

Bid Document

Bid Details	
Bid End Date/Time	08-09-2021 11:00:00
Bid Opening Date/Time	08-09-2021 11:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	65 (Days)
Ministry/State Name	Ministry Of Petroleum And Natural Gas
Department Name	Oil India Limited
Organisation Name	Oil India Limited
Office Name	Oil India Limited
Total Quantity	1
Item Category	BOQ
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	Certificate (Requested in ATC), OEM Authorization Certificate, Additional Doc 1 (Requested in ATC), Additional Doc 2 (Requested in ATC), Additional Doc 3 (Requested in ATC), Additional Doc 4 (Requested in ATC), Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	No
Time allowed for Technical Clarifications during technical evaluation	3 Days
Estimated Bid Value	114798185
Evaluation Method	Total value wise evaluation

EMD Detail

Required	No
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ePBG Detail

Advisory Bank	HDFC Bank
ePBG Percentage(%)	3.00

Duration of ePBG required (Months).

20

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:

GMFA

Oil India Limited, Duliajan, Assam 786602. Email : tuhin_roy@oilindia.in; Details of Beneficiary : OIL INDIA LIMITED. Bank Name :HDFC BANK LIMITED Branch Name :Duliajan Bank Account No. :21182320000016 Type of Account :Current Account IFSC Code :HDFC0002118 MICR Code :786240302 SWIFT Code :HDFCINBBCAL (Gmfa)

Splitting

Bid splitting not applied.

1. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

BOQ (1 pieces)

Brand Type	Unbranded
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Technical Specifications

Specification Document	View File
BOQ Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Krishna Mohan Kumar	786602,Oil India Limited, Duliajan, Assam	1	180

Buyer Added Bid Specific Additional Terms and Conditions

1. **Nominated Inspection Agency:** On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:
Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC): Shall be intimated later.
Post Receipt Inspection at consignee site before acceptance of stores: Shall be intimated later.
2. **Bidder financial standing:** The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.
3. Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. [Click here to view the file](#)
4. Bidder shall submit the following documents along with their bid for Vendor Code Creation:
 - a. Copy of PAN Card.
 - b. Copy of GSTIN.
 - c. Copy of Cancelled Cheque.
 - d. Copy of EFT Mandate duly certified by Bank.
5. **OPTION CLAUSE:** The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.
6. **Purchase preference to Micro and Small Enterprises (MSEs):** Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 100% of total value.
7. **Pre-dispatch inspection at Seller premises (Fee/Charges to be borne by the BUYER):** Before dispatch, the goods will be inspected by Buyer / Consignee or their Authorized Representative or by Nominated External Inspection Agency (independently or jointly with Buyer or Consignee as decided by the Buyer) at Seller premises (or at designated place for inspection as declared / communicated by the seller) for their compliance to the contract specifications. Fee/Charges taken by the External inspection Agency and any external laboratories testing charges shall be borne by the Buyer. For in-house testing, the Sellers will provide necessary facilities free of cost. Seller shall notify the Buyer through e-mail about readiness of goods for pre-dispatch inspection and Buyer will notify the Seller about the Authorized Representative/ Nominated External Inspection Agency and the date for testing. The goods would be dispatched to consignee only after clearance in pre-dispatch inspection. Consignee's right of rejection as per GTC in respect of the goods finally received at his location shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by Buyer/ Consignee or its Nominated External Inspection Agency prior to the goods' shipment. While bidding, the sellers should take into account 7 days for inspection from the date of email offering the goods for inspection. Any delay in inspection beyond 7 days shall be on the part of the buyer and shall be regularised without Liquidated Damages.
When there is requirement of submission the advance sample, the seller shall inform the buyer promptly through emails about the date of submission of sample to the buyer nominated Inspection agency.
8. **Purchase Preference linked with Local Content (PP-LC) Policy:**

The bid clause regarding "Preference to Make In India products" stands modified in this bid and shall be governed by the PPLC Policy No. FP-20013/2/2017-FP-PNG dated 17.11.2020 issued by MoP&NG as amended up to date. Accordingly, bidders with Local Content less than or equal to 20% will be treated as "Non Local Supplier". The prescribed LC shall be applicable on the date of Bid opening. Sanctions on the bidders for false / wrong declaration or not fulfilling the Local Content requirement shall be as per the PPLC policy. Further following additional provisions are added in the certification and verification of local content provision of the Preference to Make in India clause:

- i. In case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practicing cost accountant or practicing chartered accountant giving the percentage of local content is also acceptable.
 - ii. Along with Each Invoice: The local content certificate (issued by statutory auditor on behalf of procuring company) shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work/purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.
 - iii. The bidder shall submit an undertaking from the authorized signatory of bidder having the Power of Attorney along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
9. Scope of supply (Bid price to include all cost components) : Only supply of Goods
10. The buyer organization is an institution eligible for concessional rates of GST as notified by the Government of India. The goods for which bids have been invited fall under classification of GST concession and the conditions for eligibility of concession are met by the institution. A certificate to this effect will be issued by Buyer to the Seller after award of the Contract. Sellers are requested to submit their bids after accounting for the Concessional rate of GST.
Applicable Concessional rate of GST : 5%
Notification No.and date : 3/2017 dated 28/06/2017
11. Whereever Essentiality Certificate is applicable (PEL/ML), successful bidder should provide Proforma Invoice for processeing for EC application and material should be dispatche after receiving of EC rom DGH. In view of the same, an ATC may be incorporated in GeM, viz, "BIDDER/OEM must provide Proforma Invoice for processeing for EC application within 30 days from date of issue of GeM Contract and material should be dispatche after receiving of EC rom DGH."

Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization. Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specification and / or terms and conditions governing the bid. Any clause incorporated by the Buyer such as demanding Tender Sample, incorporating any clause against the MSME policy and Preference to make in India Policy, mandating any Brand names or Foreign Certification, changing the default time period for Acceptance of material or payment timeline governed by OM of Department of Expenditure shall be null and void and would not be considered part of bid. Further any reference of conditions published on any external site or reference to external documents / clauses shall also be null and void. If any seller has any objection / grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---Thank You---

LIST OF ANNEXURES APPLICABLE		
Heading		Particulars
Annexure-A	:	Item Details & Quantity of Items.
Annexure-A1	:	Detailed specification, Scope of work and Special Instruction.
Annexure-B	:	Bid Evaluation & Rejection Criteria
Annexure- F	:	Technical & Commercial Checklist
Appendix-A2	:	Policy for providing preference to domestically manufactured Iron and Steel products.

AA: ITEM DETAILS & QUANTITY OF ITEMS:

Sl. No.	Item Description	Quantity
1	Line Pipe ,Bevel Ended,3LPE coated, 150mm (6") NB dia , ERW/LSAW/HSAW/Seamless, Grade API 5L X-46, PSL-2, W/T 6.4 mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 168.3mm ii) Thickness:6.4mm iii) Length : Double random length iv) Weight per meter : 28.22 kg/m v) Test mill Pressure (Hydraulic): 140kg/sq cm	9500 M
2	Line pipe Bevel Ended 3 LPE coated 150mm (6") NB dia , ERW/LSAW/HSAW/Seamless, Grade API 5L X-46, PSL - 2, W/T 7.11 mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 168.3 mm ii) Thickness:7.11 mm iii) Length :Double random length v)Test mill Pressure (Hydraulic): 205 kg/sq cm	200 M
3	Bare Line pipe, Bevel Ended Dimensions: 150mm (6") NB diameter, ERW/LSAW/HSAW/Seamless, Grade: API 5L X-46,PSL -2 W/T: 6.4mm as per API 5L latest edition having following specifications:- i) Pipe Outside diameter:168.3mm ii) Thickness:6.4mm iii) Length : Double random length iv) Weight per meter:28.22 kg/m v) Test mill Pressure (Hydraulic):140kg/sq cm	300 M
4	Bare Bevel ended Line Pipe, 250 mm (10") NB ERW/LSAW/HSAW/Seamless, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition having following specification : 1. Pipe Outside diameter: 273.1 mm 2. Thickness : 7.1 mm 3. Length : Double random length 4. Weight per meter : 46.57 kg/m 5. Test Pressure: 140 kg/cm2	200 M
5	Line pipe Bevel Ended 3 LPE coated 200mm (8 ") NB dia , ERW/LSAW/HSAW/Seamless , Grade API 5L X-46,PSL - 2, W/T 6.4 mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 219.1mm ii) Thickness:6.4mm iii) Length :Double random length iv) Weight per meter : 33.57 kg/m	22000 M

	v)Test mill Pressure (Hydraulic): 140kg/sq cm	
6	Line pipe Bevel Ended 3 LPE coated 200mm (8") NB dia , ERW/LSAW/HSAW/Seamless , Grade API 5L X-46,PSL -2, W/T 7.0 mm as per API 5L latest edition having following specification i) Pipe Outside diameter 219.1mm ii) Thickness:7.0mm iii) Length :Double random length v)Test mill Pressure (Hydraulic): 156 kg/sq cm	500 M
7	Bevel ended (BARE)Line Pipe, 200mm (8") NB ERW/LSAW/ HSAW/Seamless, Grade X-60, PSL-2, W/T= 8.7 mm, Double random length as per API 5L latest Edition	500 M
8	Bare Line pipe, Bevel Ended 300mm (12") NB dia , ERW/LSAW/HSAW/Seamless ,Grade API 5L X-60,PSL -2, W/T 7.1 mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 323.9mm ii) Thickness: 7.1 mm iii)Length : Double random length iv) Weight per meter : 55.47 kg/m (v) Test mill Pressure (Hydraulic): 154 kg/sq cm	500 M
9	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 90Deg .Fabricated from line pipe 150mm (6") NB dia , ERW/LSAW/HSAW/Seamless, Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 168.3mm ii)Thickness:6.4mm iii) Weight per meter : 28.22 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 90 Deg vi) Radius of curvature, R= 6D where D is the diameter of the pipe	20 NOS.
10	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 60Deg .Fabricated from line pipe 150mm (6") NB dia , ERW/LSAW/HSAW/Seamless, Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification . i) Pipe Outside diameter 168.3mm ii) Thickness:6.4mm iii) Weight per meter : 28.22 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 60 Deg vi) Radius of curvature, R= 6D where D is the diameter of the pipe	5 NOS.
11	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 45Deg .Fabricated from line pipe 150mm (6") NB dia , ERW/LSAW/HSAW/Seamless, Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L	12 NOS.

	latest edition having following specification i) Pipe Outside diameter 168.3mm ii) Thickness:6.4mm iii) Weight per meter : 28.22 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 45 Deg vi) Radius of curvature, $R= 6D$ where D is the diameter of the pipe	
12	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 30 Deg. Fabricated from line pipe 150mm (6") NB dia, ERW/LSAW/HSAW/Seamless, Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification i) Pipe Outside diameter 168.3mm ii) Thickness:6.4mm iii) Weight per meter : 28.22 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 30 Deg vi) Radius of curvature, $R= 6D$ where D is the diameter of the pipe	20 NOS.
13	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 90 Deg. Fabricated from line pipe 200mm ,NB (8") dia , ERW/LSAW/HSAW/Seamless , Grade API 5L X-46,PSL -2,W/T 6.4mm as per API 5L latest edition having following specification. i) Pipe Outside diameter 219.1 mm ii) Thickness:6.4mm iii) Weight per meter : 33.57 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 90 Deg vi)Radius of curvature, $R= 6D$ where D is the diameter of the pipe	20 NOS.
14	Bend Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 60 Deg .Fabricated from line pipe 200mm ,NB (8") dia , ERW/LSAW/HSAW/Seamless , Grade API 5L X-46,PSL -2,W/T 6.4mm as per API 5L latest edition having following specification. i) Pipe Outside diameter 219.1 mm ii) Thickness:6.4mm iii) Weight per meter : 33.57 kg/m iv) Test mill Pressure (Hydraulic): 140kg/sq cm v) Deg of Bend : 60 Deg vi)Radius of curvature, $R= 6D$ where D is the diameter of the pipe	15 NOS.
15	BEND,45 DEG,NB 200MM, API 5L X-46 Bend, Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 45 Degree Fabricated from line pipe 200mm (8") NB diameter, ERW/LSAW/HSAW/Seamless Grade API 5L X-46,PSL -2	30 NOS.

	W/T 6.4 mm as per API 5L latest edition having following specification i) Pipe Outside diameter 219.1mm ii) Thickness:6.4mm iii) Weight per meter:35.57 kg/m iv) Test mill Pressure (Hydraulic):140kg/sq cm v) Deg of Bend:45 Deg vi)Radius of curvature, R= 6D where D is the diameter of the pipe	
16	BEND,30 DEG,NB 200MM, API 5L X-46 Bend, Bevel Ended Heat Shrinkable Sleeve coated (as per ISO-21809-3) Long Radius 30 Degree Fabricated from line pipe 200mm (8") NB diameter, ERW/LSAW/HSAW/Seamless Grade API 5L X-46,PSL-2 W/T 6.4 mm as per API 5L latest edition having following specification i) Pipe Outside diameter 219.1mm ii) Thickness: 6.4mm iii) Test mill Pressure (Hydraulic):140kg/sq cm iv) Deg of Bend: 30 Deg v) Radius of curvature, R= 6D where D is the diameter of the pipe	90 NOS.

AB: SPECIAL NOTES TO BIDDERS

1.0 The Bidder should indicate the dimensions and weight of the offered items, the name of the manufacturer, the country of origin, Local content and place of dispatch of the materials.

2.0 Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.

3.0 Bidder to sign and submit completely filled up Technical Checklist Annexure - F.

4.0 HSN codes of the items against of the tender are: For pipes 7306 & For bends 7307.

5.0 Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products (FORM-1) and other documents have to be submitted as per APPENDIX-A2 "POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS".

6.0 The items covered in this Tender shall be used by Oil India Limited in the PEL/ML areas and hence concessional GST @5% (for indigenous bidder) will be applicable as per Govt. Policy in vogue.

7.0 Successful bidder shall arrange to provide all necessary documents (invoice etc.) to OIL for applying Essentiality Certificate atleast 1 month prior to stipulated Delivery date. Further, Successful bidder shall affect dispatch only on receipt of relevant certificates/ shipment clearance from OIL, failing which all related liabilities shall be to Supplier's account.

8.0 Bidder to categorically confirm under which policy i.e. PP-LC or MSME or DPIIT-MII, they want to avail the benefit and to submit requisite document/certificate in support to avail this benefit. The bids will be evaluated based on their declaration. No benefit will be given if the bid is submitted without any above declaration along with supporting document as per the respective policies.

In case of tenders for Iron & Steel products as per DMI & SP policy, only the eligible bidders meeting the requisite criteria as per the DMI & SP policy shall be considered for further technical evaluation. Availing the benefit of Purchase Preference and awarding of eligible tendered quantity after price matching shall be considered based on Bidder's declaration of availing of PP-LC or MSME policy only.

9.0 OIL's Reference No. PR = 1422801.

10.0 The items shall be brand new, unused & of prime quality. The manufacturer shall warrant (in the event of an order) that the product supplied will be free from all defects & fault in material, workmanship & manufacture and shall be in full conformity with ordered specifications. This clause shall be valid for 18 months from date of shipment/ dispatch or 12 months from the date of receipt of the items, whichever is earlier. The defective materials, if any, rejected by OIL shall be replaced by the supplier at their own expense. Bidders must confirm the same in their quotations.

11.0 Bidders shall submit their offer mentioning pointwise compliance / non-compliance to all the terms & conditions, BEC/BRC, Specifications etc. Any deviation(s) from the tender terms & conditions, BEC/BRC, Specifications etc. should be clearly highlighted specifying justification in support of deviation.

12.0 Tax Collectible at Source (TCS) applicable under the Income-tax Law and charged by the SUPPLIER shall also be payable by OIL along with consideration for procurement of goods/materials/equipment. If TCS is collected by the SUPPLIER, a TCS certificate in prescribed Form shall be issued by the SUPPLIER to OIL within the statutory time limit.

Payment towards applicable TCS u/s 206C (1H) of Income Tax Act, 1961 will be made to the supplier provided they are claiming it in their invoice and on submission of following undertaking along with the invoice stating that:

a. TCS is applicable on supply of goods invoiced to OIL as turnover of the supplier in previous year was more than Rs. 10 Cr. and

- b. Total supply of goods to OIL in FY ... exceeds Rs. 50 Lakh and
- c. TCS as charged in the invoice has already been deposited (duly indicating the details such as challan No. and date) or would be deposited with Exchequer on or before the due date and
- d. TCS certificate as provided in the Income Tax Act will be issued to OIL in time.

However, Performance Security deposit will be released only after the TCS certificate for the amount of tax collected, is provided to OIL. Supplier will extend the performance bank guarantee (PBG), wherever required, till the receipt of TCS certificate or else the same will be forfeited to the extent of amount of TCS, if all other conditions of Purchase order are fulfilled.

The above payment condition is applicable only for release of TCS amount charged by supplier u/s 206C (1H) of Income tax Act, 1961.

13. Unloading at Duliajan, Assam shall be carried out by Oil India Limited using its own resources.

NOTE: FOR DETAILED SPECIFICATION, SCOPE OF WORK OF THE ABOVE ITEMS PLEASE REFER ANNEXURE – A1.

*******END OF ANNEXURE – A*******

DETAILED SPECIFICATION, SCOPE OF WORK AND SPECIAL INSTRUCTIONS

PART – A

1.0 Line pipes 3LPE Coated and Bare, of sizes 150, 200, 250, 300 mm NB diameter and precoated bends of 30, 45, 60 & 90deg, for 150 & 200 mm NB diameters.

2.0 All the tendered items shall be procured from same source against this tender and hence, bidder must quote for all items in full quantity strictly complying with the technical specifications as per tender.

3.0 SCOPE OF WORK AND SPECIFICATIONS FOR SUPPLY OF 3LPE COATED & BARE LINE PIPES & BENDS

3.1 SPECIFICATIONS:

3.1.1 Line Pipes must be manufactured as per API 5L Latest Edition and must bear API monogram. A valid API Specification 5L certificate from the manufacturer shall be submitted along with the quotation without which offer shall be rejected. The pipes shall be brand new, unused, and of prime quality and in double random length without any jointers.

3.1.2 Pipe ends: Ends must be prepared as per relevant API specifications. Suitable end protectors as specified shall be used to protect the ends.

3.2 MILL INSPECTION / CERTIFICATION

All line pipes shall be manufactured, tested and certified in accordance with API Specification 5L, Latest Edition.

3.3 PHYSICAL / MECHANICAL TEST:

The following tests shall be carried out on each heat of steel from which the pipes are manufactured as per API Specification 5L, Latest Edition, and test results thereof shall be submitted to OIL along with the materials.

- (i) Chemical Analysis
- (ii) Heat Analysis
- (iii) Product Analysis
- (iv) Recheck Analysis
- (v) Mill-Control Check Analysis
- (vi) Tensile tests
- (vii) Yield strength tests
- (viii) Mill control tensile tests
- (ix) Flattening tests

- (x) Guided bend tests/tensile elongation tests
- (xi) Dimension and weight tests including drift and straightness.

(Note: ix and x are required for ERW pipes only)

3.3.1 While conducting the above tests if any of the pipe fails, retest of the same shall be carried out as per API Specification 5L, API 5L Latest Edition.

3.4 Hydrostatic Test:

Each joint of pipe shall be tested hydrostatically to the recommended pressure at the mill in accordance with the relevant API specifications.

3.5 Non-Destructive Tests:

Non-destructive tests shall be carried out as specified in API Specification 5L Latest Edition.

3.6 SUPPLIERS should give details of mills inspection and QC methods available. OIL may require such details in case of an Order.

3.7 SPECIFICATION FOR ELECTRIC WELDED LINE PIPE FOR ONSHORE APPLICATION

Electric welding shall be performed with a minimum welder frequency of 200 kHz. The welding system shall have an integrated control in which following data as a minimum shall be monitored.

- Time
- Welding speed
- Current and Voltage
- Heat treatment temperature

Maximum Carbon Equivalent

For pipes of all grades, size and wall thickness, Carbon Equivalent shall comply with the following limits :

CE (Pcm) < 0.20%

CE (IIW) ≤ 0.40%

Tensile Properties

The finished pipes shall conform to the requirements of relevant table of API 5L latest edition.

Charpy Impact Test for PSL 2

As per API Spec 5L.

Metallographic Examination

Vickers hardness test shall be carried out on each specimen taken for metallographic examination in accordance with ASTM E-92. The resulting Vickers hardness value at any point shall not exceed 248HV10. The maximum

difference in hardness between the base metal and any reading taken on the weld or heat affected zone shall be less than 80 HV10. Modalities of retest shall be in accordance with para 9.10.2 of API Spec. 5L

REVERSE BEND TEST

Reverse bend test shall be executed with the same number of tests and retests (if any) specified for flattening test in para 9.6 of API 5L 46th Edition and for acceptance criteria of Reverse bend, bidder shall refer to para 9.5.

WALLTHICKNESS

In addition to API requirements, the wall thickness of each pipe shall be checked along the circumference at both ends of pipe body at 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock positions. The wall thickness tolerance shall comply with the requirements of API Spec 5L specification.

LENGTH

All pipes shall be supplied with length between 11.5 m and 12.5 m. However pipe with length between 10.0 m and 11.5 m can also be accepted for a max. of 5% of the ordered quantity. The minimum average length of the entire ordered quantity in any case shall be 12.0 m. API Spec 5L Table 11 shall not be acceptable. The minimum overall length tolerance shall be (-) zero and (+) one pipe length to complete the ordered quantity. Each pipe shall be measured for conformance to above requirements and all measurements shall be recorded.

STRAIGHTNESS

The deviation from a straight line for shall not exceed 0.2% along any length. Each pipe shall be checked for conformance to this requirement.

PIPE ENDS

Unless specified otherwise, the pipe ends shall be beveled as per API Spec. 5L. In removing the inside burrs at the pipe ends, care shall be taken not to remove excess metal and not to form an inside cavity or bevel. Removal of excess metal beyond the minimum wall thickness as indicated elsewhere in this specification, shall be a cause for rebeveling. In case root face of bevel is less than that specified, the pipe ends shall be rebevelled and rectification by filing or grinding shall not be done.

