

BHEL- HPVP- VISAKHAPATNAM

1. LIST OF MATERIAL GROUPS FOR WHICH VENDORS ARE INVITED FOR REGISTRATION :

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SI No	MATL GROUP	MATERIAL GROUP DESCRIPTION	Group Description
1	TE_SPL_F	Special Tools for FB	
2	VZTSC	TUBE SUPPORT CASTING	Castings & Forgings
3	STDCL	CLAMPS - CS	Fasteners
4	FIT91	FITTINGS - WP91	Fasteners
5	80ROE	ROD END	Fasteners
6	AS PIPES	H:AS Pipes	Pipes
7	SS PIPES	H:SS pipes	Pipes
8	INCOP	Inconel pipes	Pipes
9	CS PIPES	H:CS Pipes	Pipes
10	CLADP	CLAD PLATES	Steel
11	NACPL	SA516 Gr.60 (NACE)	Steel
12	41SOV	SDM:SOLENOID VALVES	Sub-Dely & Mechanical
13	NASBTS	Non-Asbestos Matls	Sub-Dely & Mechanical
14	33SLC	SEALING COMPOUND	Sub-Dely & Mechanical
15	SPFAN	FANS	Sub-Dely & Mechanical
16	44SGL	Glass-SightGlassAssy	Sub-Dely & Mechanical
17	48HRG	HEAT RESISTENT GLASS	Sub-Dely & Mechanical
18	CRASH	Corrugated AL Sheet	Sub-Dely & Mechanical
19	AYTPT	TADPOLE TAPE	Sub-Dely & Mechanical
20	42CTV	VALVE:BALLTYPE CONTL	Sub-Dely & Mechanical
21	81BFP	BOILER FEED PUMP	Sub-Dely & Mechanical
22	97ACF	GRAVIMETRIC FEEDER C	Sub-Dely & Mechanical
23	24NBS	NITROGEN BLANKET SYS	Sub-Dely & Mechanical
24	42SAV	SELFACUT-PrRedu-Valv	Sub-Dely & Mechanical
25	ATVAP	ATMOSPHERIC VAPORISE	Sub-Dely & Mechanical
26	ARCO2	Argon CO2 mixing sys	Sub-Dely & Mechanical
27	41HEA	HEA IGNITOR ASSY	Sub-Dely & Mechanical
28	VZHUB	GAS FIRED BURNER	Sub-Dely & Mechanical
29	AYHSP	SPRINGS	Sub-Dely & Mechanical

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SI No	MATL GROUP	MATERIAL GROUP DESCRIPTION	Group Description
30	65GFD	GRAVIMETRIC FEEDER	Sub-Dely & Mechanical
31	VZPSV	Pressure Safety Vlv	Sub-Dely & Mechanical
32	VZSBL	SOOT BLOWERS	Sub-Dely & Mechanical
33	INSCB	INTERNALS FOR HP SCR	Sub-Dely & Mechanical
34	INSTR	INTERNALS FOR AMMONI	Sub-Dely & Mechanical
35	AYGEL	GASKET ELIMINATOR/SE	Sub-Dely & Mechanical
36	CRPSV	CRYO SAFETY VALVE	Sub-Dely & Mechanical
37	RUDSC	RUPTURE DISC	Sub-Dely & Mechanical
38	AYLCH	LINK CHAINS	Sub-Dely & Mechanical
39	41HUB	HEAT UP BURNER	Sub-Dely & Mechanical
40	QFCPL	QF COUPLING, BRONZE	Sub-Dely & Mechanical
41	VZPCP	PLASTIC PIPE CAP	Sub-Dely & Mechanical
42	CRBOV	SDM:CRYO BO VALVE	Sub-Dely & Mechanical
43	RLAHW	PORTABLE INSTRUMENT	Sub-Dely & Mechanical
44	VZAPH	AIR PRE-HEATERS	Sub-Dely & Mechanical
45	97EWI	EWL INDICATOR	Sub-Dely C & I-Items
46	95HEO	ACCESSORIES FOR HEAI	Sub-Dely C & I-Items
47	97LAR	LIGHTING ARRESTORS	Sub-Dely C & I-Items
48	97LIF	ELEVATOR-PASSENGER &	Sub-Dely C & I-Items
49	97ALS	ASH LEVEL SWITCH	Sub-Dely C & I-Items
50	97BLC	Bunker Load Cell	Sub-Dely C & I-Items
51	43PWR	ACTUATOR:PNEUMATIC R	Sub-Dely C & I-Items
52	42LMS	SDE:LS : LIGHT DUTY	Sub-Dely C & I-Items
53	41GIG	IFM GAS IGNITOR	Sub-Dely C & I-Items
54	GASKETS	H:GASKETS	Sub-Dely C & I-Items
55	VZMFD	INSTRUMENT MANIFOLDS	Sub-Dely C & I-Items
56	43PWC	BURNER TILT POWER	Sub-Dely C & I-Items
57	INCOF	Inconel fittings	Sub-Dely C & I-Items
58	VZIIV	INSTRUMENT VALVES	Sub-Dely C & I-Items
59	VZASH	AIR SUB HEADER	Sub-Dely C & I-Items
60	WCS29	WELDG.ELECTRODES:SMA	Welding Consumables