BEVEL PROTECTORS

Both pipe ends of all pipes shall be provided with metallic or high impact plastic bevel protectors as per Manufacturer's standard. Bevel protectors shall be of a design such that they can be re-used by coating applicator.

PURCHASER AND THIRD PARTY INSPECTION(ENGAGED BY PURCHASER)

Manufacturer shall comply with the provisions regarding inspection notice, plant access, compliance and rejection mentioned in Appendix H of API Spec 5L. The Manufacturer shall give reasonable notice of the starting date of normal production and the work schedule. Any action or omission on part of Purchaser's

Representative shall not relieve the Manufacturer of his responsibility and obligation to supply material in accordance with this specification.

4.0 THIRD PARTY INSPECTION (TPI):

a) OIL shall arrange for inspection (TPI) of the materials through OIL's nominated Third Party Inspection Agency at Bidder's/Manufacturer's plant/premises as per the broad Scope of Work mentioned the tender. **ALL COST TOWARDS THE ENGAGEMENT OF THIRD PARTY INSPECTION AGENCY SHALL BE BORNE BY OIL. BIDDER SHALL NOT QUOTE/INCLUDE THE COST OF THIRD PARTY INSPECTION IN THEIR OFFER.** However, Bidder shall extend all necessary facility to the satisfaction of Third Party Inspection Agency for smooth conduct of the inspection.

b) Bidder shall clearly indicate in the Technical bid the place/plant where Third Party Inspection of the materials shall be conducted, in the event of an order.

c) Supplier shall convey to OIL the production schedule within 02(two) weeks from the date of Letter of Award (LOA)/Purchase order so that OIL can deploy the TPI agency to carry out inspection at bidder's/ manufacturer's premises accordingly. Additionally, Supplier shall send a notice in writing/e-mail to OIL at least 15 days in advance specifying the exact schedule and place of inspection (TPI) as per the Purchase Order and OIL upon receipt of such notice shall notify to the supplier the date and time when the materials would be inspected by OIL nominated TPI Agency.

d) The supplier shall provide, without any extra charge to OIL, all materials, tools, labour and assistance of every kind which the OIL nominated TPI Agency may demand for any test or examination required at supplier's premises. The supplier shall also provide and deliver sample from the material under inspection, free of charge, at any such place other than their premises as the TPI Agency may specify for acceptance tests for which the supplier does not have the facilities for such tests at their premises. In the event of testing outside owing to lack of test facility at supplier's premises, the supplier shall bear cost of such test, if any.

e) The supplier shall not be entitled to object on any ground whatsoever to the method of testing adopted by the OIL nominated TPI Agency.

f) Unless otherwise provided for in the Purchase Order, the quantity of materials expended in test will be borne by supplier.

g) The decision of the Third Party Inspection Agency nominated by OIL regarding acceptance/rejection of material shall be final and binding on the supplier.

h) Upon successful completion of the TPI and acceptance of the TPI reports by OIL, Bidder/Supplier shall be intimated by OIL for dispatch of the materials. The materials should be despatched only after receipt of dispatch clearance from OIL.

i) Acceptance of the TPI reports and receipt of dispatch intimation from OIL do not absolve the bidder from any warranty obligations or waive the bidder from OIL's right for rejection of the materials after receipt at site.

j) Notwithstanding clauses contained herein above, in the event the materials under inspection fails to conform to Purchase order specification and are rejected by OIL nominated Third Party Inspection agency, OIL may recover all cost incurred for re-inspection of the materials from the supplier.

k) Third party inspection of items will be carried out by any of the TPI agencies indicated below. The details of Third party inspection agency shall be provided after placement of Purchase order:

i) M/s Lloyds.

ii) M/s Bureau Veritas

iii) M/s RITES

iv) M/s I.R.S

v) M/s Tuboscope Vetco (To be considered after opening of office in India).

vi) M/s DNV-GL

4.1 SCOPE OF THIRD PARTY INSPECTION FOR LINE PIPES:

4.1.1 Inspection by an independent third party to cover the following will be required against line pipes:

(i) Material Identification

(ii) Stage inspection at random visit basis during manufacturing

(iii) Audit and endorsement of all chemical analysis and physical test reports

(iv) Witness dimensional checks

(v) Witness mechanical tests (as per API 5L, the Latest Edition)

(vi) Witness NDT

(vii) Witness hydrostatic tests

(viii) Visual inspection for imperfection

(ix) Longitudinal defect identification

(x) Transverse defect identification (The same is not required for ERW Pipe)

(xi) Wall thickness measurement

(xii) Joint Inspection & Grade confirmation

(xiii) End area defect identification

(xiv) Inspection of end bevelling

(xv) Check and verify length of each joint of pipe

(xvi) Issue of certificate

4.1.2 Manufacturer will carry out physical / chemical / mechanical / hydrostatic, NDT tests etc. for raw material and finished pipes as per relevant API specification (Latest Edition) for all the pipes i.e. 100% (hundred percent).

Third Party will check & verify manufacturer's test data, records, reports etc. of raw materials and finished tubes in respect of all the pipes i.e. 100% (hundred percent). Over and above checking and verification of records and reports, third party will carry out inspection for the followings on the percentage basis given below in his presence:

(a) Raw material inspection for chemical composition and mechanical properties:

10% of number of heats and plates of raw materials will be tested at random by the third party. If the percentage of number of heats/plates for manufacture of particular item is 05(five) or less, then all the raw materials will be tested for chemical composition and mechanical properties, as per relevant codes.

(b) Finished tube inspection:

(i) Checking dimensions, wall thickness, quality, end beveling (for Beveled ended pipes), surface imperfection etc. : 5% of the tubes at random will be checked/tested by third party.

(ii) Checking chemical composition and mechanical properties – Sample frequency as per API 5L Latest Edition will be tested by the third party.

(c) Witnessing NDT through ultrasonic testing/magnetic particulars method/other methods:

(i) Longitudinal defects - 5% of the tubes at random will be tested by third party.

(ii) Transverse defects - 1% of the tubes at random will be tested by third party.

(d) Hydraulic testing: 10% of the tube at random will be tested by third party.

4.1.3 The Third Party Inspection is to be carried out OIL's appointed Third Party Inspection Agency only.

4.1.4 SUPPLIERS to confirm that transportation will be carried out as per API-RP-5L1 (Latest Edition).

4.2 THIRD PARTY INSPECTION FOR COATINGS:

4.2.1 The Third Party Inspection is to be carried out OIL's appointed Third Party Inspection Agency for coatings.

4.2.2 Third Party shall carry out inspection of the coating as per para 6.10 'INSPECTION AND TESTING' and quantum of inspection to be carried out by TPIA shall be as per table 4.2.2(t1) below.

Table 4.2.2(t1)

Sl. No.	Inspection and testing description	Scope of TPIA	Quantum of check	Verifying document
1	Visual Inspection	Visual check	10% of total ordered quantity	
2	Coating Thickness	Physical check	10% of total ordered quantity	
3	Holiday Detection	Witness	10% of total ordered quantity	
4	Bond Strength Test.	Verify	Random	Suppliers test report
5	Impact Strength	Verify	Random	Suppliers test report.
6	Indentation Hardness	Verify	Random	Suppliers test report.
7	Air Entrapment Test	Verify	Random	Suppliers test report
8	Degree of Cure	Verify	Random	Suppliers test report
9	Epoxy Layer Adhesion Test	Verify	Random	Suppliers test report
10	Cathodic Disbondment Test	Verify	Random	Suppliers test report

4.2.3 Third party will carry out additional tests and inspections which they feel deem necessary as per DIN-30670 and also issue necessary inspection certificate.

4.3 THIRD PARTY INSPECTION FOR BENDS.

Third Party will check , verify and certify the following for the bends before coating.

4.3.1 Test certificate of chemical, mechanical tests, heat treatment, dimensional inspection and hydrotest carried out on pipe used for fabrication of bend.

4.3.2 Certificate of non-destructive test / examination carried out on bends.

4.3.3 Records of heat treatment, if carried out for bends.

4.4.4 Dimensional tolerance of bends.

Third party will check , verify and certify the following for the bends after coating.

4.4.5 Third party will carried out all necessary test / inspection as per requirement of Para – 4.0 i.e THIRD PARTY INSPECTION FOR COATINGS.

5.0 SCOPE OF WORK AND SPECIFICATIONS FOR PIPE HANDLING, LOADING, TRANSPORTATION TO COATING PLANT AND UNLOADING AT COATING PLANT.

5.1 The SUPPLIER (whether they are pipe manufacturer or pipe coating applicator or supplier of the pre-coated pipes as referred to PART B, Bid rejection criteria & Bid evaluation criteria) shall be fully responsible for the custody of the pipes from the start of manufacturing until the time the coated pipes are 'handed over' to COMPANY and/ or installed in permanent installation of the COMPANY in the case may be as per terms of the tender.

5.2 The SUPPLIER shall load, transport, the bare pipes to the coating plant(s) and unload and stockpile the same using suitable means and in a manner to avoid damage to pipes. The SUPPLIER shall stockpile the bare pipes at the storage area of the coating plant. The SUPPLIER shall prepare and furnish to COMPANY a procedure/calculation generally in compliance with API RP-5L1 for stacking of pipes of individual sizes, which shall be approved by COMPANY prior to commencement.

5.3 The SUPPLIER shall load, unload, transport and stockpile the bare pipes within the coating plant using approved suitable means and in a manner to avoid damage to the pipe. The COMPANY shall approve such procedure prior to commencement of work.

5.4 In case bare line pipe supply is from foreign origin, it will be the sole responsibility of the SUPPLIER to receive and take-over the line pipes from the pipe manufacturer and SUPPLIER shall be solely responsible for port clearance, stevedoring, liaison, port fees, easements, warehousing, wharf age, handling, unloading / loading as applicable. SUPPLIER shall then transfer the pipes to the coating facility.

5.5 Coated pipes may be handled by slings and belts of minimum 60 mm width made of non- abrasive/ non-metallic materials. In this case, stacked pipes shall be separated row by row to avoid damages by rubbing the coated surface in the process of taking off the slings. Use of round sectional slings is prohibited. Fork lifts may be used provided that the arms of the forklift are covered with suitable pads, preferably rubber.

5.6 Bare / coated pipes at all times shall be stacked completely clear from the ground, at least 300 mm, so that the bottom row of pipes remain free from any surface water. The pipes shall be stacked at a slope so that driving rain does not collect inside the pipe. Bare / coated pipes may be stacked by placing them on ridges of sand free from stones and covered with a plastic film or on wooden supports provided with suitable cover. This cover can be of dry, germ free straw covered with plastic film, otherwise foam rubber may be used. The supports shall be spaced in such a manner as to avoid permanent bending of the pipes. Stacks shall consist of limited number of layers such that the pressure exercised by the

pipe's own weight does not cause damages to the coating. SUPPLIER shall submit calculations for COMPANY approval in this regard. Each pipe section shall be separated by means of spacers suitably spaced for this purpose. Stacks shall be suitably secured against falling down and shall consist of pipe sections having the same diameter and wall thickness. The weld seam of pipes shall be positioned always in a manner so as not to touch the adjacent pipes. The ends of the pipes during handling and stacking shall always be protected with bevel protectors.

5.7 The lorries used for transportation shall be equipped with adequate pipe supports having as many round hollow beds as there are pipes to be placed on the bottom of the lorry bed. Total width of the supports shall be at least 5% of the pipe length and min. 2 no. support shall be provided. These supports shall be lined with a rubber protection and shall be spaced in a manner as to support equal load from the pipes. The rubber protection must be free from all nails and staples where pipes are in contact. The second layer and all following layers shall be separated from the other with adequate number of separating layers of protective material such as straw in plastic covers or mineral wool strips or equivalent, to avoid direct touch between the coated pipes. All stanchions of lorries used for transportation shall be covered by non-abrasive material like rubber belts or equivalent. Care shall be exercised to properly cover the top of the stanchions and other positions such as reinforcement of the truck body, rivets, etc. to prevent damage to the coated surface. Slings or non-metallic straps shall be used for securing loads during transportation. They shall be suitably padded at the contact points with the pipe.

5.8 Materials other than pipes and which are susceptible of deteriorating or suffering from damages especially due to humidity, exposure to high thermal excursions or other adverse weather conditions, shall be suitably stored and protected. Deteriorated materials shall not be used and shall be replaced at SUPPLIER's expenses. These materials, shall always be handled during loading, unloading and storage in a manner so as to prevent any damage, alteration and dispersion. When supplied in containers and envelopes, they shall not be dropped or thrown, or removed by means of hooks, both during the handling operations till their complete use. During unloading, transport and utilization, any contact with water, earth, crushed stone and any other foreign material shall be carefully avoided. The SUPPLIER shall strictly follow Manufacturer's instructions regarding storage temperature and methods for volatile materials that are susceptible to change in properties and characteristics due to unsuitable storage. If necessary the SUPPLIER shall provide for a proper conditioning.

5.9 In case of any marine transportation of bare/coated line pipes involved, the same shall be carried out in compliance with API RP 5LW. SUPPLIER shall furnish all details pertaining to marine transportation including drawings of cargo barges, storing/stacking, sea fastening of pipes on the barges/marine vessels to the company for approval prior to undertaking such transportation works. In addition SUPPLIER shall also carry out requisite analyses considering the proposed transportation scheme and establish the same is safe and stable. On-deck overseas shipment shall not be allowed.

5.10 The above scopes from 5.1 to 5.9 shall also cover transportation of requisite bare pipes from pipe manufacturing yard to LR bend fabrication unit and onward transportation of the LR bends to coating unit.

6.0 SCOPE OF WORK AND SPECIFICATIONS FOR 3 LAYER SIDE EXTRUDED POLYETHYLENE COATING

6.1 SCOPE:

This specification covers the minimum requirements for supply/arrangement of all materials, plant, equipment, plant sites, consumables, utilities and application including all labour, supervision, inspection and tests etc. for application of external anti-corrosion coating of pipes by using 3 Layer Side Extruded Polyethylene coating conforming to DIN-30670, latest edition, 'Polyethylene Coating for Steel Pipes and Fittings' and the requirements of this specification.

6.2 REFERENCE STANDARDS

Reference has also been made to the latest edition of the following standards, codes and specifications. The edition enforce at the time of floating the enquiry shall be termed as latest edition.

- a) ASTM D-149 : Standard Test Methods of Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Frequencies.
- b) ASTM D-257 : Standard Test Methods for D-C Resistance or Conductance of Insulating Materials.
- c) ASTM D-543 : Standard Method of Test for Resistance of Plastics to Chemical Reagents.
- d) ASTM D-570 : Standard Method of Test for Water Absorption of Plastics.
- e) ASTM D-638 : Standard Method of Test for Tensile Properties of Plastics.
- f) ASTM D-792 : Standard Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- g) ASTM D-1238 : Test Method for Flow Rates of Thermoplastics by Extrusion
- h) ASTM D-1525 : Test Method for Vicat Softening Temperature of Plastics
- i) ASTM D-1603 : Test Method for Carbon Black in Olefin Plastics
- j) ASTM D-1693 : Test Method for Environmental Stress Cracking of Ethylene Plastics
- k) ASTM D-2240 : Test Method for Rubber Property – Durometer Hardness.
- l) ASTM D-3895 : Test Method for Oxidative-Induction Time of Polyolefins by Differential Scanning Calorimetry
- m) ASTM G-42 : Tentative Methods for Cathodic Disbonding of Pipeline coatings Subjected to Elevated or Cyclic Temperatures.
- n) API RP 5L1 : Recommended Practice for Railroad Transportation of Linepipe.
- o) API RP 5LW : Transportation of Line Pipe on Barges and Marine Vessels
- p) DIN EN 10204 : Metallic Products – Types of Inspection Documents

- q) DIN 53735 : Testing of Plastics: Determination of Melt Index of Thermoplastics.
- r) IEC 454 – 2 : Specification for Pressure-Sensitive Adhesive Tapes for Electrical Purposes.
- s) ISO 8501-1 : Preparation of Steel Substrates before Application of Paints and Related Products – Visual Assessment of Surface Cleanliness : Part 1 - Representative Photographs of the Change of Appearance imparted to Steel when Blast Cleaned with different Abrasives
- t) ISO 8502 – 3 : Preparation of Steel Substrates before Application of Paints and Related Products – Part 3 - Assessment of Dust on Steel Surfaces Prepared for Painting (Pressure Sensitive Tape Method)
- u) ISO 9002 : Quality Systems : Model for Quality Assurance in Production, Installation and Servicing
- v) ISO 11124 : Preparation of Steel Substrates Before Application of Paints and Related Products
- w) API 5L, Latest Edition: Specification for Line Pipe
- x) ASME B31.8 : Gas Transmission and Distribution Piping Systems.
- y) ASME B31.4 : Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols.
- z) CSA Z245.20-02 : External Fusion Bond Epoxy Coating for Steel Pipe.

The SUPPLIER shall be familiar with the requirements of these documents and shall make them readily available at the coating plant to all persons concerned with carrying out the works specified in this specification.

6.3 PLANT SCALE AND INSTALLATION

6.3.1 SUPPLIER shall size coating plant(s) after evaluating the scale of work and the time schedule required for the works. Coating plant(s), both new or existing, shall be installed into a yard whose geometry and dimensions are such as to allow the execution of a continuous work schedule. For this purpose the SUPPLIER shall ensure non-stop work execution owing to prohibitive adverse weather conditions and install requisite equipment and plant in roofed and adequately weather protected areas.

6.3.2 Plant equipment, machinery and other facilities shall be in first class operating condition to at least meet the job requirements of quality and production. Worn out and improvised plants are not acceptable.

6.3.3 The SUPPLIER shall, at his own responsibility and cost, provide and prepare all necessary area for the storage of bare and coated pipe and all other materials, for coating yard, stock-piling and other temporary installation. For each area, SUPPLIER shall provide necessary agreements as required with the land owner(s) / relevant Authorities, and, on work completion, to clean and pay settlement and claims for damages, as applicable.

6.3.4 The SUPPLIER shall at its own responsibility and cost, provide for water and power supply and other utilities and consumables and obtain authorization regarding access roads and other permits required for the execution of works conforming to all the requirements of the governing Authorities.

6.3.5 The SUPPLIER shall at its own expense provide a fully equipped laboratory and test facilities with adequate inventory to carry out tests required for the procedure qualification and regular production. Outside testing for qualification and regular production is not acceptable to COMPANY.

6.3.6 The SUPPLIER shall be fully responsible for adherence to all statutory regulations applicable for handling and disposal of the hazardous chemicals during the coating works.

6.3.7 The SUPPLIER shall be responsible for obtaining all statutory approvals / clearances from relevant Authorities including Pollution Control Board, as applicable for the coating plant(s).

6.4 MATERIALS

6.4.1 The three layer coating system shall comprise of a powder epoxy primer, polymeric adhesive and a polyethylene top coat. Coating materials shall be suitable for the service conditions and the pipe sizes involved. The coating materials i.e. epoxy powder, adhesive and polyethylene compound shall have proven compatibility. The coating system and materials shall be pre-qualified and approved by COMPANY in accordance with provisions of Para 6.5.4, Annexure I of this specification. SUPPLIER shall obtain prior approval from COMPANY for the coating system and coating materials.

6.4.2 The coating materials Manufacturer shall carry out tests for all properties specified in para 6.5.1 and 6.5.2 for each batch of epoxy, adhesive and polyethylene compound. In addition, the Manufacturer shall also furnish Infra-red Scan for each batch of epoxy powder. The coating materials Manufacturer shall issue test certificates as per DIN EN 10204, 3.1B for each batch of materials supplied to SUPPLIER and the same shall be submitted to COMPANY for approval prior to their use.

6.4.3 In addition to Manufacturer's certificate, the SUPPLIER shall draw samples from each batch of epoxy, adhesive and polyethylene in the presence of COMPANY Representative and test for the following properties at the coating yard at least one week prior to its use, to establish compliance with the Manufacturer's test certificates.

(a) Epoxy Powder:

Ø Gel Time

Ø Cure time

Ø Moisture content

Ø Thermal Characteristics (Tg1, Tg2 , ΔH)

(b) Adhesive:

Ø Specific Gravity

Ø Melt Flow Rate

Ø Vicat Softening Point

(c) Polyethylene:

Ø Melt Flow Rate
Ø Specific Gravity
Ø Vicat Softening Point.
Ø Moisture Content
Ø Oxidative Induction Time

In case of failure of any of the above tests in a batch, that batch of material shall be tested for all other tests required as per para 6.5.1 and 6.5.2 including the tests which failed. If all tests pass, the batch shall be accepted for coating. If any of the tests fail, entire batch of material shall be rejected and shall not be used for the coating.

6.4.4 All materials to be used shall be supplied in sealed, damage free containers and shall be suitably marked with the following minimum information:

Ø Name of the Manufacturer
Ø Type of Material
Ø Batch Number
Ø Place and Date of Manufacture
Ø Shelf Life/Expiry Date (if applicable)
Ø Quantity

All materials noted to be without above identification shall be deemed suspect and shall be rejected by COMPANY. Such materials shall not be used for coating and shall be removed from site and replaced by SUPPLIER at his expense.

6.4.5 SUPPLIER shall ensure that all coating materials are properly stored in accordance with the Manufacturer's recommendation at all times, to prevent damage and deterioration in quality prior to use.

6.4.6 SUPPLIER shall be required to use all materials on a date received rotation basis, i.e. first in- first used basis.

6.5 FUNCTIONAL REQUIREMENTS AND PROPERTIES OF COATING

6.5.1 The coating shall be able to withstand a maximum in service operating temperature of (+)65°C and shall conform to 'S' Type of coating as per DIN 30670. In addition, in open storage the coating must be able to withstand a temperature of at least (+)80°C, without impairing its serviceability and properties specified.

6.5.2 The top coat polyethylene used shall be a black readymade compound, fully stabilized against influence of ultraviolet radiation (i.e. sunlight), oxygen in air and heat (due to environmental temperature as specified above). No appreciable changes shall occur during exposure to such environments up to at least a period of 6000 hours. The SUPPLIER shall submit certificate from Manufacturer in this regard

6.5.3 Properties:

Properties of coating system and coating material shall comply the requirements indicated in subsequent paragraphs. In case the coating / material properties

are tested as per test methods / standards other than specified herein below, the same may be accepted provided the test procedures and test conditions are same or more stringent than the specified.