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SI No	MATL GROUP	MATERIAL GROUP DESCRIPTION	Group Description
61	WELD ELEC	H:Welding Electrodes	Welding Consumables
62	WCFA1	ER70S - 6 BULK PACKS	Welding Consumables
63	TIGW9	ER80S - D2 GTAW ROD	Welding Consumables
64	WCW02	WELDING WIRE:SAW EB3	Welding Consumables
65	WCL07	WELDG.ELECTRODES:SMA	Welding Consumables
66	GOUGE	GOUGING ELECTRODES	Welding Consumables
67	FLP01	FLUX-F8PX-EA4-A4	Welding Consumables
68	WSP01	EA4 SAW COIL WIRE	Welding Consumables
69	TIGTH	TIG THORIUM ELECTROD	Welding Consumables

2. **REGISTRATION REQUIREMENT FOR R & D PROJECTS:** (Contact Mr Jai Chandra Singh (Ph: 08912881312 Email: jcsinh@bhel.in) ; Aditya Kumar (Ph: 0891-2881306 Email: aaditya@bhel.in), Mr M V R Murthy (Ph: 0891-2881311 Email: mvmurthy@bhel.in)

- a. AWS A5.8 -2011 – BNi5 & BNi7 - BRAZING FILLER MATERIAL
Specification :RD-Br-001 Dt 19.03.2022

Procurement Plan for Bni-7 Brazing Tape (in Lakhs)						
S. No	Item Description	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
1	0.0762 mm BNi-7 Brazing Tape Spec: ASME SFA 5.8 BNi 7 Size: 0.0762 mm x 140 mm x Roll x 25 ft long TDC: RD-Br-001 Rev 01 dated 19.03.2022	95	165	165	165	125
2	0.0762 mm BNi-7 Brazing Tape Spec: ASME SFA 5.8 BNi 7 Size: 0.0762 mm x 118 mm x Roll x 25 ft long TDC: RD-Br-001 Rev 01 dated 19.03.2022.	60	104	104	104	80

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b. ALUMINIUM CLAD SHEET FOR AEROSPACE APPLICATION

Specification :RD-CLAD-004 Rev 04

Procurement Plan for 0.5 mm Aluminium Clad Sheet (in KG)						
S. No	Item Description	FY 22-23	FY 23- 24	FY 24- 25	FY 25- 26	FY 26- 27
1	Size: 0.5 mm(+/-0.0381mm)thick x 150 mm(+/-0.406mm) width coil Material:AA4104 clad on AA3003-O. TDC: RD-CLAD-01 REV 04. Quantity Tolerance: +/-25%	400 KG	Nil	Nil	Nil	Nil
2	Size: 0.5 mm(+/-0.0381mm)thick x 160.5 mm(+/-0.406mm) width coil Material:AA4104 clad on AA3003-O. TDC: RD-CLAD-01 REV 04. Quantity Tolerance: +/-25%	200 KG	Nil	Nil	Nil	Nil
3	Size: 0.5 mm(+/-0.0381mm)thick x 170 mm(+/-0.406mm) width coil Material:AA4104 clad on AA3003-O. TDC: RD-CLAD-01 REV 04. Quantity Tolerance: +/-25%	230 KG	Nil	Nil	Nil	Nil
4	Size: 0.5 mm(+/-0.0381mm)thick x 302 mm(+/-0.406mm) width coil Material:AA4104 clad on AA3003-O. TDC: RD-CLAD-01 REV 04. Quantity Tolerance: +/-25%	200 KG	Nil	Nil	Nil	Nil



**TECHNICAL SPECIFICATION &
TECHNICAL DELIVERY
CONDITIONS**

TDC No	:	RD-Br-001 Dated 19.03.2022.
Rev. No	:	01
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**AWS A5.8-2011-BNi-5 & BNi-7 Brazing Filler Metal in
Transfer Tape Form**

Technical Specification:

1. The transfer tape shall be supplied in roll form.
2. The powder particle size that is used for making the transfer tape shall be of 270 or 325 mesh size.
3. The binder content of the tape should be in between 6-10 %.
4. The supplier should clearly indicate the storage conditions and shelf life of the tape in the documentation.