Properties of Epoxy Powder and Adhesive

SUPPLIER shall choose such a brand of epoxy powder and adhesive that will achieve the functional requirements and properties of coating system as specified in para 6.5.1 and 6.5.3 of this specification respectively. Epoxy powder properties shall be as per CSA Z245.20-02. The colour of epoxy powder shall be either green or dark red or any other colour approved by COMPANY except grey colour. Copolymer grafted adhesive shall have the following properties:

Sl. No	Properties	Unit	Requirement	Test Method
A	Melt Flow Rate (190°C / 2.16 kg)	g/10 min	1.0 min	ASTM D 1238
B	Vicat Softening Point	Deg C	100 min	ASTM D 1525
C	Specific Gravity	-	0.926 min	ASTM D 792

6.5.2 Properties of Polyethylene Compound

Sl. No	Properties	Unit	Requirement	Test Method
A	Tensile Strength @ + 25 deg C	N/mm 2	17 min	ASTM D 638
B	Melt Flow Rate (190°C / 2.16 kg)	g/10 min	0.25 min	ASTM D 1238/ DIN 53735
C	Specific Gravity @ + 25 ° C	-	0.926 min (MDPE) 0.941 min. (HDPE)	ASTM D 792
D	Hardness @ + 25 °C	Shore D	50 min	ASTM D 2240
E	Water Absorption 24 hours, @ + 25 °C	%	0.05 max	ASTM D 570
F	Volume Resistivity @ + 25°C	Ohm-cm	1015 min	ASTM D 257
G	Dielectric withstand 1000 Volt/sec rise @ + 25 °C	Volts/mm	30,000 min	ASTM D 149
H	Vicat Softening Point	Deg C	110 min	ASTM D 1525
I	Elongation	%	600 min	ASTM D 638
J	Oxidative Induction Time in Oxygen at 220°C	Min	10	ASTM D3895

	Aluminium pan, no screen			
K	Environmental Stress Crack Resistance (ESCR) (for F50)	Medium Density, Condition "C" (Hours)	300	ASTM D1693
		High Density, Condition "B" (Hours)	300	
L	Carbon Black Content	%	2 min	ASTM D 1603

6.5.3 Properties of Coating System

Sl. No	Properties	Unit	Requirement	Test Method
A	Bond Strength - @ 20 +/- 5°C - @ 65 +/- 5°C	Kg/Cm	8.0 min 5.0 min	DIN 30670
B	Impact Strength (Min. of 30 impacts on body along the length. No breakdown allowed when tested at 25 Kv)	Joules/mm of coating thickness	7 min	DIN 30670
C	Indentation Hardness - @ 23 +/- 2°C - @ 70 +/- 2°C	mm	0.2 max 0.3 max	DIN 30670
D	Elongation at Failure	%	300 min	DIN 30670
E	Coating Resistivity (*)	Ohm – m2	108 min	DIN 30670
F	Heat Ageing (*)		Melt Flow Rate shall not deviate by more than 35% of original value	DIN 30670
G	Light Ageing (*)		Melt Flow Rate shall not deviate by more than 35% of original value	DIN 30670
H	Cathodic Disbondment (**) - @ + 65° C after 30 days - @ + 65°C after	mm radius of dis bondment	15 max. 7 max	ASTM G42

	48 hrs			
I	Degree of Cure of Epoxy (***) - Percentage Cure, ΔH - Δ Tg %	% Deg C	95 +3 / -2	CSA Z 245.20-98

(*) Test carried out in an independent laboratory of national / international recognition on PE top coat is also acceptable.

(**) Disbondment shall be equivalent circle radius of total unsealed area as per ASTM G 42.

(***) TEMPERATURE TO WHICH THE TEST SPECIMENS ARE TO BE HEATED DURING CYCLIC HEATING SHALL HOWEVER BE AS PER THE RECOMMENDATIONS OF EPOXY POWDER MANUFACTURER.

6.5.4 The acceptable combinations of coating material shall be as per Annexure-I.

ANNEXURE-I : LIST OF ACCEPTABLE COMBINATIONS OF COATING MATERIALS

The following combinations of coating materials are considered acceptable. In case any of the combinations listed below are offered, details regarding properties of the offered materials need not be furnished with bid. However, In the event of award of contract, SUPPLIER shall furnish the combination(s) proposed and re-confirmation of compatibility of the proposed combination (s) from the raw materials Manufacturers.

Epoxy Powder

(Manufacturer) Adhesive

(Manufacturer) PE Compound

(Manufacturer)

CORRO-COAT EP-F 2001

(JOTUN) FUSABOND 158D

(DUPONT) SCLAIR 35 BP HDPE

(NOVACOR)

PE 50-8190/8191

(BASF) or CORRO-COAT EP-F 2001 (JOTUN) LUCALEN G3510H

(BASF) LUPOLEN 3652 D SW 00413

(BASF)

PE 50-6109

(BASF) or CORRO-COAT EP-F 2001 (JOTUN) or

SCOTCHKOTE 226N (3M) ME 0420

(BOREALIS)

HE 3450

(BOREALIS)

CORRO-COAT EP-F 2001

(JOTUN) or CORRO-COAT EP-F 2002 (JOTUN) LE – 149 V

(S K CORPORATION)
ET 509 B
(S K CORPORATION)

Although the above combinations would be acceptable to COMPANY, the responsibility of suitability for application, performance and compliance to the coating system requirements shall unconditionally lie with the SUPPLIER. SUPPLIER shall ensure that adhesive as well as polyethylene is manufactured by the same Manufacturer.

6.6 MEASUREMENT AND LOGGING

The SUPPLIER shall maintain records in computer using standard database Software containing all the relevant data of individual pipe and pipe coating including pipe number, heat number, diameter, length, wall thickness, defects, coating number, batches of materials, sampling, testing, damages, repairs, rejects and any other information that COMPANY considers to be relevant and required for all incoming bare pipes and COMPANY approved outgoing coated pipes as applicable. SUPPLIER's documentation shall be designed to ensure full traceability of pipe and coating materials through all stages of coating and testing. SUPPLIER shall submit this information in the form of a report at the agreed intervals. The above data shall also be provided in MS ACCESS format in Compact Disc (CD). SUPPLIER shall provide the use of one Computer Terminal to COMPANY Representative for monitoring/tracking of the above. In addition SUPPLIER shall also submit the material balance details to COMPANY for information.

6.7 COATING PROCEDURE AND QUALIFICATION

6.7.1 Upon award of the PURCHASE ORDER, the SUPPLIER shall submit within two (2) weeks, for COMPANY approval, a detailed report in the form of bound manual outlining, but not limited to, the following:

- Ø Details of plant(s), location(s), layout, capacity and production rate(s).
- Ø Details of the equipment available to carry out the coating works including surface preparation, epoxy powder application and its recycling system, adhesive & polyethylene extrusion, moisture control facilities available for coating materials.
- Ø Details of process control and inspection equipment required for the coating process such as temperature control, thickness control, holiday testers, etc.
- Ø Facilities in the yard for unloading, handling, transport, production, storage, stockpiling, loading of bare and coated pipes and warehouses for storage of other coating materials.
- Ø Plant Organisation Chart and availability of manpower including coating specialist
- Ø Details of utilities/facilities such as water, power, fuel, access roads and communication etc

After COMPANY has given approval, no change in plant set-up shall be made. However, unavoidable changes shall be executed only after obtaining written approval from COMPANY.

6.7.2 At least four (4) weeks prior to the commencement of production coating, a detailed procedure of the SUPPLIER's methods, material proposed, etc., shall be formulated by the SUPPLIER and submitted for COMPANY approval in the form of a bound manual. The procedure shall include, but not limited to, the following information and proposals:

- Ø Pipe inspection at the time of bare pipe receipt.
- Ø Steel surface preparation, including preheating, removal of steel defects, method of pipe cleaning, dust removal, abrasive blast cleaning and surface profile; methods of measurements and consumables.
- Ø Pipe heating, temperatures and control prior to epoxy application.
- Ø Complete details of raw materials including current data sheets showing values for all the properties specified together with quality control and application procedure recommendations from manufacturer(s).
- Ø Application of FBE powder, adhesive and polyethylene, including characteristics, temperature, line speed, application window, curing time, etc.
- Ø Quenching and cooling, including time and temperature.
- Ø Quality Assurance System, Quality Plan, Inspection and Test Plan and reporting formats, including instrument and equipment types, makes and uses, etc
- Ø Detailed method of repair of coating defects duly classified depending upon nature and magnitude of defects and repair thereof including coating stripping technique
- Ø Details of instrument and equipment calibration methods including relevant standards and examples of calibration certificates.
- Ø Complete details and inventory of laboratory and equipment for procedure qualification and regular production
- Ø Pipe handling and stock piling procedures
- Ø Sample of recording and reporting formats, including laboratory reports, certificates and requirement as per clause 6.0 of this specification.
- Ø Complete details of test certificates for raw materials including test methods and standards used.
- Ø Test certificates from PE compound manufacturer for tests for thermal aging, coating resistivity and aging under exposure to light. These test certificates shall not be older than three years
- Ø Health, Safety and Environment Plans.
- Ø Storage details of coating materials and chemicals.
- Ø Continuous temperature monitoring at various stages of coating

Procedure Qualification Tests (PQT) shall be carried out only after obtaining written approval of the above procedure from COMPANY. No change in the procedure shall be made after the COMPANY has given approval. However, unavoidable changes shall be executed only after obtaining written approval from COMPANY.

6.7.3 Prior to start of production, the SUPPLIER shall, at his expense, carry out a coating PQT for each pipe diameter on max. wall thickness, for each type of pipe, for each coating material combination, and for each plant, to prove that his plant, materials, and coating procedures result in a quality of end product conforming to the properties stated in clause 5.3, relevant standards, specifications and material manufacturer's recommendations. SUPPLIER shall give seven (7) working days notice to witness all procedures and tests. A batch representing a normal production run, typically 15 pipes, shall be coated in accordance with the approved coating procedure and the coating operations witnessed by COMPANY Representative. Out of these pipes, at least one pipe shall be coated partly with epoxy and partly with both epoxy and adhesive layers.

At least 5 (five) test pipes shall be selected by COMPANY Representative (optional) for coating procedure approval tests and shall be subjected to procedure qualification testing as described hereinafter. COMPANY Representative shall witness all tests. Out of 5 (five) test pipes, 1 (one) pipe partly coated with epoxy and partly coated with both epoxy and adhesive layers shall be included. Remaining 4 (four) test pipes shall have all three layers. During PQT, the SUPPLIER shall qualify various procedures forming a part of coating operations as detailed subsequently.

6.7.4 Qualification of Procedures

6.7.4.1 Epoxy Powder Application & Recycling: During pre-qualification, air pressure in the epoxy spray guns, satisfactory functioning of monitoring system, line speed vs coating thickness, etc. shall be established. Dew point of air used to supply the fluidised bed, epoxy spray system and epoxy recycling system shall be recorded during the PQ

Also, the SUPPLIER shall remove samples of reclaimed powder from the reclamation system. These samples of reclaimed powder shall be subject to a detailed visual examination, thermal analysis and moisture content tests. The properties of the reclaimed powder shall be within the range specified by the Manufacturer of epoxy powder. In case the properties of the reclaimed powder are out of the range specified by the Manufacturer, SUPPLIER shall not use the reclaimed powder during the regular production.

6.7.4.2 Pipe Pre-heating : The SUPPLIER shall establish the temperature variation due to in-coming pipe temperature, line speed variation, wall thickness variation, emissivity, interruptions, etc. and document the same during the PQT stage. During PQT, proper functioning of pipe temperature monitoring and recording system including alarm/hooter shall be demonstrated to the COMPANY Representative.

6.7.4.3 Surface Preparation: The procedure to clean and prepare the pipe surface shall be in accordance with the requirements of this specification. The ratio of shot to grit shall be established during procedure qualification testing, such that the resultant surface profile is not dished and rounded. The qualification shall be performed through a visual inspection, measurement of roughness and check of the presence of dust on the abrasive blast cleaned pipe surface.

6.7.4.4 Coating Application: The COMPANY Representative will check the correctness of each coating application operation, values of the main parameters

of each operation, pre-heating pipe surface temperature prior to epoxy powder application temperature, line speed, fusion bonded epoxy curing time, temperature and flow rate of co-polymer adhesive and polyethylene, etc. and the same shall be recorded. These values shall be complied with during regular production.

6.7.5 Qualification of Applied Coating

6.7.5.1 Tests on pipe coated partly with epoxy and partly with epoxy & adhesive layers

Ø Degree of Cure: Epoxy film samples (minimum 4 no.) shall be scrapped from the coated pipe and the samples shall be taken for cure test using Differential Scanning Calorimetry (DSC) procedure. Care shall be taken to remove the samples of full film thickness avoiding inclusion of steel debris. Glass transition temperature differential (ΔT_g) and % cure (ΔH) shall comply with the specified requirements.

Ø Epoxy Layer Thickness: Epoxy layer thickness shall be checked at every one metre spacing at 3, 6, 9 and 12 o'clock positions. The thickness shall comply with the specified thickness requirements.

Ø Adhesive layer Thickness: Adhesive layer thickness shall be checked at every one metre spacing at 3, 6, 9 and 12 o'clock positions. The thickness shall comply with the specified thickness requirements.

Ø Holiday Inspection: Entire pipe shall be subject to holiday inspection and the test voltage shall be set to exceed 5 v/micron of epoxy thickness specified for the portion coated only with epoxy layer.

Ø Adhesion Test

i. Adhesion Test (24 hrs or 48 hrs) shall be carried out on the epoxy coated pipe. Test method, no. of test specimen and acceptance criteria shall comply CSA Z.245.20-02, Table 4.

ii. Adhesion of FBE shall also be separately determined at ambient temperature at two locations by the "St Andrews Cross" method and the test shall comply with the specified requirements.

Ø 2.5° Flexibility Test: 2.5° Flexibility test shall be carried out on the epoxy coated pipe at test temperature of 0°C. Test method, no. of test specimen and acceptance criteria shall comply CSA Z.245,20-02, Table 4.

Ø Cross-section & Interface Porosity Test: Cross section porosity and interface porosity tests shall be carried out on the epoxy coated pipe. Test method, no. of test specimen and acceptance criteria shall comply CSA Z.245,20-02, Table 4.

6.7.5.2 Tests on pipes coated with all three layers

Ø Bond Strength: Three test pipes shall be selected for bond strength tests. On each of the selected pipes, three bond strength test shall be performed for each specified temperature i.e. one at each end and one in the middle of the pipe and specified requirements shall be complied with, i.e. bond strength as well as mode of separation. Length of peel shall be minimum 65 mm. None of these samples shall fail. Bidder may perform bond strength test at maximum feasible distance from either end instead of middle of the pipe due to pipe internal diameter limitations if encountered.

Ø Impact Strength: Three test pipes shall be selected for impact strength test and the test shall meet the specified requirements.

Ø Indentation Hardness: Two samples for both temperatures from all pipes shall be taken. If any one of these samples fail to satisfy the specified requirements, then the test shall be repeated on four more samples. In this case, none of the samples shall fail.

Ø d. Elongation at failure: Six samples each from three coated pipes i.e. 18 samples in all shall be tested and the test shall comply the specified requirement. Only one sample per pipe may fail.

Ø Cathodic Disbondment Test: Two CD tests shall be carried out for the total lot of test pipes having all three layers. One test shall be carried out for 30 days duration and another test for 48 hours duration. The tests shall comply the specified requirement. Whenever Procedure Qualification is necessitated for different pipe size with same coating material combination, 48 hours test only be conducted. 30 days CD test is not mandatory in this case.

Ø Holiday Inspection: All the pipes shall be subject to holiday inspection. The test voltage shall be as specified in para 6.10.4.

Ø Coating Thickness Measurement: All pipes shall be subject to coating thickness measurements. Acceptance criteria shall be as per para 6.10.3.

Ø Air Entrapment: One sample each from pipe body and on weld (if applicable) shall be taken from all four coated pipes and the specified requirements shall be complied with.

Ø Degree of Cure: Epoxy film samples (minimum 4 no., equally spaced) shall be scrapped from one coated pipe and the samples shall be taken for cure test using Differential Scanning Calorimetry (DSC) procedure. Silicon coated sulphite paper shall be placed between the epoxy layer and adhesive layer immediately after epoxy application, to ensure physical separation of epoxy & adhesive as well as to prevent contamination of epoxy with adhesive layer, at a location from where the epoxy samples are to be removed for the test. Care shall be taken to remove the samples of full film thickness avoiding inclusion of steel debris. Glass transition temperature differential (ΔT_g) and % cure (ΔH) shall comply with the specified requirements.

6.7.5.3 Inspection of all test pipes

All pipes shall be subject to the following inspections :

Ø Surface cleanliness, surface roughness measurements and dust control immediately after second abrasive blast cleaning and salt test immediately after deionised water wash.

Ø pH of pipe surface before and after phosphoric acid wash.

Ø visual inspection of finished coating, cut back dimension, internal/external cleanliness, end sealing and bevel inspection. Acceptance criteria for all inspection and testing shall be as specified in this specification.

6.7.6 After completion of the qualification tests and inspection as per para 6.7.5.2 and 6.7.5.3 above, the SUPPLIER shall prepare and issue to COMPANY for approval a detailed report of the above tests and inspection including test reports/certificates of all materials and coatings tested. Only upon written approval from COMPANY, SUPPLIER shall commence production coating.

6.7.7 On successful completion of PQT, coating of all five (5) test pipes shall be removed and completely recycled as per the approved coating procedure specification, at SUPPLIER's expense. Remaining pipes will be accepted by COMPANY provided they meet the requirements of this specification and need not be stripped and re-cycled

6.7.8 The SUPPLIER shall re-establish the requirements of qualification and in a manner as stated before or to the extent considered necessary by COMPANY, in the event of, but not limited to, the following:

Ø Every time there is a change in the previously qualified procedure.

Ø Every time there is a change in the manufacturer and change in formulation of any of the raw materials and change in location of raw material manufacture.

Ø Every time the coating yard is shifted from one location to the other or every time the critical coating equipments (induction heater, epoxy spray system, extruder, etc) are shifted.

Ø Any change in line speed during coating application

Ø Any time when in COMPANY's opinion the properties are deemed to be suspect during regular production tests.

6.7.9 COMPANY reserves the right to conduct any or all the test required for qualification through an independent laboratory or agency at the cost of SUPPLIER when in COMPANY's opinion, the results are deemed suspect. COMPANY's decision shall be final.

6.8 PIPE SURFACE PREPARATION

6.8.1 Unless specified otherwise, the pipes shall be supplied free from mill applied oils but may be subject to contamination occurring during transit.

6.8.2 Prior to cleaning operation, SUPPLIER shall visually examine the pipes and shall ensure that all defects, flats and other damages have been repaired or removed. The SUPPLIER shall also remove marking stickers, if any, present within the pipe. Record shall be kept of such marking on the stickers to ensure traceability of pipe after coating.

6.8.3 Any oil, grease, salt or other contaminants detrimental to the formation of a good coating bond or coating quality shall be removed prior to coating application. Contaminants may be removed by the use of non-oily solvents. Gasoline or kerosene shall not be used for this purpose. Visible oil and grease spots shall be removed by solvent wiping. Solvent cleaning shall be in accordance with SSPC-SP1. Steel surface shall be allowed to dry before abrasive cleaning.

6.8.4 All pipes shall be preheated to a temperature of 65°C to 85°C prior to abrasive blast cleaning. The external surface of the pipe shall be cleaned using 2 no. dry abrasive blast cleaning units to achieve the specified surface cleanliness and profile. The abrasive blast cleaning units shall have an effective dust collection system to ensure total removal of dust generated during blast cleaning from the pipe surface. During abrasive blast cleaning, the metallic abrasive shall be continuously sieved to remove "fines" and "contaminants" and the quality checked at every four hours. Abrasives used for blast cleaning shall comply ISO-11124

6.8.5 Suitable plugs shall be provided at both pipe ends to prevent entry of any shot/grit into the pipe during blast cleaning operations. These plugs shall be removed after blast cleaning. Alternatively the SUPPLIER may link the pipes suitably together to prevent the entry of any shot/grit into the pipe.

6.8.6 All pipes shall be tested for salt contamination after blast cleaning unit. One test shall be carried out on each pipe. The acceptance criteria shall be 2 µg/cm². An approved salt meter (SCM 400 or equivalent) shall be used to carry out salt tests and shall be calibrated in accordance with the equipment

manufacturer's recommendations. Any pipe having salt contamination exceeding $2 \mu\text{g}/\text{cm}^2$ shall be either reblasted or deionised water washed and then rechecked for salt contamination. In case salt level less than $2 \mu\text{g}/\text{cm}^2$ is consistently achieved, the frequency of salt contamination testing may be relaxed to at least one pipe per hour at the sole discretion of the COMPANY Representative.

6.8.7 Abrasive cleaning carried out shall be such that the resultant surface profile is not dished and rounded when viewed with 30X magnification. The standard of finish for cleaned pipe shall conform to near white metal finish to Sa $2 \frac{1}{2}$ of ISO 8501-1. Surface of pipe after abrasive blast cleaning shall have an anchor pattern of 50 to 80 microns (RZ). This shall be measured for each pipe by a suitable instrument such as surface profile depth gauge. In addition the pipe surface after blast cleaning shall be checked for the degree of cleanliness (Sa $2 \frac{1}{2}$), degree of dust and shape of profile. Degree of dust shall comply the requirements of ISO 8502 – 3. Acceptance limit shall be either quality rating 2 or Class 2. Tape used for assessment of degree of dust shall comply IEC 454-2. Pressure shall be exerted on the applied tape using a 4 kg roller, prior to peeling-off to assess the degree of dust.

6.8.8 All pipes shall be visually examined for presence of any shot/grit/loose material left inside the pipe during blast cleaning. Suitable mechanical means (stiff brush) shall be employed to remove the same before the pipes are processed further. In addition, inside surface of the pipe shall also be visually inspected for presence of any foreign material or shots and grit (free or embedded/sticking to pipe inside surface). The pipe inside surface shall be examined using sharp floodlight focused at the middle of the pipe at one end while inspection is carried out visually from other end. Any foreign material or shots/grit present in the pipe shall be completely removed by mechanical brush, high pressure air jets, by tilting of pipe, etc.

6.8.9 At no time shall the blast cleaning be performed when the relative humidity exceeds 85%. The SUPPLIER shall measure the ambient conditions at regular intervals during blast cleaning and coating operations and keep records of prevailing temperature, humidity and dew point.

6.8.10 The blast cleaned surface shall not be contaminated with dirt, dust, metal particles, oil, water or any other foreign material, nor shall the surface or its anchor pattern be scarred or burnished. All blast cleaned pipe surface shall be kept in dust free enclosure prior to coating. After blast cleaning, all surfaces shall be thoroughly inspected under adequate lighting to determine anchor pattern, quality of blasting and identify any surface defects prior to coating application. All surface defects such as slivers, scab, burns, laminations, welds spatters, gouges, scores, indentations, slugs or any other defects considered injurious to the coating integrity made visible during blast cleaning shall be reported to the COMPANY Representative and on permission from COMPANY Representative, such defects shall be removed by filing or grinding. After any grinding or mechanical repairs, the remaining wall thickness shall be checked and compared with specified thickness. Any pipes having thickness less than 95% of specified thickness shall be kept aside and disposed off as per the instructions of COMPANY Representative. The method employed to remove surface defects shall not burnish or destroy the anchor pattern or contaminate the surface. Pneumatic tools shall not be used unless they are fitted with effective air/oil and water traps. Where burnishing results in destruction of anchor pattern, the anchor

pattern shall be restored by suitable means. Pipes that have damages repaired by grinding and have ground areas more than 50mm in diameter shall be re-blasted. Any dust or loose residues that have been accumulated during blasting and/or during filing/grinding operations shall be removed by vacuum cleaning. If contamination of surface occurs, the quality of blast cleaning method and process shall be examined. If the surface roughness is outside the specified limit, the blast cleaning material shall be checked and replaced.

6.8.11 Upon Completion of the blasting operations, the quality control supervisor shall accept the pipe for further processing or return for re-blasting after removal of defects/imperfections. In case imperfections are considered detrimental to the coating quality, the same shall be reported to COMPANY's Representative for final decision on rejection or re-blasting / removal of defects. Re-blasting / removal of defects or returning pipe to the yard shall be at the SUPPLIER's cost. COMPANY's Representative, in additions, reserves the right to initiate any of the above actions during periodic inspections for oil, dust, salt, imperfections, surface defects, lack of white metal finish, etc.

6.8.12 In order to ensure that pipe with defects are not processed further, provisions shall be available to lift the pipes from inspection stand.

6.8.13 The total allowable elapsed time between completion of the blasting operations and commencement of the pre-coating and heating operations shall be such that no detectable oxidation of the surface occurs. Relative humidity readings shall be recorded every half an hour during the blasting operations in the immediate vicinity of the operations. The maximum elapsed time shall not exceed the duration given below:

Relative Humidity%	Maximum elapsed time
> 80	2 hours
70 to 80	3 hours
< 70	4 hours

Any pipe not processed within the above time-humidity requirement shall be completely re-blasted. Any pipe showing flash rusting shall be re-blasted even if the above conditions have not been exceeded.

6.8.14 Pipe handling between abrasive blasting and pipe coating shall not damage the surface profile achieved during blasting. Any pipe affected by the damage to the surface exceeding 200mm² in area and/or having contamination of steel surface shall be rejected and sent for re-blasting.

6.9 COATING APPLICATION

The external surface of the cleaned pipe conforming to clause 8.0 of this specification shall be immediately coated with 3-layer extruded polyethylene coating in accordance with the procedures approved by COMPANY, relevant standards and this specification. In general the procedure shall be as follows:

6.9.1 Pipe Heating

6.9.1.1 Immediately prior to heating of pipe, all dust and grit shall be removed from inside of the pipe by a combination of air blast, brushing and vacuum cleaning. Suitable arrangement shall be made to protect the bevel ends from getting damaged during the coating operation.

6.9.1.2 Induction heater or gas fired heating shall be used for heating the pipe. The method shall be capable of maintaining uniform temperature along the total length of the pipe, and shall be such that it shall not contaminate the surface to be coated. In case of induction heating, appropriate frequency shall be used to ensure 'deep heating' and intense skin heating is avoided. Gas fired heating system shall be well adjusted so that no combustion products are deposited on the steel surface. This shall be demonstrated on bare pipes prior to start of PQT. Oxidation of the cleaned pipe surfaces prior to coating (in the form of blueing or other apparent oxide formation) is not acceptable.

6.9.1.3 External surface of the pipe shall be heated to about 190 °C or within a temperature range (min. to max.) as recommended by the powder manufacturer. Required pipe temperature shall be maintained as it enters the coating chamber.

6.9.1.4 Temperature of the pipe surface shall be continuously monitored & recorded by using suitable instruments such as infrared sensors, contact thermometers, thermocouples etc. The recording method shall allow to correlate each linepipe. The monitoring instrument shall be able to raise an alarm / activate audio system (hooter) in the event of tripping of induction heater / gas fired heater or in the event of pipe temperature being outside the range recommended by the manufacturer. Any deviation from the application temperature range recommended by manufacturer shall be rectified. If immediate rectification is not feasible, the production shall be stopped until cause of deviation has been removed. Any pipe coated during the duration of temperature deviation shall be identified by marking and rejected. Such rejected pipes shall be stripped, re-cleaned and recoated.

6.9.1.5 Temperature measuring & monitoring equipment shall be calibrated twice every shift and/or as per COMPANY Representative's instruction.

6.9.1.6 SUPPLIER shall ensure that pipe surface emissivity variations are minimized during pipe heating. To avoid significant variance, more than once blasted joints should be coated at the same time and not mixed with joints blasted only once

6.9.2 Pipe Coating

6.9.2.1 Subsequent to pipe heating, coating consisting of following layers shall be applied onto the pipe.

Ø Electrostatic application of epoxy powder of minimum dry film thickness 0.150 mm, unless otherwise specified. The maximum thickness shall not exceed the epoxy thickness specified by epoxy powder manufacturer.

Ø Grafted co-polymer adhesive application by extrusion, minimum thickness 0.200 mm.

Ø Polyethylene application by extrusion. The coated pipe shall be subsequently quenched and cooled in water for a period that shall sufficiently lower the temperature of pipe coating to permit handling and inspection.

6.9.2.2 Minimum total thickness of finished coating shall be as under:

Pipe Size (Specified Outside Diameter)	Minimum Coating (*) Thickness (mm)	
	Normal Type (n)	Reinforced Type (v)
Up to 10 ³ / ₄ " (273.1 mm)	2.0	2.7
Over 10 ³ / ₄ " (273.1 mm) to below 20" (508.0 mm)	2.2	2.9
From 20" (508.0mm) to below 32" (813.0 mm)	2.5	3.2
From 32" (813.0 mm) and above	3.0	3.7

(*) In case HDPE material is used as top coat, 10% reduction in minimum coating thickness specified is permissible.

Required coating thickness shall be Normal Type (n), unless otherwise specified.

6.9.2.3 Coating materials shall be inspected in accordance with the manufacturer's recommendation prior to coating application and it shall be ensured that the materials are moisture free. In case the relative humidity exceeds 80%, the adhesive and polyethylene material shall be dried using hot dry air as per the directions of COMPANY Representative.

6.9.2.4 Prior to starting the application of fusion bonded epoxy powder, the recovery system shall be thoroughly cleaned to remove any unused powder remaining from a previous line pipe coating application. The use of recycled powder shall be permitted subject to

Ø Satisfactory qualification of the reclaimed system during PQT stage

Ø The proportion of the reclaimed powder in the working mix does not exceed 20% at any one time.

Ø The quality of the recycled powder being routinely checked during production, at a minimum frequency of once per shift and consistently meets the requirements stated at para 6.5.1

6.9.2.5 Dry air, free of oil and moisture shall be used in the coating chamber and spraying system and filters, dehumidifier/dryer as required along with control & monitoring system shall be provided for this purpose. Dew point of air used to supply the fluidized bed, epoxy spray system and epoxy recycling system shall be at least (-) 40°C and this shall be monitored during the regular production.

6.9.2.6 Air pressure in the epoxy spray guns shall be controlled, continuously monitored and recorded by using suitable instruments. The air pressure shall be controlled within the limits established during coating procedure qualification. The monitoring system shall be able capable of raising an alarm / activate audio system (hooter) in the event of change in air pressure beyond the set limits. Any deviation from the pre-set limits shall be rectified. If immediate rectification is not feasible, the production shall be stopped until cause of deviation has been removed. Any pipe coated during the duration of air pressure deviation shall be identified by suitable marking and rejected. Such rejected pipes shall be stripped and recoated.

6.9.2.7 Extruded adhesive layer shall be applied before gel time of the epoxy coating has elapsed and within the window recommended by the manufacturer. The SUPPLIER shall establish, to the satisfaction of the COMPANY Representative, that the adhesive is applied within the gel time window of epoxy and at the temperature recommended by the adhesive manufacturer. The SUPPLIER shall state the minimum and maximum time interval between epoxy and adhesive application at the proposed pre-heat temperature and line speed.

6.9.2.8 Extruded polyethylene layer shall be applied over the adhesive layer within the time limit established during PQT stage and within the time/temperature range recommended by the manufacturer. The extrusion temperatures of the adhesive and polyethylene shall be continuously recorded. The monitoring instruments shall be independent of the temperature control equipment. The instruments shall be calibrated prior to start of each shift.

6.9.2.9 SUPPLIER shall ensure that there is no entrapment of air or void formation along the seam weld (where applicable) during application of coating. Air entrapment below the coating and also along the coating overlap shall be prevented by forcing the coating on to the pipe using high pressure roller of suitable design during coating application. In case it is not adequately achieved, SUPPLIER shall supplement by other methods to avoid air entrapment. The methods used shall be witnessed and approved by COMPANY.

6.9.2.10 Resultant coating shall have a uniform gloss and appearance and shall be free from air bubbles, wrinkles, holidays, irregularities, discontinuities, separation between layers of polyethylene & adhesive, etc.

6.9.2.11 Coating and/or adhesive shall terminate 120 mm (+) 20 / (-) 0 mm from pipe ends. The adhesive shall seal the end of applied coating. SUPPLIER shall adopt mechanical brushing for termination of the coating at pipe ends. Edge of the coating shall be shaped to form a bevel angle of 30° to 45°.

6.9.2.12 Failure to comply with any of the above applicable requirement and of the approved procedure shall be cause for the rejection of the coating and such coating shall be removed in a manner approved by COMPANY at SUPPLIER's expense.

6.10 INSPECTION AND TESTING

6.10.1 General : The SUPPLIER shall establish and maintain such quality assurance system as are necessary to ensure that goods or services supplied comply in all respects with the requirements of this specification. The minimum inspection and testing to be performed shall be as indicated subsequently herein.

6.10.2 Visual Inspection: Immediately following the coating, each coated pipe shall be visually checked for imperfections and irregularities of the coating. The coating shall be of natural colour and gloss, smooth and uniform and shall be blemish free with no dust or other particulate inclusions. The coating shall not show any defects such as blisters, pinholes, scratches, wrinkles, engravings, cuts, swellings, disbonded zones, air inclusions, tears, voids or any other irregularities. Special attention shall be paid to the areas adjacent to the longitudinal weld (if applicable), adjacent to the cut-back at each end of pipe and within the body of the pipe. In addition inside surface of the pipe shall also be visually inspected for presence of any foreign material or shots and grit (free or embedded/sticking to pipe inside surface). The pipe inside surface shall be

examined using sharp floodlight focussed at the middle of the pipe at one end while inspection is carried out visually from other end.

6.10.3 Coating Thickness

Ø The coating thickness shall be determined by taking at least 10 measurements at locations uniformly distributed over the length and periphery of each pipe. In case of welded pipes, five of the above readings shall be made at the apex of the weld seam, uniformly distributed over the length of the coated pipe. All readings must meet the minimum requirements. However, localized coating thickness of less than the permissible minimum thickness can be tolerated on the condition that it does not attain a total extent of more than 5 cm² per meter length of coated pipe, and the actual coating thickness does not drop more than 10% below the permissible minimum coating thickness at these locations. The frequency of thickness measurement as stated above shall be initially on every pipe, but may be reduced depending upon consistency of results, at the sole discretion of COMPANY Representative. Results of all measurements shall be recorded.

Ø Thickness of epoxy and adhesive shall be measured at the beginning of each shift and whenever the plant re-starts after any stoppage for compliance. Coating of epoxy and adhesive on portion of pipe required for this purpose, stripping and recoating of such partly coated pipes shall be at SUPPLIER's expense.

Ø Coated pipes not meeting the above requirements shall be rejected. Rejected coated pipes shall be stripped and re-coated in accordance with approved procedure, at SUPPLIER's expense.

6.10.4 Holiday Detection

Ø Each coated pipe length shall be checked over 100% of coated surface by means of a "holiday detector" of a type approved by COMPANY for detecting holidays in the finished coating.

Ø The holiday detector shall be a low pulse D.C. full circle electronic detector with audible alarm and precise voltage control complying with Annex. E of DIN 30670: 2012. The set voltage for inspection shall be minimum 25 kV. Travel speed shall not exceed 300 mm/s.

Ø SUPPLIER shall calibrate the holiday detector at least once every 4 hours of production. SUPPLIER shall have necessary instruments or devices for calibrating the holiday detector.

Ø Any pipe coating shall be rejected if more than 1(one) holiday & area more than 100 cm² in size are detected in its length attributable to coating process.

Ø Holidays which are lesser in size than those mentioned above, shall be repaired in accordance with a approved procedure and shall be at SUPPLIER's expense.

6.10.5 Bond Strength Test

Ø SUPPLIER shall conduct bond strength test for composite coating as per Clause 6.3.3(a) of this specification. A minimum of 65 mm length shall be peeled. First 20 mm and last 20 mm shall not be counted for assessment of bond strength.

Ø The frequency of test for cut back portions shall be one pipe in every fifteen (15) pipes coated and for middle of pipe shall be one pipe in every sixty (60) pipes coated or one pipe per shift whichever is higher. On each selected pipe, bond strength shall be performed for each specified temperature. Test shall be performed at each cut back portion and one in the middle of pipe. The system shall disbond/separate cohesively either in adhesive layer or in polyethylene layer. Majority of the peeled off area on the pipe shall show presence of adhesive. Disbondment/separation at epoxy to steel interface or epoxy / adhesive interface or adhesive / polyethylene interface shall not be permitted. The failure mode shall be recorded for each test.

Ø In case the test fails to comply the specified requirement, the SUPPLIER shall test the preceding and succeeding coated pipe. If both pipes pass the test, then the remainder of the pipe joints in that shift shall be deemed satisfactory. If either pipe fails to meet the specified requirements, all pipes coated during that shift shall be tested until the coating is proved acceptable. Rejected coated pipes shall be stripped and re-coated in accordance with approved procedure, at SUPPLIER's expense.

Ø The frequency of bond strength test as per para 6.10.5 for cut back portion may be reduced depending upon the consistency of result to one pipe in every twenty five (25) instead of every fifteen pipes, at the sole discretion of the COMPANY Representative.

6.10.6 Impact Strength

Ø Impact strength test shall be conducted as per clause 6.3.3(b) of this specification. Initially the frequency of test shall be two (2) coated pipes per shift that may be further reduced to one coated pipe per 2 weeks depending upon consistently acceptable results at the sole discretion of COMPANY's Representative.

Ø Minimum thirty (30) impacts located equidistant along the length of coated pipe shall be performed.

Ø Immediately after testing, the test area shall be subjected to holiday detection at the same voltage as used prior to impact strength test. The pipe shall be rejected if any holiday is noted in the test area.

Ø In case of test failure, retesting and disposal of coated pipe shall be as per para 6.10.5 (c) above.

6.10.7 Indentation Hardness

Ø Indentation hardness test shall be as per clause 6.3.3 (c) of this specification. The frequency of test shall be initially 2 (two) coated pipes per shift which shall be further reduced to one test each on 2 coated pipes per week at random after 1 week of consistently acceptable results. Two samples for each temperature shall be taken from the cut back portion of coated pipe and one in the middle of the pipe for this test.

Ø In case of test failure, retesting and disposal of coated pipe shall be as per para 10.5 (c) above.

6.10.8 Air Entrapment Test

Ø Strips from bond strength tests or coated pipe may be used to help determine the porosity of the finished coating. Strip shall be also cut from longitudinal weld (if applicable) at cut back portion and examined for the presence of voids.

Ø Bond strength strip shall be viewed from the side and at the failure interface. At the pipe bond strength test location, utility knife shall be used to cut the edge of the coating to a 45° angle and view with a microscope. Similar examination shall be done in the coating cut back area.

Ø One sample each either on the bond strength strip or coated pipe and strip cut from the longitudinal weld (if applicable) shall be examined for air entrapment per shift. Strips shall be viewed from the side.

Ø All examination shall be done using a 30X magnification hand-held microscope. The polyethylene and adhesive layers shall have no more than 10% of the observed area taken up with air entrapment (porosity or bubbles). Air entrapment shall not occupy more than 10% of the thickness in each case. Bubbles shall not link together to provide a moisture path to the epoxy layer.

Ø In case of test failure, retesting and disposal of coated pipe shall be as per para 10.5 (c) above.

6.10.9 Degree of Cure

Ø Epoxy film samples shall be removed from cut back portion of the coated pipe using hammer and cold chisel and the samples shall be taken for cure test using DSC procedure. Silicon coated sulphite paper shall be placed between the epoxy layer and adhesive layer immediately after epoxy application, to ensure physical separation of epoxy & adhesive as well as to prevent contamination of epoxy with adhesive layer, at a location from where the epoxy samples are to be removed for the test. Care shall be taken to remove the samples of full film thickness avoiding inclusion of steel debris. Glass transition temperature differential (.Tg) and % cure (.H) shall comply the specified requirements.

Ø Frequency of this test shall be once per shift. Pipe shall be selected randomly by COMPANY Representative during the middle of a shift. Suitable provisions /arrangements as per the instructions of COMPANY Representative shall be made by the SUPPLIER for this purpose

Ø In case of test failure, production carried out during the entire shift shall be rejected, unless the SUPPLIER proposes a method to establish the compliance with the degree of cure requirements of all pipes coated during that shift.

6.10.10 Epoxy Layer Adhesion Test

Ø Adhesion of epoxy layer shall be determined at ambient temperature by the "St Andrews Cross" method i.e. by cutting two straight lines through the epoxy layer with a sharp knife. The incisions shall intersect at an angle of 30°/150°. The epoxy coating shall resist disbondment from the steel when attempts are made to flick/lift the coating from the 30° angle with a sharp knife.

Ø Frequency of this test shall be once per shift. The test shall be carried out at the cut back portion on the pipe from which the Degree of Cure test has been carried out as per para 10.9 above.

Ø In case of test failure, retesting and disposal of coated pipe shall be as per para 10.9 (c) above.

6.10.11 Cathodic Disbondment Test

Ø 48 hours CD test shall be conducted as per clause 6.3.3 (h) of this specification.

Ø The frequency of this test shall be once in every two weeks or one test representing each batch of epoxy powder used, whichever is more frequent.

Ø In case the test fails to conform to the specified requirement, at the option of the SUPPLIER, all pipes coated after the previous acceptable test and prior to

next acceptable test shall be rejected or the test shall be repeated using two additional samples taken from the same end of the affected pipe. When both retests conform to the specified requirement, the lot of pipes shall be accepted. When one or both the retests fail to conform to the specified requirement, all coated pipes after previous acceptable test and prior to next acceptable shall be rejected. All rejected pipes shall be stripped, re-cleaned and re-coated. COMPANY may consider a further retest program to determine whether any of the affected pipe meet the criteria for acceptance upon written request by the SUPPLIER.

6.10.12 Damages occurring to pipe coating during above tests shall be repaired in accordance with approved coating repair procedure.

6.10.13 Repairs occurring on account of the production tests are however excluded from above mentioned limitations at para 6.10.4 above.

6.10.14 COMPANY reserves the right to perform inspection and witness tests on all activities concerning the pipe coating operations starting from bare pipe to finished coated pipe ready for despatch and also testing of raw materials. SUPPLIER shall give reasonable notice of time and shall provide without charge reasonable access and facilities required for inspection to the COMPANY's representative. Inspection and tests performed or witnessed by COMPANY's representative shall in no way relieve the SUPPLIER's obligation to perform the required inspection and tests.

6.10.15 In case rate of defective or rejected pipes and/or samples tests are 10% or more for a single shift (typically 8 hours), SUPPLIER shall be required to stop production and carry out a full and detailed investigation and shall submit findings to COMPANY for approval. SUPPLIER shall recommence the production only after getting the written permission from COMPANY. Under no circumstances any action or omission of the COMPANY's Representative shall relieve the SUPPLIER of his responsibility for material and quality of coating produced. No pipes shall be transported from the coating plant unless authorized by COMPANY in writing.

6.11 REPAIR OF COATING

SUPPLIER shall submit to COMPANY, its methods and materials proposed to be used for executing a coating repair and shall receive approval from COMPANY prior to use. In open storage the repair coating materials must be able to withstand a temperature of at least (+) 80°C without impairing its serviceability and properties. SUPPLIER shall furnish manufacturer's test certificates for the repair materials clearly establishing the compliance of the repair materials with the applicable coating requirements indicated in this specification. All pipe leaving coating plant, shall have sound external coating with no holiday or porosity on 100% of the surface. Defects, repairs and acceptability criteria shall be as follows:

Ø Pipes showing porosities or very small damage not picked up during holiday test and having a surface less than 0.5 cm² or linear damage (cut) of less than 3 cm shall be repaired by stick using material of same quality.

Ø Damages caused to coating by handling such as scratches, cuts, dents, gouges, not picked up during holiday test, having a total reduced thickness on damaged portion not less than 2 mm and an area not exceeding 20 cm² shall be rebuild by heat shrink patch only and without exposing to bare metal.

Ø Defects of size exceeding above mentioned area or holidays of width less than 300 mm shall be repaired with heat shrink repair patch by exposing the bare metal surface.

Ø Defects exceeding the above and in number not exceeding 2 per pipe and linear length not exceeding 500 mm shall be repaired using heat shrinkable sleeves of HTLP 80 or equivalent.

Ø Pipes with bigger damage shall be stripped and recoated.

Ø In case of coating defect close to coating cut back, SUPPLIER shall remove the coating throughout the entire circumference of the pipe down to the steel surface and increase the coating cut back length. Now if the coating cut back exceeds 140 mm of linear length of pipe then the coating shall be repaired by the use of heat shrink sleeves thereby making up the coating cut back length of 120 mm.

Notwithstanding the above, if any defect exceeds 70 mm from the original coating cut back length, the entire coating shall be removed and the pipe shall be recycled through the entire coating procedure.

Irrespective of type of repair, the maximum numbers of repair of coating shall be as follows:

Ø Holiday repair of size =100 cm² attributable to process of coating application shall be maximum one number per pipe.

Ø In addition to the above, defects to be repaired by heat shrink patch/sleeve shall be maximum 2 (two) per pipe

Defects exceeding the above limits shall cause pipe coating rejection, stripping and recoating. The above is exclusive of the repairs warranted due to testing as per this specification.

All repairs carried out to coating for whatever reason shall be to the account of SUPPLIER.

Cosmetic damages occurring in the polyethylene layer only need not be repaired by exposing up to steel surface, as deemed fit by the COMPANY Representative. In any case the SUPPLIER shall establish his material, methods and procedure of repair that result in an acceptable quality of product by testing and shall receive approval from COMPANY prior to use.

Testing of repairs shall be in the same form as testing coating. All repairs shall result in a coating thickness no less than the parent coating thickness. SUPPLIER shall test repairs to coating as and when required by COMPANY.

6.12 MARKING

SUPPLIER shall place marking on the outside surface of the coating at one end of the coated pipe, and marking shall indicate, but not limited to the following information:

Ø Pipe number, Heat number

Ø Diameter & Wall thickness

Ø Coated pipe number

Ø Colour band

Ø Any other information considered relevant by COMPANY.

Ø Pipe Manufacturer Name

Ø Inspection Mark/Punch

SUPPLIER shall obtain prior approval on marking procedure to be adopted from the COMPANY.

6.13 QUALITY ASSURANCE

6.13.1 The SUPPLIER shall have established within his organization and, shall operate for the contract, a documented Quality System that ensures that the requirements of this specification are met in all aspects. The Quality System shall be based upon ISO 9001/2 or equivalent.

16.13.2 The SUPPLIER shall have established a Quality Assurance Group within its organization that shall be responsible for reviewing the Quality System and ensuring that it is implemented.

16.13.3 The SUPPLIER shall submit the procedures that comprise the Quality System to the COMPANY for agreement.

16.13.4 The SUPPLIER's Quality System shall pay particular attention to the control of Suppliers and Sub-SUPPLIERS and shall ensure that the requirements of this specification are satisfied by the Suppliers and Sub-SUPPLIERS operating Quality system in their organization.

16.13.5 The SUPPLIER shall, prior to the commencement of work, prepare and issue a Quality Plan for all of the activities required to satisfy the requirements of this specification. The plan shall include any sub-contracted work, for which the sub-SUPPLIERS Quality Plans shall be submitted. The plan shall be sufficiently detailed to indicate sequentially for each discipline the requisite quality control, inspection, testing and certification activities with reference to the relevant procedures and the acceptance standards.

16.13.6 The SUPPLIER's Quality system and associated procedures may, with due notice, be subject to formal audits. The application of quality control by the SUPPLIER will be monitored by the COMPANY Representatives who will witness and accept the inspection, testing and associated work required by this specification.

6.14 Para – 6.1 to 6.13 shall also cover scope for 3 layer polyethylene coating for the LR bends.

7.0 SCOPE OF WORK FOR DELIVERY OF PRE-COATED PIPES AND SPECIFICATION

The pre coated / Bare Pipes and LR Bends are to be delivered at pipe yards in and around Duliajan. The pipes and bends should be carefully handled as per guidelines so that there is no damage to the coatings.

Unloading at Duliajan, Assam shall be carried out by Oil India Limited using its own resources.

8.0 SCOPE OF WORKS AND SPECIFICATION FOR FABRICATION OF LONG RADIUS BENDS, INCLUDING HEAT SHRINKABLE SLEEVE COATING OF THE BENDS, HANDLING, DESPATCH AND DELIVERY OF THE BENDS AT DESIGNATED POINTS.

8.1 SCOPE :

8.1.1 Fabrication of long radius bends as per clause 8.2 to 8.8.

8.1.2 Handling, loading, transportation to coating plant and unloading at coating plant as per Para -5.0 PART – A.

8.1.3 External coating of the bends by using heat shrinkable sleeve coating as per Item Description

8.1.4 Handling, packing, loading, despatch and delivery of coated bends at designated points as per Para – 7.0, PART – A.

8.2 Reference has been made in this specification to the latest edition of the following codes, standards and specifications :

a) ASME B 31.8 : Gas Transmission and Distribution Piping Systems.

b) MSS-SP-75 : Specification for High Test Wrought Welding Fittings.

8.3 MATERIAL

8.3.1 Bends shall be fabricated from steel line pipes of specification as per SCOPE OF SUPPLY mentioned in Para – 1.4 and scope as per Para – 3.0, PART – A.

8.3.2 Heat treatment shall be carried out for all finished bends, Heat treatment procedure shall be such that the mechanical properties and steel microstructure of the finished bends comply with the minimum requirements specified in the applicable line pipe specification referred under clause 3.1 When TMCP and OLAC sheets and micro alloyed steels are used, specific approval of the proposed heat treatment shall be obtained before bending process is employed. The finished product shall be evaluated for mechanical properties and micro structural stability.

8.4 MANUFACTURE

8.4.1 Bends shall be manufactured by high frequency induction heating and forming method. Once the bending operation has commenced no stoppage shall be permitted until the entire bend has been completed. If bending temperature, bending rate, cooling medium volume or heat treatment temperature depart from the Purchase approved bend manufacturing procedure, then the pipe shall be discarded and another bend shall be made in its place.

8.4.2 Unless otherwise specified differently in the Purchase Order, the bevels at the ends shall be as per relevant pipe specification.

8.4.3 No repair by welding is allowed on any part of the bends.

8.4.4 Bulges, dents and flat areas shall not appear within 100 mm front end of the bend. For the remaining part of the bend these deviations from the original contour of the pipe are permitted provided these deviations do not exceed 6.0 mm. The same shall not extend (in any direction) over a distance of more than 25% of nominal diameter of the bend.

8.4.5 All bends shall be provided with a tangent length at the ends. Tangent length shall be 300 mm or pipe outside diameter whichever is more.

8.5 TOLERANCES

The dimensions of bends shall be controlled to make sure that they are manufactured according to the tolerances indicated below in addition to the requirements of MSS-SP-75. However, the ends of finished pipe bend shall meet the dimensional tolerances of the relevant pipe specification as referred in Para – 1.1 and Para – 3.0, PART - A.

8.5.1 Bend Angle : ± 0.5 degree of specified angle
Bend Radius : $\pm 1\%$ of bending nominal radius

8.5.2 The manufacturer shall measure the wall thickness of the pipe before bending along both the inside and outside radii of the bend between and including the start and stop points of the bend arc angle, at intervals approximately equal to pipe diameter or 300 mm whichever is less. The wall thickness shall be measured ultrasonically after bending at the same locations measured before bending. In addition, the wall thickness of the tangents shall also be measured. These measurements shall be taken at four equally spaced locations around the pipe circumference. The measured wall thickness shall be at least equal to :

$$t_{\min} = 0.95 (t_{\text{actual}} - \Delta t)$$

where :

t_{actual} = Actual wall thickness of pipe

Δt = 0.35 mm for a wall thickness < 10 mm and 0.5 mm for a wall thickness > 10 mm

8.5.3 Out of roundness tolerance on the body and ends of the bend shall be as follows :

Body Measurements of the outside diameter shall be taken in the plane of the bend at locations where wrinkles are present (OD max.) and at locations where wrinkles are not present (OD min.). Out of roundness shall be considered acceptable, if the value of $(\text{OD}_{\max} - \text{OD}_{\min}) / \text{OD}_{\text{nom.}}$ does not exceed 2.5%.

8.5.4 Off-Plane

Off-Plane of bends shall not exceed $(\theta/90) \times 10$ mm, where θ is the bend angle in degree or the tolerance limit specified in MSS-SP-75 whichever is less. The measurement shall be in accordance with MSS-SP-75.

8.6 INSPECTION & TESTS

8.6.1 The manufacturer shall perform all inspection and tests as per the requirements of this specification and MSS-SP-75 prior to transfer to the coating plant. Such inspection and tests shall be as a minimum, but not limited to the following :

8.6.1.1 Verify that the uncoated bends arrive at coating shop is in full compliance with the pipe specification as referred from Para – 8.2 to Para – 8.5.

8.6.1.2 Visual inspection.

8.6.1.3 Dimensional and tolerances check as per MSS-SP-75 and requirements of Section 4.0 of this specification.

8.6.1.4 Check heat treatment, if carried out, as required and maintain its records.

8.6.1.5 Temperature against time recorder charts for each induction heating.

8.6.1.6 A check shall be performed on each bend by passing a gauging pig consisting of two discs having a diameter equal to 95% of the nominal internal diameter of the pipe, connected rigidly together at a distance equal to 500 mm (and 300 mm for pipe size below 8" NB). Details of the gauging pig. Including its dimensions shall be approved by Purchaser.

8.6.2 Purchaser reserves the right to perform stage wise inspection and witness tests on all bends as indicated in Clause 5.1 at Manufacturer's works, prior to shipment.

8.7 TEST CERTIFICATES

The manufacturer shall submit the following certificates ;

8.7.1 Records of heat treatment, if carried out for bends.

8.7.2 Certified reports of dimensional tolerance of bends.

8.7.3 Certificates of all other tests as required in this specification.

The Certificate shall be valid only when signed by Third Party Inspection Agency. Only those bends which have been certified by Third Party Inspection Agency shall be dispatched from Manufacturer's works.

8.8 MARKING, PACKING AND SHIPMENT

8.8.1 All bends shall be marked as per MSS-SP-75.

8.8.2 Both ends of all bends shall be suitably protected to avoid any damage during transit by means of metallic or high impact plastic bevel protectors.

*******END OF ANNEXURE – A1*******

BID EVALUATION CRITERIA (BEC)/BID REJECTION CRITERIA (BRC) -

(A) BID REJECTION CRITERIA (BRC):

The bids shall broadly conform to the specifications and terms and conditions given in this bid document. Bids shall be rejected in case the items offered do not conform to required parameters stipulated in the technical specifications and to the respective international/national standards wherever stipulated.

Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements will have to be particularly met by the Bidders, without which the same will be considered as non-responsive and rejected.

1.0 Bidder shall either be a Line Pipe Manufacturer or a Supply House/ Dealer/Distributor/Sole Selling Agent duly authorized by a Line Pipe Manufacturer. Bidder must submit such authorization letter, if applicable, alongwith the Technical Bid clearly specifying their status.

2.0 All the tendered items shall be procured from same source against this tender and hence, bidder must quote for all items in full quantity strictly complying with the technical specifications as per tender.

3.0 Bidder must be in a position of despatching the entire tendered quantity within a period of 6 months from the date of PO (FOR Despatching Station). Bids without delivery schedule of 6 months or with higher delivery schedule than above shall be rejected.

4.0 Experience Criteria:

4.1 **For Line Pipe Manufacturer:** The Line Pipe Manufacturer must have experience of manufacturing and successfully executing orders/contracts to any Oil & Gas specific Companies for at least 50% tendered quantity of same type (as per tender specifications) Line Pipes compliant to API Spec. 5L at PSL-2 during the last 5 (five) years preceding the original bid closing date of the tender (either by themselves or through their sole selling agent/ distributor/dealer/supply house). Manufacturer/Mill having such experience for supplying higher outer diameters and/or higher Grades and/or minimum wall-thickness of 6.4 mm shall also be acceptable. Documentary evidence in this regard must be submitted as per Para 4.4.

4.2 **For Bend Manufacturer:** The Manufacturer of offered Pipe Bends must have experience of manufacturing and successfully executing orders/contracts to any Oil & Gas specific companies for at least 50% tendered quantity of same type (as per tender specifications) Pipe Bends during the last 5 (five) years preceding the original bid closing date of the tender (either by themselves or through their sole selling agent/ distributor/dealer/supply house). Manufacturer/ Mill having

such experience for supplying higher outer diameters and/or higher Grades and/or minimum wall-thickness of 6.4 mm shall also be acceptable. Documentary evidence in this regard must be submitted as per Para 4.4. Bend Mother pipes manufacturing mill must have API Spec. 5L – Product Specification Level 2 (PSL 2) certifications for the preceding five (5) years from the original bid closing date of the tender. Copies of relevant API license to use API monogram (API 5L at PSL-2) for the last 5 (Five) years shall be submitted along with the techno-commercial bid. The Bend manufacturing process shall comply relevant standards (ASME B16.49) including the detailed specs mentioned in the tender.

4.3 For Coating Applicator: The Coating Applicator must have experience of successfully carrying out API Line Pipe coating jobs as per tender specifications for at least 50% tendered quantity for use by Oil and Gas specific companies in the last 5 (five) years preceding the original bid closing date of the tender. Documentary evidence in this regard must be submitted as per Para 4.4.

4.4 Documentary evidences to substantiate past supply experience as above should be submitted alongwith the technical bid in the form of copies of relevant Purchase Orders/Contracts placed by Oil & Gas specific Companies together with copies of any of the following documents against each of those Orders/contracts:

- (i) Signed and sealed Satisfactory supply / completion report (in original on user's letter head) (OR)
- (ii) Bill of Lading (OR)
- (iii) Consignee delivery receipt / challan (OR)
- (iv) Central Excise Gate Pass/Tax Invoice issued under relevant rules of Central Excise/Vat (OR)
- (v) Commercial Invoice/ Payment Invoice

Note:

i. The Purchase Orders/contracts date need not be within 5 (five) years preceding original bid closing date of this tender. However, the execution of supply must be within 5 (five) years preceding the original bid closing date of this tender.

ii. In the event of any extension to the bid closing date of the tender, the original scheduled bid closing date shall be considered for evaluation of BRC clauses.

iii. Documentary evidences regarding satisfactory supply/completion/installation report should be submitted alongwith the technical bid on client's letterhead, duly signed & sealed by the authorised officials of such client/customer. Original documents, if & when warranted, must be produced for verification by OIL.

5.0 In case the Bidder is a LINE PIPE MANUFACTURER:

5.1 The manufacturing mill of the offered line pipes must have API Spec. 5L – Product Specification Level 2 (PSL 2) certifications for the preceding five (5) years from the original bid closing date of the tender and the same must be valid as on the scheduled original bid closing date. Copies of relevant API license to use API monogram (API 5L at PSL-2) for the last 5 (Five) years (i.e. continuous without having any break in between) shall be submitted alongwith the techno-commercial bid. Bids without copies of valid API certificates or with break in between shall be rejected.

5.2 The Bidder must meet the past supply experience criteria as stipulated in Para 4.1 above for Coated Line Pipes and submit documentary evidences thereof as per para 4.4 above.

5.3 The Bidder should either themselves meet the criteria for Bends as stipulated in Para 4.2 above or propose to engage a third party Bend Manufacturer who meets the said criteria. Bidder proposing to engage a third party Bend Manufacturer must execute an MOU (Memorandum of Understanding) with such bend manufacturer before submission of their Bid and a copy of which must be submitted alongwith the technical bid. Requisite documentary evidences for supply experience of the Bend Manufacturer as called for vide para 4.4 complying with the criteria mentioned in para 4.2 above must also be submitted together with the MOU.

5.4 The Bidder should either have their own coating facility meeting the tender specifications or propose to engage a third party Coating Applicator who meets the coating criteria. Bidders proposing to engage a third party Coating Applicator, must execute an MOU (memorandum of understanding) with such Coating Applicator before submission of their Bid and a copy of which must be submitted alongwith the technical bid. Requisite documentary evidences for experience of Line Pipe Coating jobs as called for vide para 4.4 complying with the criteria mentioned in para 4.3 above must also be submitted together with the MOU.

5.5 As may be necessary, the Bidder can propose only one Bend Manufacturer and only one Coating Applicator in their Bid. Offers highlighting multiple Bend Manufacturers and/or multiple Coating Applicators shall be rejected without any reference.

5.6 Subsequent to submission of Bid, Bidder shall not be permitted to change the Bend Manufacturer or Coating Applicator. Request for such change(s) will amount to post-tender modification/withdrawal of bid and liable for bid rejection, besides other penal actions.

6.0 In case the Bidder is an authorized Dealer/Distributor/Supply House/Sole Selling Agent of a Line Pipe Manufacturer, the following criteria must be met by the Bidder:

6.1 The Bidder must identify its status (whether Dealer/Distributor/Supply House/Sole Selling Agent) in its technical Bid and undertake to supply Line Pipes & Bends produced by the manufacturer(s), who meets the experience

requirements stipulated under para 4.1 & 4.2 above. Similarly, the Coating shall be applied by the party who meets the criteria as mentioned in para 4.3 above. Documentary evidences in this regard for Line Pipe Manufacturer, Bend Manufacturer and Coating Applicator must be submitted as per para 4.4 above.

6.2 The bidder must additionally have own experience of successfully executing at least 01 (One) purchase order/contract for Coated API Line Pipe of minimum 25% of the tendered quantity of any size & grade to Oil and Gas specific companies in the last 5 (Five) years preceding the original bid closing date of the tender. Documentary evidence in this regard must be submitted as per Para 4.4 above.

6.3 The Bidder shall furnish due Authorisation Certificate from the Line Pipe Manufacturer with specific stipulation to the effect that the Pipe Manufacturer does not quote/participate against tendering process, but sells through their authorized dealer/distributor/supply houses/sole selling agents only. Such authorization must remain valid throughout execution of the order arising out of this tender and the manufacturer must guarantee supply of offered API Line Pipes, if ordered.

6.4 In case the Bidder offers Bends and/or Coating from vendors other than the pipe manufacturer, a copy of MOU (Memorandum of Understanding) from each such vendors must be submitted alongwith the technical bid as per para 5.3 & 5.4 above.

6.5 As may be necessary, the Bidder can propose only one Pipe Manufacturer, one Bend Manufacturer and one Coating Applicator in their Bid. Offers highlighting multiple Pipe Manufacturers and/or multiple Bend Manufacturers and/or multiple Coating Applicators shall be rejected without any reference.

6.6 Subsequent to submission of Bid, Bidder shall not be permitted to change the Pipe Manufacturer/Bend Manufacturer/Coating Applicator. Request for such change(s) shall amount to post-tender modification/withdrawal of bid and liable for bid rejection, besides other penal actions.

7.0 Bidders who have already executed Purchase Orders of OIL INDIA LIMITED (OIL) for Coated API Line Pipes (API 5L) during the last five (5) years preceding to the original Bid Closing Date of this Tender and propose the same set of manufacturers & coating applicator against this tender also, need not be required to submit documentary evidences as per para 4.4 above. However, for availing this exemption, the Bidder must highlight OIL's such Purchase Order No. & Date as well as the name of Pipe Manufacturer, Name of Bend Manufacturer and Name of Coating Applicator in their Technical Bid. Notwithstanding above, the Bidder must submit other documents viz; copy of API License & valid MOU (for subject tender) etc. as called for above.

8.0 Policy for providing preference to domestically manufactured Iron and Steel products in govt. procurement, notified vide **Gazette of India No 324 dated 29.05.2019** read with clarifications, if any issued by MoS on the policy shall be

applicable for this tender. Bidders are required to confirm acceptance to the conditions of this policy.

Bidders who comply with all the provisions specified in **APPENDIX-A2** attached to this Tender Document and submit all the undertakings and documents applicable **under the revised policy** shall only be accepted.

B. BRC -FINANCIAL:

- 1.0 **Annual Turnover** - The bidder shall have annual financial turnover of minimum **INR 5.74 Crores** during any of the preceding 3 (Three) financial/accounting years reckoned from the original bid closing date of the tender.
- 2.0 "Net Worth" of the bidder must be positive for the financial/accounting year just proceeding to the original Bid Closing Date of the Tender.
- 3.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/ accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/ accounting year will be considered. However, the bidder has to submit an affidavit/ undertaking (**ref. Proforma-6**) certifying that 'the balance sheet/Financial Statements for the preceding financial year has actually not been audited so far'.

Note:

- a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the technical bid:-
 - i) A certificate issued by a practicing Chartered / Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual Turnover & Net worth as per format prescribed in **Proforma-7**.
- OR
- ii) Audited Balance Sheet along with Profit & Loss account.
- b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/ State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

- 4.0 In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR or US\$, then the bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date of Balance Sheet and Profit & Loss Account. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US\$.
- 5.0 In case the Bidder is subsidiary company (should be 100% owned subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits its bid based on the strength of parent/ ultimate parent/ holding company, then following documents need to be submitted:
- i) Turnover of the parent/ ultimate parent/ holding company should be in line with Para 1.0 above.
 - ii) Net Worth of the parent/ultimate parent/ holding company should be positive in line with Para 2.0 above.
 - iii) Corporate Guarantee (as per Proforma-8) on parent / ultimate parent/ holding company's company letter head signed by an authorised official undertaking that they would financially support their wholly owned subsidiary company for executing the project/ job in case the same is awarded to them.
 - iv) Document of subsidiary company being 100% owned subsidiary of the parent/ ultimate parent/ holding company.
-

PROFORMA – 6

FORMAT FOR CERTIFICATE OF COMPLIANCE OF FINANCIAL CRITERIA

Ref: Clause No. B - Financial Criteria of the BEC

Tender No.: _____

**I the authorized signatory(s) of
..... (Company or firm name with address) do hereby solemnly
affirm and declare as under:-**

**The balance sheet/Financial Statements for the financial year
_____ (as the case may be) has actually not been audited as on
the Original Bid closing Date.**

Place :.....

Date :.....

Signature of the authorized signatory

Note: This certificate are to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.

PROFORMA - 7

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING **CHARTARD ACCOUNTANTS' FIRM** ON
THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s.....(Name of the bidder) for the last three (3) completed accounting years upto..... **(as the case may be)** are correct

YEAR	TURN OVER In INR (Rs.) Crores/ US \$ Million) *	NET WORTH In INR (Rs.) Crores / US \$ Million) *

*Rate of conversion (if used any): USD 1.00 = INR

Place:

Date:

Seal

Membership No:

Registration Code:

Signature

NOTE: As per the guidelines of ICAI, every practicing CA is required to mention Unique Document Identification Number (UDIN) against each certification work done by them. Documents certified by CA without UDIN shall not be acceptable.

PROFORMA – 8

PARENT/ ULTIM ATE PARENT/ HOLDING COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING (Delete whichever not applicable)

(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at this day of by M/s(mention complete name) a company duly organized and existing under the laws of (insert jurisdiction/country), having its Registered Office atherein after called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their Tender No..... for.....and M/s.....(Bidder) intends to bid against the said tender and desires to have Financial support of M/s..... [Parent / Ultimate Parent/Holding Company(Delete whichever not applicable)] and whereas Parent/Ultimate Parent/Holding Company(Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

1. The Guarantor confirms that the Bidder is a 100% subsidiary of the Guarantor.
2. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
3. The Guarantor have an annual financial turnover of minimum INR..... Cr or USD during any of the preceding 03(three) financial/ accounting years reckoned from the original bid closing date.
4. Net worth of the Guarantor is positive for preceding financial/ accounting year.
5. The Guarantor undertakes to provide financial support to the Bidder for executing the project/job, in case the same is awarded to the Bidder.
6. The Guarantor represents that:

(a) this Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty

obligations) awarded to the Bidder.

(b) the liability of the Guarantor, under the Guarantee, is limited to the 100% of the order value between the Bidder and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.

(c) this Guarantee has been issued after due observance of the appropriate laws in force in India.

(d) this Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of New Delhi, India.

(e) this Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.

(f) the Guarantor has the legal capacity, power and authority to issue this Guarantee and that giving of this Guarantee and the performance and observations of the obligations hereunder do not contravene any existing laws.

for and on behalf of (Parent/Ultimate Parent/ Holding Company) (Delete whichever not applicable) Witness: 1. 2.	for and on behalf of (Bidder) Witness: 1. 2.
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END OF ANNEXURE – B

ANNEXURE-F

TECHNICAL & COMMERCIAL CHECK LISTS

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

A) TECHNICAL CHECKLIST

Sl. No	DESCRIPTIONS	REMARKS
1	Whether Bidder is a Manufacturer of API 5L, 3LPE line pipes? <i>If yes, reply to sl.no. from 2 to 9.</i>	YES / NO
2	Whether valid license to use API monogram on line pipes of API 5L specification submitted? API certificate must be valid for the last 5 years (i.e. continuous without having any break in between).	YES / NO
3	Whether documentary evidence ie. Purchase orders/invoices etc submitted by Manufacturer against the same type (as per tender spec) or higher OD, grade and wall thickness of the line pipes, at least 50% of tendered quantity to various companies, during last 5 years reckoned from the BCD?	YES / NO
4	Whether 3LPE coating facility available with line pipe manufacturer? <i>If yes, need not reply to slno.5.</i>	YES / NO
5	If line pipe manufacturer propose to engage 3LPE coating applicator, whether copy of MOU submitted, as per BEC & BRC clauses?	YES / NO
6	Whether credential for 3LPE coating of Bare line pipes of same or higher sizes, during last 5 years reckoned from date of commencement of sale of bidding document submitted?	YES / NO
7	Whether infrastructure for fabrication of pipe bends,	YES / NO

	available with the line pipe manufacturer? <i>If yes, need not to reply slno.8.</i>	
8	If line pipe manufacturer propose to engage a bend manufacturer, whether copy of MOU submitted?	YES / NO
9	Whether credential for bend manufacturing and supply of bends same type and size during last 5 years reckoned from BCD submitted?	YES / NO
10	Whether Bidder is an Authorized Supplier of API 5L, line pipes? <i>If yes, reply to sl.no. from 11 to 18.</i>	YES / NO
11	Whether proposed line pipe manufacturer's documents as per Slno.2&3 of checklist, submitted by the supplier?	
12	Whether authorization certificate for supply of line pipe from proposed line pipe Manufacturer submitted by supplier?	YES / NO
13	Whether 3LPE coating facility available with proposed line pipe Manufacturer, as per BEC & BRC clauses? <i>If yes, need not reply to slno.14.</i>	YES / NO
14	If the Supplier proposes to engage 3LPE coating applicator, whether copy of MOU submitted, as per BEC & BRC clauses?	YES / NO
15	Whether credential for 3LPE coating of Bare line pipes of same or higher sizes, during last 5 years reckoned from date of commencement of sale of bidding document submitted?	YES / NO
16	Whether infrastructure for fabrication of pipe bends, available with proposed line pipe manufacturer/Coater, engaged by the supplier? <i>If yes, need not to reply slno.17</i>	YES / NO
17	If the Supplier proposes to engage a bend manufacturer, whether copy of MOU submitted?	YES / NO

18	Whether credential for bend manufacturing and supply of bends same type and size during last 5 years reckoned from BCD submitted?	YES / NO
19	Whether Bidder is a Coating Applicator? <i>If yes, reply to sl.no. from 20 to 26</i>	YES / NO
20	Whether credential for 3LPE coating of Bare line pipes of same or higher sizes, during last 5 years reckoned from date of commencement of sale of bidding document submitted?	YES / NO
21	Whether MOU between coating applicator and line pipe manufacturer submitted?	YES / NO
22	Whether proposed line pipe manufacturer's document is as per Slno.2&3 of checklist, submitted by the supplier?	
23	Whether infrastructure for fabrication of pipe bends, available with the proposed line pipe manufacturer, engaged by the Coating applicator ? <i>If yes, need not to reply slno.24</i>	YES / NO
24	If the Supplier proposes to engage a bend manufacturer, whether copy of MOU submitted?	YES / NO
25	Whether credential for bend manufacturing and supply of bends of same type and size during last 5 years reckoned from BCD submitted?	YES / NO

B. COMMERCIAL CHECKLIST:

<u>Sl#</u>	REQUIREMENT	COMPLIANCE
1.0	Whether quoted as manufacturer?	Yes / No
2.0	Whether quoted as OEM Dealer / Supply House etc. To Specify-	Yes / No

2.1	If quoted as OEM Dealer / Supply House. (a) Whether submitted valid and proper authorization letter from manufacturer confirming that bidder is their authorized Dealer / supply House for the product offered ?	Yes / No
2.2	(b) Whether manufacturer's back-up Warranty/Guarantee certificate submitted?	Yes / No
2.3	Whether all documents have been submitted as required for fulfilling Experience criteria clause of BRC-Technical.	Yes / No
2.3.1	Name and details of the Oil & gas specific company to whom the bidder has successfully executed orders / contracts for atleast 50% of the tendered quantity as per Experience criteria clause of BRC-Technical.	
2.3.2	Whether submitted the profile and other documents of the Oil & gas specific company for verification (viz. Annual reports, Memorandum of Association, Article of Association etc.)	Yes / No
2.5	Whether Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products (FORM-1) and other documents has been submitted as per APPENDIX-A2 "POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS".	Yes / No
3.0	As per BRC clause 8.0, whether you have submitted the self-certification regarding domestic value addition in Iron & Steel products.	
4.0	Whether you have submitted certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made.	
4.1	Name of Manufacturer.	

4.2	Place of Despatch.	
5.0	Local content amount and percentage. Details of locations at which the local value addition is made.	
6.0	Whether you are quoting under PP-LC or MSME policy.	
7.0	Whether Integrity Pact with digital signature uploaded (if applicable as per Additional Terms and Conditions) ?	
7.1	Whether all the clauses in the Integrity Pact have been accepted?	
8.0	Name, Address, Phone No & E-mail id of Bidder.	

MINISTRY OF STEEL**NOTIFICATION**

New Delhi, the 31st December, 2020

G.S.R. 1(E).—The amendments in the Policy for providing preference to domestically manufactured Iron & Steel products in Government procurement (DMI&SP Policy)—Revised, 2019 is hereby published for general information.

"No. S-13026/1/2020- IDD**Ministry of Steel****ID Division****Udyog Bhawan,****New Delhi 31st December, 2020**

Sub.: Amendments / additions to the Policy for Providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement - revised, 2019

The following amendments / additions to the Policy for Providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement - revised, 2019 (DMI&SP revised, 2019) are applicable with immediate effect. These amendments / additions shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this notification.

I - Amendments: Table 1

Sl. No.	Existing Clause in DMI&SP revised, 2019	Amended Clause in DMI&SP revised, 2019
1	<u>Clause 1.3:</u> The policy is applicable to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for purchase of iron & steel products for government projects. However, this policy shall not apply for purchase of iron & steel products with a view to commercial resale or with a view to use in the production of goods for commercial sale.	<u>Clause 1.3:</u> The policy is applicable to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for purchase of iron & steel products for government projects. <u>All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies, would come within the purview of this Policy, if that project / scheme is fully / partly funded by Government of India.</u> However, this policy shall not apply for purchase of iron & steel products with a view to commercial resale or with a view to use in the production of goods for commercial sale.
2	<u>Clause 2.13:</u> Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in percent. The 'domestic value addition' definition shall be in line with the DPIIT (formerly DIPP) guidelines, and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.	<u>Clause 2.13:</u> Domestic value addition means - <u>amount of value added in India which shall be the total value of the item to be procured / sold (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value of the item to be procured / sold, in percent.</u> The 'domestic value addition' definition shall be in line with the DPIIT (formerly DIPP) guidelines, and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

3	Clause 5.1.5 The policy is applicable to all projects funded by Ministry or Department of Government and all agencies/ entities under their administrative control for purchase of iron & steel products.	Clause 5.1.5: The policy is applicable to all projects funded by Ministry or Department of Government and all agencies/ entities under their administrative control for purchase of iron & steel products. <u>All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies, would come within the purview of this Policy, if that project / scheme is fully / partly funded by Government of India.</u>
4	Clause 5.1.6: The policy shall be applicable to projects where the procurement value of iron and steel products is greater than Rs. 25 crores. The policy shall also be applicable for other procurement (non-project), where annual procurement value of iron and steel products for that Government organization is greater than Rs. 25 crores.	Clause 5.1.6 The policy shall be applicable to projects where the procurement value of iron and steel products (Appendix - A of the DMI&SP Policy) is greater than Rs. 5 lakhs. The policy shall also be applicable for other procurements (non-project), where annual procurement value of iron and steel products for that Government organization is greater than Rs. 5 lakhs. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this policy.
5	Clause 7.2: Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in per cent.	Clause 7.2: Domestic value addition means - amount of value added in India which shall be the total value of the item to be procured / sold (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value of the item to be procured / sold, in percent.
6	Clause 7.3: It is recommended that each bidder participating in the tender process should calculate the domestic value addition using the below formula below so as to ensure the domestic value addition claimed is consistent with the minimum stipulated domestic value addition requirement of the policy. For iron and steel products <u>% domestic value addition</u> <i>Net selling price of final product - landed cost of imported iron or steel at the plant-----</i> <i>----- X 100 %</i> <i>Net selling price of final product</i> For capital goods <u>% domestic value addition</u> <i>Net selling price of final product - landed cost of imported iron or steel at the plant</i> <i>----- X 100 %</i> <i>Net selling price of final product</i>	Clause 7.3: It is recommended that procuring Government agency / bidder participating in the tender process should calculate the domestic value addition using the below formula so as to ensure that the domestic value addition claimed is consistent with the minimum stipulated domestic value addition requirement of the policy. For iron and steel products& capital goods <u>% domestic value addition</u> <i>Total value of the item to be procured / sold (excluding net domestic indirect taxes) - the value of imported content in the item (including all customs duties)</i> <i>----- X 100 %</i> <i>Total value of the item to be procured / sold</i>

II - Following amendment is made to the Appendix A of the DMI&SP revised, 2019 :- Wherever minimum domestic value addition of **15%** is specified in the Appendix - A of the DMI&SP revised, 2019 under the column Minimum domestic value addition requirement, same shall be replaced with **20%** minimum domestic value addition). (Revised Appendix - A is attached)

III - Additions / Insertions: Table 2

Sl. No.	Added / Inserted Clause in DMI&SP revised, 2019
1	Clause 5.1.13 is inserted below Clause 5.1.12 as: Clause 5.1.13: No Global Tender Enquiry (GTE) shall be invited for tenders related to procurement of iron and steel products (Appendix-A of the DMI&SP Policy). No Global Tender Enquiry (GTE) shall be invited for tenders related to procurement of Capital Goods for manufacturing iron & steel products (Appendix- B of the DMI&SP Policy) having estimated value upto Rs. 200 Crore except with the approval of competent authority as designated by Department of Expenditure.
2	Clause 6.9 is inserted below Clause 6.8 as: Clause 6.9: Specifications in Tenders and other procurement solicitations: 6.9.1 Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports. 6.9.2 Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local supplier' who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier. 6.9.3 Procuring entities shall, within 2 months of the issue of this policy review all existing eligibility norms and conditions with reference to sub-paragraphs 6.9.1 and 6.9.2 above. 6.9.4 If Ministry of Steel is satisfied that Indian suppliers of iron and steel products are not allowed to participate and/ or compete in procurement by any foreign government due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of project of specific value in the procuring country etc., it may, if deemed appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to Ministry of Steel. 6.9.5 For the purpose of sub-paragraph 6.9.4 above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or (ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India. The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.
3	Clause 6.10 is inserted below Clause 6.9 as: Clause 6.10: In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such action shall be sent to the Standing Committee under the DMI&SP Policy.

IV - Revised Appendix A - Exclusive for domestically manufactured products

Sl. No	Indicative list of Iron & Steel Products	Applicable HS code	Minimum domestic value addition requirement
1	Flat-rolled products of iron or non alloy steel, of a width of 600 mm or more, hot rolled, not clad, plated or coated	7208	50%
2	Flat-rolled products of iron or non alloy steel, of a width of 600	7209	50%

	mm or more, cold rolled (cold-reduced), not clad, plated or coated		
3	Flat-rolled products of iron or non alloy steel, of a width of 600 mm or more, clad, plated or coated	7210	50%
4	Flat-rolled products of iron or non alloy steel, of a width of less than 600 mm, not clad, plated or coated	7211	35%
5	Flat-rolled products of iron or non alloy steel, of a width of less than 600 mm, clad, plated or coated	7212	35%
6	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	7213	35%
7	Other bars and rods of iron or non alloy steel, not further worked than forged, hot rolled, hot-drawn or hot-extruded, but including those twisted after rolling	7214	35%
8	Other bars and rods of iron or non alloy steel	7215	35%
9	Angles, shapes and sections of iron or non-alloy steel	7216	35%
10	Wire of iron or non-alloy steel	7217	50%
11	Flat-rolled products of stainless steel, of a width of 600 mm or more	7219	50%
12	Flat-rolled products of stainless steel, of a width of less than 600 mm	7220	50%
13	Other bars and rods of stainless steel; angles, shapes and sections of stainless steel	7222	50%
14	Wire of other alloy steel	7229	35%
15	Rails, railway or tramway track construction material of iron or steel	7302	50%
16	Tubes, pipes and hollow profiles, of cast iron	7303	35%
17	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	35%
18	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4 mm, of iron or steel	7305	35%
19	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel	7306	35%
20	Tube or pipe fittings (for example, connectors/couplings, elbow sleeves), of iron or steel	7307	35%
21	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel	7221	35%
22	Wire of stainless steel	7223	35%
23	Flat-rolled products of other alloy steel, of a width of 600 mm or more, including electrical steel	7225	35%
24	Flat-rolled products of other alloy steel, of a width of less than 600 mm, including electrical steel	7226	35%
25	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel	7227	20%

26	Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or nonalloy steel	7228	35%
27	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel	7301	20%
28	Structures (excluding prefabricated buildings of heading 9406) and parts of structures	7308	20%
29	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 whether or not lined or heatinsulated, but not fitted with mechanical or Thermal equipment	7309	20%
30	Tanks, casks, drums, cans, boxes and similar containers, for any material (other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300 L, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment	7310	20%
31	Containers for compressed or liquefied gas, of iron or steel	7311	20%
32	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	20%
33	Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not, and loosely twisted double wire, of a kind used for fencing, of iron or steel	7313	20%
34	Grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	20%
35	Chain and parts thereof, of iron or steel	7315	20%
36	Anchors, grapnels and parts thereof, of iron or steel	7316	20%
37	Articles of iron and steel	7317	20%
38	Articles of iron and steel	7318	20%
39	Articles of iron and steel	7319	20%
40	Springs and leaves for springs, of iron or steel	7320	20%
41	Stoves, ranges, grates, cookers (including those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances, and parts thereof, of iron or steel	7321	20%
42	Radiators for central heating, not electrically heated, and parts thereof, of iron or steel; air heaters and hot air distributors, not electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel	7322	20%
43	Tables and similar household articles and parts thereof, of iron or steel	7323	20%
44	Sanitary ware and parts thereof, of iron or steel	7324	20%
45	Other cast articles of iron or steel	7325	20%

46	Electrical steel and other articles of iron or steel	7326	20%
47	Railway or tramway passenger coaches, not self-propelled	8605	50%
48	Railway or tramway goods vans and wagons, not self-propelled	8606	50%
49	Parts of railway or tramway locomotives or rolling-stock; such as bogies, bissel-bogies, axles and forged wheels, and parts thereof	8607	50%

Products included in descriptions are indicative; all products under the specified HS codes are included as part of the appendix."

[F. No. S-13026/1/2020-IDD]

RASIKA CHAUBE, Addl. Secy.

MINISTRY OF STEEL

NOTIFICATION

New Delhi, the 29th May, 2019

G.S.R. 385(E).—The revised Policy for providing preference to domestically manufactured Iron & Steel Products in Government procurement is hereby published for general information.

[F. No.3(2)/2018-IDD]

RASIKA CHAUBE, Addl. Secy.

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT- REVISED, 2019

1 Background

- 1.1 This policy provides preference to Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.
- 1.2 The policy is applicable to iron & steel products as provided in Appendix A and capital goods for manufacturing iron & steel products in Appendix B, produced in compliance to prescribed quality standards, as applicable.
- 1.3 The policy is applicable to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for purchase of iron & steel products for government projects. However, this policy shall not apply for purchase of iron & steel products with a view to commercial resale or with a view to use in the production of goods for commercial sale.

2 Definitions

- 2.1 **Bidder** may be a domestic/ foreign manufacturer of iron & steel or their selling agents/ authorized distributors/ authorized dealers/ authorized supply houses or any other company engaged in the bidding of projects funded by Government agencies.
- 2.2 **Domestically Manufactured Iron & Steel Products (DMI&SP)** are those iron and steel products which are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs). In addition, such products shall meet the criteria of domestic minimum value-addition as mentioned in Appendix A.
- 2.3 **Domestic Manufacturer** is a manufacturer of iron & steel products conforming to guidelines in section 7 and confirming to the definition of 'manufacturer' as per Central Excise Act.
- 2.4 **Government** for the purpose of the Policy means Government of India.
- 2.5 **Government agencies** include Government PSUs, Societies, Trusts and Statutory bodies set up by the Government.
- 2.6 **MoS** shall mean Ministry of Steel, Government of India.
- 2.7 **Net Selling Price** shall be the invoiced price excluding net domestic taxes and duties
- 2.8 **Semi-Finished Steel** shall mean Ingots, billet, blooms and slabs, which can be subsequently processed to finished steel.
- 2.9 **Finished Steel** shall mean Flat and Long products, which can be subsequently processed into manufactured items.
- 2.10 **L1** means the lowest tender or the lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.
- 2.11 **Margin of purchase preference** means the maximum extent to which the price quoted by a domestic supplier may be above L1 for the purpose of purchase preference. In case of DMI&SP policy, the margin of purchase preference shall be 20% for items in Appendix B.
- 2.12 **Iron & Steel Product(s)** shall mean such iron and steel product(s) which are mentioned in Appendix A.
- 2.13 **Domestic value addition** shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in percent. The 'domestic value addition' definition shall be in line with the DPIIT(formerly DIPP) guidelines, and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

3 Exclusions

- 3.1 Waivers shall be granted by the Ministry of Steel to all such Government procurements subject to the below conditions.
- 3.1.1 Where specific grades of steel are not manufactured in the country, or
- 3.1.2 Where the quantities as per the demand of the project cannot be met through domestic sources

The exclusion requests shall be submitted to the Standing Committee along with sufficient proof of unavailability of domestically manufactured iron & steel products

4 Standing Committee

A Standing Committee under the Ministry of Steel (MoS) to be chaired by the Secretary (Steel), shall be constituted to oversee the implementation of the policy. The Committee shall comprise of experts drawn from Industry / Industry Association / Government Institution or Body / Ministry of Steel (MoS). The said Committee in MoS shall have the mandate for the following:

- 4.1 Monitoring the implementation of the policy
- 4.2 Review and notify the list of Iron & Steel products and the domestic value addition requirement criteria as mentioned at Appendix A and Appendix B.
- 4.3 Issue necessary clarifications for implementation of the policy including grant of exclusions to procuring agencies as per section 3
- 4.4 Constitute a separate committee to carry out grievance redressal
- 4.5 The Standing Committee shall submit its recommendations for approval to Ministry of Steel.

5 Notifying Iron & Steel Products Procured by Government

- 5.1 The following guidelines may be used for identifying and notifying the aforementioned products under the policy:
- 5.1.1 The policy is applicable to iron & steel products as provided in Appendix A and to capital goods for manufacturing iron & steel products in Appendix B.
- 5.1.2 Appendix A contains list of iron & steel products which are to be exclusively domestically manufactured and cannot be imported without the approval of the Ministry of Steel
- 5.1.3 Appendix B contains a list (non-exhaustive) of capital goods for which purchase preference shall be provided to domestically manufactured capital goods, if their quoted price falls within 20% of the price quoted for corresponding imported capital good.
- 5.1.4 The objective of the policy is to notify all iron & steel products which are procured by Government Agencies for government projects and not with a view to commercial resale or with a view to use in the production of products for commercial sale.
- 5.1.5 The policy is applicable to all projects funded by Ministry or Department of Government and all agencies/entities under their administrative control for purchase of iron & steel products.
- 5.1.6 The policy shall be applicable to projects where the procurement value of iron and steel products is greater than Rs. 25 crores. The policy shall also be applicable for other procurement (non-project), where annual procurement value of iron and steel products for that Government organization is greater than Rs. 25 crores.
- 5.1.7 The policy is applicable to purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of Ministry or Department of Government or their PSUs.
- 5.1.8 Analysis of the availability of various grades of domestic iron and steel products needs to precede for notification under the policy. Only those iron & steel products, in respect of which at least one domestic manufacturer exists, shall be notified. Consultation may be carried out by the Standing Committee.
- 5.1.9 The policy is applicable to capital goods for manufacturing iron & steel products in Appendix B produced in compliance to prescribed quality standards, as applicable.
- 5.1.10 Policy for domestic procurement of capital goods for manufacturing iron and steel products is applicable to all public sector steel manufacturers and all agencies/entities under their administrative control for purchase of capital goods for manufacturing iron & steel products, not with a view to commercial resale.
- 5.1.11 The policy is applicable to purchase of capital goods for manufacturing iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of public sector steel manufacturers and all agencies/entities under their administrative control

- 5.1.12 Government agencies which are involved in procurement of iron and steel products, and capital goods for manufacturing of iron and steel products, in cases where the iron and steel products are not mentioned in Appendix A and Appendix B, shall provide description and technical specifications of the product along with prescribed standards to the Standing Committee. The Standing Committee will act as per mandate in section 3 and section 4.
- 5.2 The Ministry of Steel (MoS) would notify iron & steel products along with the minimum prescribed domestic value addition, furnished at Appendix A.
- 5.3 The policy guidelines on capital goods for manufacturing iron & steel products shall be applicable to public sector steel manufacturers for all purchases of capital goods for manufacturing iron & steel products in Appendix B, irrespective of the project size.
- 5.4 Minimum domestic value addition requirement suggested for iron and steel products in Appendix A, and for capital goods for manufacturing iron and steel products in Appendix B have been decided on the basis of factors such as domestic supplier base, number of suppliers and import to consumption ratio.
- 5.5 The domestic value addition requirement norm shall be so calibrated that it reflects the average/above average manufacturing capability of the domestic industry for the iron & steel products at a point of time. This shall be suitably reviewed by the Standing Committee from time to time and amended, if required with the approval of Ministry of Steel.

6 Tender procedure for procurement by government and government agencies

- 6.1 The procuring/ Government agencies shall follow standard procurement procedures, in accordance with instructions of Ministry of Finance and CVC while adhering to DMI&SP. The policy shall come into effect from the date of its notification in all tenders where price bid have not been opened.
- 6.2 The tender document, for procurement of both Goods as well as for EPC contracts, should explicitly outline the qualification criteria for adherence to minimum prescribed domestic value addition by the bidder for iron and steel products and capital goods for manufacturing iron & steel products(as indicated in Appendix A and Appendix B)
- 6.3 In supporting the growth of domestic products, the target of domestic value addition in iron and steel business activities has been set as contained in **Appendix A and Appendix B**.
- 6.4 For iron and steel products in Appendix A, the procurement process shall be open only to the manufacturers / suppliers having the capability of meeting / exceeding the domestic value addition targets. Manufacturers / suppliers not meeting the domestic value addition targets are not eligible to participate in the bidding.
- 6.5 In case of Appendix B items, if in the opinion of the procuring company, the tenders (procured quantity) cannot be divided in the prescribed ratio of 50:50, then they shall have the right to award contract to the eligible domestic manufacturer for quantity not less than 50%, as may be divisible.
- 6.6 In continuation to the above clause, for Appendix B items, if the tendered item is non divisible, (to be included in the tender document by procuring company) the contract can be awarded to the eligible domestic manufacturer for the entire quantity.
- 6.7 In case of Appendix B items, if none of the eligible manufacturers meeting domestic value addition requirements match the L1 bid, the original bidder holding L1 bid shall secure the order for full value of procurement.
- 6.8 The bidders who are selling agents/ authorized distributors/ authorized dealers/ authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of the domestic manufacturers under the policy. However, this shall be subject to the following conditions:
 - 6.8.1 The bidder shall furnish the authorization certificate issued by the domestic manufacturer for selling domestically manufactured iron & steel products.
 - 6.8.2 In case the procurement is covered under Appendix A of the DMI&SP policy, the bidder shall furnish the Affidavit of self-certification issued by the domestic manufacturer to the procuring agency declaring that the iron & steel products is domestically manufactured in terms of the domestic value addition prescribed.
 - 6.8.3 In case the procurement is covered under Appendix B of the DMI&SP policy, the bidder shall furnish the certification issued by the statutory auditor to domestic manufacturer declaring that the capital goods to be used in Iron & Steel industry are domestically manufactured in terms of the domestic value addition prescribed.
 - 6.8.4 It shall be the responsibility of the bidder to furnish other requisite documents required to be issued by the domestic manufacturer to the procuring agency as per the policy.

7 Domestic value addition requirement

- 7.1 Minimum domestic value addition requirement to qualify the product as a domestically manufactured iron & steel product or a Capital good are mentioned in Appendix A and B.
- 7.2 Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in per cent.
- 7.2.1 In case the iron & steel products are made using domestic input steel (semi-finished/ finished steel), invoices of purchases from the actual domestic producers along with quantities purchased and the other related documents must be furnished to the procuring Government agency.
- 7.2.2 In case the iron & steel products have imported input steel, the invoices of purchases from the actual producers along with quantities purchased and the other related documents must be furnished separately. To derive the extent of domestic value addition, the weighted average of both (imported & domestic) input steel shall be considered to ensure that the minimum stipulated domestic value addition requirement of the policy is complied with.
- 7.3 It is recommended that each bidder participating in the tender process should calculate the domestic value addition using the below formula below so as to ensure the domestic value addition claimed is consistent with the minimum stipulated domestic value addition requirement of the policy.

For Iron and Steel products*% Domestic value addition*

$$= \frac{\text{Net selling price of final product} - \text{Landed cost of imported iron or steel at plant}}{\text{Net selling price of final product}} \times 100\%$$

For Capital Goods*% Domestic value addition*

$$= \frac{\text{Net selling price of final product} - \text{Landed cost of imported input materials at plant}}{\text{Net selling price of final product}} \times 100\%$$

8 Certification and audit

- 8.1 For products in Appendix A, each domestic manufacturer shall furnish the Affidavit of self-certification to the procuring Government agency declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. For capital goods in Appendix B, the bidder shall furnish the certification issued by the statutory auditor to the domestic manufacturer declaring that the capital goods are domestically manufactured in terms of the domestic value addition prescribed. The bidders who are sole selling agents / authorized distributors / authorized dealers / authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of domestic manufacturers under the policy. The bidder shall furnish the Affidavits of self-certification issued by the domestic manufacturers and the certifications issued by the statutory auditors, to the procuring agency declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. The Affidavit of self-certification shall be furnished in **Form 1** attached to these guidelines.
- 8.2 It shall be the responsibility of the domestic manufacturer to ensure that the products so claimed are domestically manufactured in terms of the domestic value addition prescribed for the product. The bidder shall also be required to provide a domestic value addition certificate on half-yearly basis (Sep 30 and Mar 31), duly certified by the Statutory Auditors of the domestic manufacturer, that the claims of domestic value addition made for the product during the preceding 6 months are in accordance with the Policy. Such certificate shall be filed within 60 days of commencement of each half year, to the concerned Government agencies and shall continue to be filed till the completion of supply of the said products.
- 8.3 The procuring agency shall accept the Affidavit of self-certification regarding domestic value addition in a steel product submitted by a bidder. It shall not normally be the responsibility of procuring agency to verify the correctness of the claim. The onus of demonstrating the correctness of the same shall be on the bidder when asked to do so.
- 8.4 In case a complaint is received by the procuring agency or the concerned Government Agency against the claim

of a bidder regarding domestic value addition in iron & steel products, the procuring agency shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to MoS with a request for technical assistance.

- 8.5 Any complaint referred to the Government Agency shall be disposed off within 4 weeks of the reference along with submission of all necessary documents. The bidder shall be required to furnish the necessary documentation in support of the domestic value addition claimed in iron & steel products to the Government Agency within 2 weeks of filing the complaint.
- 8.6 In case, the matter is referred to the Ministry of Steel, the grievance redressal committee setup under the MoS shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the Government Agency. The bidder shall be required to furnish the necessary documentation in support of domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance redressal committee may take further necessary action, in consultation with Government Agency to establish bonafides of claim.
- 8.7 The cost of assessing the prescribed extent of domestic value addition shall be borne by the procuring agency if the domestic value addition is found to be correct as per the certificate. However, if it is found that the domestic value addition as claimed is incorrect, the cost of assessment will be payable by the bidder who has furnished an incorrect certificate. The manner of enforcing the same shall be defined in the tender document.

9 Sanctions

- 9.1 Each Government Agency shall clearly define the penalties, in case of wrong declaration by the bidder of the prescribed domestic value addition, in the tender document. The penalties may include forfeiting of the EMD, other financial penalties and blacklisting of such manufacturer/ service provider.
- 9.2 In case of reference of any complaint to MoS by the concerned bidder, there would be a complaint fee of Rs. 10 Lakh or 0.2 % of the value of the DMI&SP being procured (subject to a maximum of Rs. 20 Lakh), whichever is higher, to be paid by Demand Draft deposited with the grievance redressal committee under MoS along with the complaint by the complainant. In case, the complaint is found to be incorrect, the Government Agency reserves the right to forfeit the said amount. In case, the complaint is found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

10 Implementation monitoring by Ministry of Steel

- 10.1 The policy provisions shall be applicable for a period of 5 years from the date of publication. The policy period may further be extended at the discretion of Ministry of Steel.
- 10.2 MoS shall be the nodal ministry to monitor the implementation of the policy.
- 10.3 All applicable agencies under DMI&SP policy shall ensure implementation of the policy and shall annually, in the month of June, send a declaration indicating the extent of compliance to the policy and reasons for noncompliance thereof, during the preceding financial year.

Reference to Ministry of Steel

In case of a question whether an item being procured is a DMI&SP to be covered under the policy, the matter would be referred to the Ministry of Steel for clarification.

Appendix A - Exclusive for domestically manufactured products

Sl. No.	Indicative list of Iron & Steel Products	Applicable HS code	Minimum domestic value addition requirement
1	Flat-rolled products of iron or non alloy steel, of a width of 600 mm or more, hot rolled, not clad, plated or coated	7208	50%
2	Flat-rolled products of iron or non alloy steel, of a width of 600 mm or more, cold rolled (cold-reduced), not clad, plated or coated	7209	50%
3	Flat-rolled products of iron or non alloy steel, of a width of 600 mm or more, clad, plated or coated	7210	50%

4	Flat-rolled products of iron or non alloy steel, of a width of less than 600 mm, not clad, plated or coated	7211	35%
5	Flat-rolled products of iron or non alloy steel, of a width of less than 600 mm, clad, plated or coated	7212	35%
6	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	7213	35%
7	Other bars and rods of iron or non alloy steel, not further worked than forged, hot rolled, hot-drawn or hot-extruded, but including those twisted after rolling	7214	35%
8	Other bars and rods of iron or non alloy steel	7215	35%
9	Angles, shapes and sections of iron or non-alloy steel	7216	35%
10	Wire of iron or non-alloy steel	7217	50%
11	Flat-rolled products of stainless steel, of a width of 600 mm or more	7219	50%
12	Flat-rolled products of stainless steel, of a width of less than 600 mm	7220	50%
13	Other bars and rods of stainless steel; angles, shapes and sections of stainless steel	7222	50%
14	Wire of other alloy steel	7229	35%
15	Rails, railway or tramway track construction material of iron or steel	7302	50%
16	Tubes, pipes and hollow profiles, of cast iron	7303	35%
17	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	35%
18	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4 mm, of iron or steel	7305	35%
19	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel	7306	35%
20	Tube or pipe fittings (for example, connectors/couplings, elbow sleeves), of iron or steel	7307	35%
21	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel	7221	35%
22	Wire of stainless steel	7223	35%
23	Flat-rolled products of other alloy steel, of a width of 600 mm or more, including electrical steel	7225	35%
24	Flat-rolled products of other alloy steel, of a width of less than 600 mm, including electrical steel	7226	35%
25	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel	7227	15%
26	Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or nonalloy steel	7228	35%
27	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel	7301	15%
28	Structures (excluding prefabricated buildings of heading 9406) and parts of structures	7308	15%
29	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 whether or not lined or heatinsulated, but not fitted with mechanical or Thermal equipment	7309	15%

30	Tanks, casks, drums, cans, boxes and similar containers, for any material (other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300 L, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment	7310	15%
31	Containers for compressed or liquefied gas, of iron or steel	7311	15%
32	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	15%
33	Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not, and loosely twisted double wire, of a kind used for fencing, of iron or steel	7313	15%
34	Grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	15%
35	Chain and parts thereof, of iron or steel	7315	15%
36	Anchors, grapnels and parts thereof, of iron or steel	7316	15%
37	Articles of iron and steel	7317	15%
38	Articles of iron and steel	7318	15%
39	Articles of iron and steel	7319	15%
40	Springs and leaves for springs, of iron or steel	7320	15%
41	Stoves, ranges, grates, cookers (including those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances, and parts thereof, of iron or steel	7321	15%
42	Radiators for central heating, not electrically heated, and parts thereof, of iron or steel; air heaters and hot air distributors, not electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel	7322	15%
43	Tables and similar household articles and parts thereof, of iron or steel	7323	15%
44	Sanitary ware and parts thereof, of iron or steel	7324	15%
45	Other cast articles of iron or steel	7325	15%
46	Electrical steel and other articles of iron or steel	7326	15%
47	Railway or tramway passenger coaches, not self-propelled	8605	50%
48	Railway or tramway goods vans and wagons, not self-propelled	8606	50%
49	Parts of railway or tramway locomotives or rolling-stock; such as bogies, bissel-bogies, axles and forged wheels, and parts thereof	8607	50%

Products included in descriptions are indicative; all products under the specified HS codes are included as part of the appendix

Appendix B

Indicative list of capital goods(non-exhaustive) for manufacturing iron & steel products

Sl. No.	Plant shop	Capital goods	Minimum domestic value addition requirement
1	Raw material handling system	Apron feeder, barrel couplings, heavy duty bearings, hydraulic disc brakes, tanker & container for powdered materials, conveyor belt for pipe conveyors, high angle conveyor system, crushers, crane rail lubrication system, four girder EOT Crane, crane weighing system, crane air conditioning, fluid couplings, fork lift trucks, hydraulic motors, hydraulic system, locking assembly (friction grip), load cells, level sensors, pipe	50%

		conveyor system, plough/ paddle feeder, pneumatic transportation - dense & lean phase, reclaimers, radio remote control, rail fixing arrangements (special), rapid/ flood loading system, stackers, special screen, slew ring bearings, tipplers, transfer cars, tongs (special), vibration, isolation system (spring damper), wagon tipplers, wagon loaders	
2	Mineral beneficiation (iron ore and coal) equipment	Industrial crushers, grinding mills, conventional screens, slurry pumps, hire thickeners, filters, hydroclones	50%
3	Coke oven	Coke Oven Silica Refractory, Anchorage System, Waste gas valve with branch pipe, Flash Plate, Door Frame, door body, Minor Casting: Gooseneck, Valve box, AP Lid, Charging & inspection hole lid and frame Reversing mechanism, Centralised lubrication system, Hydrojet Door Cleaning Mechanism, Spillage code conveyor system, skip hoist, Door Lowering Rack, Isolation/ Reversing Cocks, Level II automation, Oven machines	50%
4	By-product plant	Primary Gas Cooler, Electrostatic Tar Precipitator, H ₂ S, NH ₃ & Naphthalene Scrubber, Combi Stripper, Flushing Liquor Pump, Claus Kiln, Claus reactors, Waste Heat Boilers, Decanters	50%
5	Sinter plant equipment	Pallet car, Drive/discharge end Sprocket assembly, Curved rail, Slide rails, Hot sinter breaker and Grizzly, Dip rail & running rail, Impeller assembly for Process fan, Drive assembly of Sinter machine, Hi-intensity Mixer & Noduliser	50%
6	Pellet plant equipment	Pallet car, Drive/discharge end Sprocket assembly, Curved rail, Slide rails, running rail, Vertical roller mill, Impeller assembly for Process fan, Drive assembly of Indurating machine, Hi-intensity Mixer, Balling disc, Single deck roller screen and Double deck roller screen	50%
7	Blast furnace equipment	Bell less top system with Bleeder valve, SG Iron stove coolers, Copper stove coolers, Stock level indicator (Radar Type), Mud gun, Drilling machine and Manipulator, Gas Cleaning Plant system, Top Recovery Turbine system including its by-pass valve, De-bricking Machine, Re-railing equipment, PCI system, Grinding mill for PCI, Stock level indicator, Tuyere Stock assembly, Waste Heat Recovery system, BF & Hot Blast Stoves Technological Valves, Above Burden probes, Slag granulation unit, Tuyere & Tuyere cooler, Torpedo Ladle Car, BF hearth refractory	50%
8	Direct reduction plant equipment	Charge distributor, Upper & lower seal leg, Reformer & Re-cuperator system, Burden feeders, Turbo-expander, Process Gas Compressor, Seal gas compressors & bottom seal gas compressors, Seal gas generators & driers, Process Gas Heater, CO ₂ removal plant	50%
9	Basic oxygen furnace equipment	Main and Maintenance equipment comprising of converter, gunning machine, Refractory/ slag monitoring device, converter vessel, trunnion ring and suspension system, trunnion bearings and housing, Converter bull gear unit and tilt drive system, Rotary joint for converter, bottom stirring system, Lance body with clamping, Lance copper tips, Valve stations for oxygen blowing/ bottom stirring, Sub-lance system, Off gas analyzer with process module i.e. Process software/ hardware, container lab Measurement probes, Switch over station, ID fan for primary gas, Hot metal and steel ladle, Ladle Transfer car, Ladle maintenance equipment, Slag pot, Slag pot transfer car, Scrap boxes, Scrap Transfer car, Lance carriage, Lance guide, Crane & hoist, Lance hoist & trolley, Lance tilting device, Traverse for lifting lances, Bunker of various sizes, Bin Vibrator, Weighing Hopper, Maintenance stands, De dusting suction hood, Teeming/HM, ladle relining stands, Stand Cooling stack inspection device, Hood traverse carriage, Refractories, Bypass & isolation valves, Flare stack & ignition system, Scrubbing tower	50%

		shell - Wet gas cleaning system, Dog house, Ladle drier, ladle pre-heater, ladle cooler, Fume collection hoods, Clean gas stack, Dust silo, Weigh Bridge, Slag retaining device	
10	Electric arc furnace	Furnace proper (includes furnace lower shell, upper shell and roof, Tilting platform, Furnace Gantry) and transformer, Electrode regulation system, Hydraulic system, Refractories, Parts of Level I & Level II Automation system. I.F - water cooled ladle roof, electrode mast and arms, electrode regulating system, wire feeding system, Bottom inert gas stirring Valve stand for porous plug and top lance, Emergency lance mechanism, Lance carriage system with drive unit, Automatic temperature, sampling & bath level / O ₂ measurement, Temp. & oxygen immersion lance, lance carriage system with drive unit, Hydraulic system, Refractories, Ladle roof Delta portion, RH proper (includes Ladle transfer car, vacuum vessel, Vessel lifting & lowering system. Hydraulic system, Multi Function lance, Valve racks/station, Electrode clamp unit, conductor of electrode arms, water cooled cable, A R stirring valve rack, lance transport car, Refractory lance, Hydraulic cylinder, Ladle roof lifting cylinder, Lubrication system, Suction hood, damper, Vibro feeder, weighing hopper, wire feeding system, Electrode nipping stand, Cranes, hoist, Temperature & sampling tips, ladle stands, ESP, Deducing hoods, Refractories, bag filter, Cranes etc.	50%
11	Continuous casting equipment	Ladle turret, ladle cover manipulator, Ladle Shroud manipulator, tundish car, Continuous tundish temperature measurement system, Tundish stopper rod mechanism, emergency cut-off gate, mould assembly, Nozzle quick change device, mould oscillator and EMS system, Electro-Magnetic braking system, Strand guide segment, Withdrawal & Straightening unit (WSU), Roll gap checker, Emergency torch cutter, Torch cutting machine, Deburrer, Marking machine, Technological control system & process models, Black Refractories, strand gunde segment, tundish, ladle cover, roller tables & auxiliaries, mould& segment maintenance equipments, tundish maintenance equipments, EMBR system	50%
12	Flat product mills	Large castings and forgings like mill housing, bed plates, work rolls, backup rolls, end spindles; roller tables, backup roll and work roll chucks, coilers / tension reels / uncoilers, AGC cylinders, shears, levelers, lazer welders, packaging machines, non-contact gauges / profile gauges, anti-friction roll neck bearings, oil film bearings, gear boxes, mill motors	50%
13	Long product mills	Mill housing, bed plates, work rolls, backup rolls, spindles; roller tables, coilers / tension reels / uncoilers, shears, billet welder, packaging machines, non-contact gauges / profile gauges, anti-friction roll neck bearings, oil film bearings, finishing blocks, gear boxes, mill motors	50%

**Items in appendix B are an indicative list of capital goods for manufacturing steel, the list is not exhaustive. All capital goods for steel manufacturing shall be considered for purchase preference under the policy with a minimum domestic value addition requirement of 50%*

Form-1

Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products/capital goods to be provided on Rs.100/- Stamp Paper Date:

I _____ S/o, D/o, W/o, _____ Resident of _____
_____ hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No: _____.

That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring agency (ies) for the purpose of assessing the domestic value addition.

That the domestic value addition for all inputs which constitute the said iron & steel products has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition criteria, based on the assessment of procuring agency (ies) for the purpose of assessing the domestic value-addition, I will be disqualified from any Government tender for a period of 36 months. In addition, I will bear all costs of such an assessment.

That I have complied with all conditions referred to in the Notification No. _____ wherein preference to domestically manufactured iron & steel products in Government procurement is provided and that the procuring agency (ies) is hereby authorized to forfeit and my EMD. I also undertake to pay the assessment cost and pay all penalties as specified in the tender document.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

- i. Name and details of the Bidder (Registered Office, Manufacturing unit location, nature of legal entity)
- ii. Date on which this certificate is issued
- iii. Iron & Steel Products for which the certificate is produced
- iv. Procuring agency to whom the certificate is furnished
- v. Percentage of domestic value addition claimed and whether it meets the threshold value of domestic value addition prescribed
- vi. Name and contact details of the unit of the manufacturer (s)
- vii. Net Selling Price of the iron & steel products
- viii. Freight, insurance and handling till plant
- ix. List and total cost value of input steel (imported) used to manufacture the iron & steel products
- x. List and total cost of input steel which are domestically sourced.
- xi. Please attach domestic value addition certificates from suppliers, if the input is not in house.
- xii. For imported input steel, landed cost at Indian port with break-up of CIF value, duties & taxes, port handling charges and inland freight cost.

For and on behalf of (Name of firm / entity)

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>



भारत का राजपत्र The Gazette of India

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
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इस्पात मंत्रालय

(स्थापना प्रभाग)

अधिसूचना

नई दिल्ली, 8 मई, 2017

सा.का.नि. 451(अ).—सरकारी खरीद में धरेलु निर्मित लोहा और इस्पात उत्पादों को बरीयता देने की नीति सामान्य जानकारी हेतु एतद्द्वारा प्रकाशित की जाती है :-

सरकारी खरीद में धरेलु रूप से निर्मित लोहा एवं इस्पात उत्पादों को बरीयता देने के लिए नीति

1. पृष्ठभूमि

- 1.1 यह नीति सरकारी खरीद में धरेलु रूप से निर्मित लोहा एवं इस्पात उत्पादों (डीएमआई एंड एमपी) को बरीयता देती है।
- 1.2 यह नीति यथा लागू निर्धारित गुणवत्ता मानदंडों के अनुपालन में परिशिष्ट-क में यथा दिए गए अनुसार उत्पादिन लोहा एवं इस्पात उत्पादों पर लागू होती है।
- 1.3 यह नीति सरकारी परियोजनाओं के लिए लोहा एवं इस्पात उत्पादों की खरीद के लिए प्रत्येक मंत्रालय अथवा सरकार के विभाग और उनके प्रशासनिक नियंत्रण में सारी एजेंसियों अथवा प्रतिष्ठानों पर और न कि वाणिज्यिक पुनर्विक्री के उद्देश्य अथवा वाणिज्यिक विक्री के लिए वस्तुओं के उत्पादन में उपयोग के उद्देश्य लागू है।

2. परिभाषा

- i. बोली लगाने वाला इस्पात का धरेलु/विदेशी निर्माता अथवा उसका विक्री एजेंट/अधिकृत वितरक/अधिकृत डीलर/अधिकृत आपूर्ति गृह अथवा किसी अन्य कंपनी, जो सरकारी एजेंसियों द्वारा प्रदान की गई निधियों वाली परियोजनाओं की बोली लगाने में लगा हुआ हो, हो सकता है।
- ii. "धरेलु रूप से निर्मित लोहा एवं इस्पात उत्पाद (डीएमआई एंड एमपी)" वे लोहा एवं इस्पात उत्पाद हैं जिनका निर्माण उन प्रतिष्ठानों द्वारा किया जाता है जो विशेष आर्थिक क्षेत्र (सेज) सहित भारत में पंजीकृत अथवा स्थापित हैं। इसके अलावा, ऐसे उत्पाद परिशिष्ट-क में यथा उल्लिखित धरेलु न्यूनतम मूल्य मवर्धन के मानदंड को पूरा करेंगे।

निविदा से 36 महीने की अवधि के लिए अयोग्य करार दिया जाएगा। इसके अन्वया में इस प्रकार के आकलन के लिए सभी लागतों का बहान करेगा/करेंगी।

कि मैंने अधिसूचना संख्या _____ में उल्लिखित सभी शर्तों का पालन कर लिया है जिसमें सरकारी खरीद में घरेलू रूप से निर्मित लोहा एवं इस्पात उत्पादों की वरीयता दी गई है और खरीदने वाली एजेंसी एतद्वारा मेरे जमा बयाना राशि जमा करने के लिए अधिकृत है। मैं निविदा प्रस्तावज्ञ में यथा विनिर्दिष्ट आकलन लागत और सभी वंडों का भी भुगतान करने का बचन देता/देती हूँ।

मैं 8 वर्षों की अवधि के लिए कंपनी के अभिलेख में निम्नलिखित सूचना रखने के लिए सहमत हूँ और किसी मांविधिक प्राधिकारी को सत्यापन के लिए इसे उपलब्ध कराऊंगा/कराऊंगी:

- i. बोली लगाने वाले का नाम और विवरण
(पंजीकृत कार्यालय, विनिर्माण इकाई का पता, कानूनी प्रतिष्ठान की प्रकृति)
- ii. वह तिथि जब यह प्रमाण-पत्र जारी किया गया
- iii. लोहा एवं इस्पात उत्पाद जिनके लिए प्रमाण-पत्र प्रस्तुत किया गया है
- iv. खरीदने वाली एजेंसी जिसे प्रमाण-पत्र प्रस्तुत किया गया है
- v. दावा किए गए घरेलू मूल्य संवर्धन का प्रतिशत और क्या यह निर्धारित घरेलू मूल्य संवर्धन के सीमा मूल्य को पूरा करता है
- vi. विनिर्माता इकाई का नाम और संपर्क व्यक्ती
- vii. लोहा एवं इस्पात उत्पादों की निवल विक्री कीमत
- viii. संयंत्र तक भाड़ा, धीमा और रख-रखाव
- ix. लोहा एवं इस्पात उत्पादों का निर्माण करने के लिए प्रयोग किए गए इनपुट इस्पात (आयातित) की सूची एवं कुल लागत मूल्य
- x. घरेलू रूप से लिए गए इनपुट इस्पात की सूची एवं कुल लागत
- xi. कृपया आपूर्तिकर्ताओं से मूल्य संवर्धन प्रमाण-पत्र, यदि इनपुट नहीं हो, मंगल करें
- xii. आयात किए गए इनपुट इस्पात के लिए, सीआईएफ मूल्य, शुल्क एवं कर, पतन रख-रखाव शुल्क और अंतर्देशीय भाड़ा लागत के व्यक्ती के साथ भारतीय पतन पर पहुँचने तक लागत

_____ (हर्म/प्रतिष्ठान का नाम) के लिए और उसकी ओर से

अधिकृत हस्ताक्षरकर्ता (निदेशक बोर्ड द्वारा विधिवत अधिकृत)

<नाम, पदनाम और संपर्क: मैं, का उल्लेख करें>

MINISTRY OF STEEL (ESTABLISHMENT DIVISION)

NOTIFICATION

New Delhi, the 8th May, 2017

G.S.R. 451(E).—The Policy for providing preference to domestically manufactured Iron & Steel products in Government procurement is hereby published for general information.:—

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT

1. Background

- 1.1 This policy provides preference to Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.
- 1.2 The policy is applicable to iron & steel products as provided in Appendix A, produced in compliance to prescribed quality standards, as applicable.
- 1.3 The policy is applicable to every Ministry or Department of Government and all agencies/entities under their administrative control for purchase of iron & steel products for government projects and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.

2. Definition

- i. Bidder may be a domestic/ foreign manufacturer of steel or their selling agents/ authorized distributors/ authorized dealers/ authorized supply houses or any other company engaged in the bidding of projects funded by Government agencies.
- ii. "Domestically Manufactured Iron & Steel Products (DMI&SP)" are those iron and steel products which are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs). In addition, such products shall meet the criteria of domestic minimum value-addition as mentioned in Appendix-A.

- iii. **Domestic Manufacturer** is a manufacturer of domestically manufactured iron & steel products (DMI&SP).
- iv. **Government** for the purpose of the Policy means Government of India.
- v. **Government agencies** include Government PSUs, Societies, Trusts and Statutory bodies set up by the Government.
- vi. **MoS** shall mean Ministry of Steel, Govt. of India.
- vii. **Net Selling Price** shall be the Ex-works/Ex-factory price comprising of the landed cost of imported steel at the plant and all other cost elements forming part of the conversion cost inclusive of nominal return on investment. This price is exclusive of any duties and taxes applicable ex-factory.
- viii. **Semi-Finished Steel** shall mean billet, blooms, slabs (cast products), which can be subsequently processed to finished steel.
- ix. **Finished Steel** shall mean Flat and Long products, which can be subsequently processed into manufactured items.
- x. **Iron & Steel Product(s)** shall mean such iron and steel product (s) which are mentioned in Appendix A.

3. Exclusions:

Waivers shall be granted to all such Government procurements subject to following conditions:

- a. where specific grades of steel are not manufactured in the country, or
- b. where the quantities as per the demand of the project cannot be met through domestic sources

4. Standing Committee:

A Standing Committee under the Ministry of Steel (MoS) to be chaired by the Secretary (Steel), shall be constituted to oversee the implementation of the policy. The Committee shall comprise of experts drawn from Industry/Industry Association/Government Institution or Body/Ministry of Steel (MoS). The said Committee in MoS shall have the mandate for the following:

- a. Monitoring the implementation of the policy
- b. Review and notify the list of Iron & Steel products and the Minimum value addition criterion as mentioned at Appendix-A
- c. Issue necessary clarifications for implementation of the policy including grant of exclusions to procuring agencies as per para 3
- d. Constitute a separate committee to carry out Grievance redressal
- e. The Standing Committee shall submit its recommendations for approval to Ministry of Steel.

5. Notifying Iron & Steel Products Procured by Government

5.1 The following guidelines may be used for identifying and notifying the aforementioned products under the policy :-

- क. The objective of the policy is to notify all iron & steel products which are procured by Government Agencies for government projects and not with a view to commercial resale or with a view to use in the production of products for commercial sale.
- ख. Only iron & steel products having aggregated estimate value of INR 50 Crores and more forming part of the steel intensive project or overall project, shall be covered under the policy.
- ग. Analysis of the availability of various grades of domestic iron and steel products needs to precede for notification under the policy. Only those iron & steel products, in respect of which at least one domestic manufacturer exists, shall be notified. Consultation may be carried out by the Standing Committee.

5.2 The Ministry of Steel (MoS) would notify iron & steel products along with the minimum prescribed value addition, furnished at Appendix-A. The Appendix-A will be reviewed by the Standing Committee and amended, if required with the approval of competent authority.

5.3 Government agencies which are involved in procurement of iron and steel products in government projects and if such product is not mentioned in Appendix-A, they will provide description and technical

specifications of the product alongwith prescribed standards to the Standing Committee. The Standing Committee will act as per the mandate at para 4.

- 5.4 The value addition norm shall be so calibrated that it reflects the average/ above average manufacturing capability of the domestic industry for the iron & steel products at a point of time. This shall be suitably reviewed as per the policy.

6. Tender Procedure for Procurement by Government and Government Agencies

- 6.1 The procuring/ Government agencies shall follow standard procurement procedures, in accordance with instructions of Ministry of Finance and CVC while providing preference to DMI&SP. The policy shall come into effect from the date of its notification in all tenders where price bid have not been opened.

- 6.2 The tender document should explicitly outline the qualification criteria for adherence to minimum prescribed domestic value addition by the bidder (as indicated at Appendix-A), provided there is procurement of iron & steel products having estimated value of INR 50 Crores or more, forming part of the steel intensive project or overall project.

- 6.3 The bidders who are sole selling agents /authorized distributors /authorized dealers /authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of the domestic manufacturers under the policy. However, this shall be subject to the following conditions:

- The bidder shall furnish the authorization certificate issued by the domestic manufacturer for selling domestically manufactured iron & steel products.
- The bidder shall furnish the Affidavit of self-certification issued by the domestic manufacturer to the procuring agency declaring that the iron & steel products is domestically manufactured in terms of the domestic value addition prescribed.
- It shall be the responsibility of the bidder to furnish other requisite documents required to be issued by the domestic manufacturer to the procuring agency as per the policy.

7. Value addition

- 7.1 Value addition shall be the difference between the net selling price and the landed cost of imported input steel (of immediate prior process) at a manufacturing plant in India.

- 7.2 In case, the iron & steel products are made –

- Using domestic input steel (semi-finished/ finished steel), invoices of purchases from the actual domestic producers along with quantities purchased and the other related documents must be furnished to procuring Government agency.
- Using a mix of imported and domestic input steel, the invoices of purchases from the actual producers along with quantities purchased and the other related documents must be furnished separately. To derive the extent of domestic value addition, the weighted average of both (imported & domestic) input steel shall be considered to ensure that the minimum stipulated domestic value addition requirement of the policy is complied with.
- Using only imported input steel, the following formula shall apply to calculate the percentage of domestic value-addition:

$$\text{Domestic value addition (\%)} = \frac{(\text{Net selling price} - \text{Landed cost of imported input steel at the plant})}{\text{Landed cost of imported input steel at the plant}} \times 100$$

It is recommended that each bidder participating in the tender process should calculate the domestic value-addition using the above formulae so as to ensure the domestic value addition claimed is consistent with the minimum stipulated domestic value addition requirement of the policy.

8. Self-Certification

- 8.1 Each domestic manufacturer shall furnish the Affidavit of self-certification to the procuring Government agency declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. The bidders who are sole selling agents/authorized distributors/authorized dealers/authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of domestic manufacturers under the policy. The bidder shall furnish the Affidavit of self-certification issued by the domestic manufacturer to the procuring agency declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. The Affidavit of self-certification shall be furnished in Form I attached to these guidelines.

- 8.2 It shall be the responsibility of the domestic manufacturer to ensure that the products so claimed are DMI&SP in terms of the domestic value addition prescribed for the product. The bidder shall also be required to provide a

value- addition certificate on half-yearly basis (Sep 30 and Mar 31), duly certified by the Statutory Auditors of the domestic manufacturer, that the claims of value-addition made for the product during the preceding 6 months are in accordance with the Policy. Such certificate shall be filed within 60 days of commencement of each half year, to the concerned Government agencies and shall continue to be filed till the completion of supply of the said products.

- 8.3 The procuring agency shall accept the Affidavit of self-certification regarding domestic value addition in a steel product submitted by a bidder. It shall not normally be the responsibility of procuring agency to verify the correctness of the claim. The onus of demonstrating the correctness of the same shall be on the bidder when asked to do so.
- 8.4 In case a complaint is received by the procuring agency or the concerned Government Agency against the claim of a bidder regarding domestic value addition in iron & steel products, the procuring agency shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to MoS with a request for technical assistance.
- 8.5 Any complaint referred to the Government Agency shall be disposed off within 4 weeks of the reference along with submission of all necessary documents. The bidder shall be required to furnish the necessary documentation in support of the domestic value addition claimed in iron & steel products to the Government Agency within 2 weeks of filing the complaint.
- 8.6 In case, the matter is referred to the Ministry of Steel, the grievance redressal committee setup under the MoS shall dispose off the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the Government Agency. The bidder shall be required to furnish the necessary documentation in support of the domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance redressal committee may take further necessary action, in consultation with Government Agency to establish the bonafides of the claim.
- 8.7 The cost of assessing the prescribed extent of domestic value addition shall be borne by the procuring agency if the domestic value addition is found to be correct as per the certificate. However, if it is found that the domestic value addition as claimed is incorrect, the cost of assessment will be payable by the bidder who has furnished an incorrect certificate. The manner of enforcing the same shall be defined in the tender document.
- 8.8 Each Government Agency shall clearly define the penalties, in case of mis-declaration by the bidder of the prescribed domestic value addition, in the tender document. The penalties may include forfeiting of the EMD and such other penalties, as may be prescribed by the concerned Government Agency in the tender document.
- 8.9 In case of reference of any complaint to MoS by the concerned bidder, there would be a complaint fee of Rs. 10 Lakh or 0.2 % of the value of the DMI&SP being procured (subject to a maximum of Rs. 20 Lakh), whichever is higher, to be paid by Demand Draft deposited with the grievance redressal committee under MoS along with the complaint by the complainant. In case, the complaint is found to be incorrect, the Government Agency reserves the right to forfeit the said amount. In case, the complaint is found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

9 Monitoring

- 9.1 MoS shall be the nodal ministry to monitor the implementation of the policy.
- 9.2 Every Government Agency shall ensure implementation of the policy and shall annually, in the month of June, send a declaration indicating the extent of compliance to the policy and reasons for non-compliance thereof, during the preceding financial year.

10 Reference to Ministry of Steel

In case of a question whether an item being procured is a DMI&SP to be covered under the policy, the matter would be referred to the Ministry of Steel for clarification.

[F. No. 11(34)/2015-IDD]

SYEDAIN ABBASI, Jt. Secy.

Appendix-A

List of Iron & Steel Products (Refer Para 7.2)

Sl. No	Iron & Steel Products	Inputs (Imported or Domestic)	Minimum Value Addition
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1	Ductile Iron Pipe	Pig Iron/Liquid Iron	15%
2	Wire rod & TMT bar	Billet	15%
3	Structural sections	Bloom	15%
4	HR Coils, strips, sheets & plates	Slab	15%
5	HR universal/Quarto Plates	Slab	15%
6	CR coils/strips	HR coils	15%
7	Coated flat steel products/ GP/GC sheets/ Al-Zn coated	Slab/ HR Coil/ Cold rolled coils/strips	15%
8	Color coated, painted sheets	Slab/ HR Coil/ Cold rolled coils/strips	15%
9	All kinds of steel pipes & tubes	Slabs/ Plates/ HR coils	15%
10	Seamless tubes & pipes	Bloom	15%
11	Rails	Bloom	15%

Form-1

Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products to be provided on Rs.100/- Stamp Paper

Date:

I _____ S/o. _____ D/o. _____ W/o. _____ Resident of _____ hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No. _____.

That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring agency (ies) for the purpose of assessing the domestic value addition.

That the domestic value addition for all inputs which constitute the said iron & steel products has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition criteria, based on the assessment of procuring agency (ies) for the purpose of assessing the domestic value-addition, I will be disqualified from any Government tender for a period of 36 months. In addition, I will bear all costs of such an assessment.

That I have complied with all conditions referred to in the Notification No. _____ wherein preference to domestically manufactured iron & steel products in Government procurement is provided and that the procuring agency (ies) is hereby authorized to forfeit and my EMD. I also undertake to pay the assessment cost and pay all penalties as specified in the tender document.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

- i. Name and details of the Bidder
(Registered Office, Manufacturing unit location, nature of legal entity)
- ii. Date on which this certificate is issued
- iii. Iron & Steel Products for which the certificate is produced
- iv. Procuring agency to whom the certificate is furnished
- v. Percentage of domestic value addition claimed and whether it meets the threshold value of domestic value addition prescribed
- vi. Name and contact details of the unit of the manufacturer (s)
- vii. Net Selling Price of the iron & steel products
- viii. Freight, insurance and handling till plant
- ix. List and total cost value of input steel (imported) used to manufacture the iron & steel products

- x. List and total cost of input steel which are domestically sourced.
- xi. Please attach value addition certificates from suppliers, if the input is not in-house.
- xii. For imported input steel, landed cost at Indian port with break-up of CIF value, duties & taxes, port handling charges and inland freight cost.

For and on behalf of _____ (Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>

Item Number	Item Title	Item Description	Item Quantity	Unit of Measure	Consignee ID	ZipCode	Delivery Period (In number of days)	Unit Price (Inclusive of TAX)	GST % Applicable	Brand	Model	HSN Code
1	Line Pipe 1	150 mm NB Line Pipe 3LPE X46 6.4 mm WT	9500	Metre	oil.dul.mat.con3.c_p	786602	180					
2	Line Pipe 2	150 mm NB Line Pipe 3LPE X46 7.11 mm WT	200	Metre	oil.dul.mat.con3.c_p	786602	180					
3	Line Pipe 3	150 mm NB Line Pipe BARE X46 6.4 mm WT	300	Metre	oil.dul.mat.con3.c_p	786602	180					
4	Line Pipe 4	LINE PIPE,10"NB API5LX46 W/T=7.1mm BARE	200	Metre	oil.dul.mat.con3.c_p	786602	180					
5	Line Pipe 5	200 mm NB Line Pipe 3LPE X46 6.4 mm WT	22000	Metre	oil.dul.mat.con3.c_p	786602	180					
6	Line Pipe 6	200 mm NB Line Pipe 3LPE X46 7.0 mm	500	Metre	oil.dul.mat.con3.c_p	786602	180					
7	Line Pipe 7	200 mm NB Line Pipe BARE X60 8.7 mm WT	500	Metre	oil.dul.mat.con3.c_p	786602	180					
8	Line Pipe 8	LINE PIPE,12"NB API5LX60 W/T=7.1mm BARE	500	Metre	oil.dul.mat.con3.c_p	786602	180					
9	Bend 1	BEND,90DEG,150M M NB,3 LPE API 5L X 46	20	Number	oil.dul.mat.con3.c_p	786602	180					
10	Bend 2	BEND,60DEG,150M M NB,3 LPE API 5L X 46	5	Number	oil.dul.mat.con3.c_p	786602	180					
11	Bend 3	BEND,45DEG,150M M NB,3 LPE API 5L X 46	12	Number	oil.dul.mat.con3.c_p	786602	180					
12	Bend 4	BEND,30DEG,150M M NB,3 LPE API 5L X 46	20	Number	oil.dul.mat.con3.c_p	786602	180					
13	Bend 5	BEND,90DEG,200M M NB,3 LPE API 5L X 46	20	Number	oil.dul.mat.con3.c_p	786602	180					
14	Bend 6	BEND,60DEG,200M M NB,3 LPE API 5L X 46	15	Number	oil.dul.mat.con3.c_p	786602	180					
15	Bend 7	BEND,45DEG,200M M NB,3 LPE API 5L X 46	30	Number	oil.dul.mat.con3.c_p	786602	180					
16	Bend 8	BEND,30DEG,200M M NB,3 LPE API 5L X 46	90	Number	oil.dul.mat.con3.c_p	786602	180					