Technical Delivery Conditions:

1. **Documentation:** The supplier shall furnish test certificate that should clearly indicate Batch No./ Lot No of powder used and chemistry of the powder to the relevant specification.
2. The supplier may provide the certification to relevant ASTM or AMS standards.
3. **Packing:**
 - a) Each Roll shall be packed carefully to avoid damage in any form during the transport.
 - b) Each Roll should be identified with the following details.

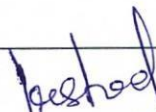
Specification :

Size : T x W x L

Qty : _____ No. of Rolls / Pack

Lot No. :

Batch No. :


PREPARED


CHECKED


APPROVED

SPECIFICATION FOR ALUMINUM ALLOY CLAD SHEET FOR AEROSPACE APPLICATION


- 1 CORE MATERIAL SPECIFICATION : SAE AMS 4006 / ASTM B 209 3003-O
- 2 CLAD MATERIAL SPECIFICATION : AS PER ASME CODE SECTION II PART C, SFA-5.8 AWS CLASSIFICATION NUMBER BAISI-11.
- 3 CLADDING THICKNESS : 10 % on each side (TOTAL: 20 %)
- 4 CLAD SHEET THICKNESS : 0.5 mm including Clad Material

1. RAW MATERIALS USED FOR MAKING CLAD SHEETS SHALL CONFORM TO **SAE AMS 4006 OR ASTM B 209 3003-O**. MILL' MATERIAL TEST CERTIFICATE TO THIS EFFECT SHALL BE FURNISHED ALONG WITH SUPPLIES FOR RAW MATERIALS USED FOR MAKING CLAD SHEETS.
2. THE CLAD MATERIAL USED FOR CLADDING SHALL CONFORM TO **ASME CODE SECTION II PART C, SFA-5.8** AWS CLASSIFICATION NUMBER BAISI-11. MILL'S MATERIAL TEST CERTIFICATE TO THIS EFFECT SHALL BE FURNISHED ALONG WITH SUPPLIES FOR RAW MATERIALS USED FOR MAKING CLAD SHEETS.
3. IN ADDITION TO 1 & 2 ABOVE, A CERTIFICATE OF COMPLIANCE, OR RELEASE NOTE, ISSUED BY YOUR QUALITY PERSONNEL SHALL BE FURNISHED FOR THE CLAD SHEETS SUPPLIED, ALONG WITH THE SHIPMENT. THIS MAY PLEASE BE ON THE FOLLOWING LINES.

"WE HEREBY CERTIFY THAT THE ITEMS SUPPLIED AGAINST PURCHASE ORDER FROM M/s BHEL-HPVP, INDIA, ARE FREE FROM DEFECTS, AND ARE IN CONFORMITY WITH THE REQUIREMENTS OF THE PURCHASE ORDER"
4. COIL ID: MINIMUM 150 mm & MAXIMUM 305 mm
5. EACH COIL WEIGHT: MAXIMUM 70 KG.
6. FINISH: MATTE "R" (12-14 RA)
7. PACKING: COILS SHALL BE PROPERLY PACKED FOR INTERNATIONAL TRANSIT TO AVOID ABRASION & DAMANGE. IT SHOULD ALSO BE SHRINK WRAPPED FOR PROTECTION.SPECIAL CARE SHOULD BE TAKEN TO AVOID DAMAGE OF EDGES.
8. IT IS NECESSARY THAT THE VENDOR PLEASE CONFIRM IN THEIR OFFER THAT THE CERTIFICATES SOUGHT IN SL.NO. 1, 2 & 3 ABOVE SHALL BE FURNISHED ALONG WITH SUPPLIES.
9. INSPECTION AT BHEL-HPVP STORES, REJECTED MATERIAL SHOULD BE REPLACED BY SUPPLIER AT THEIR OWN COST.
10. VENDOR CAN OFFER THEIR STANDARD AVAILABLE PRODUCT AGAINST THE BHEL REQUIREMENT, HOWEVER ACCEPTANCE OF SAME IS SUBJECT TO EVALUATION BY BHEL.
11. DELIVERY: WITHIN 10 WEEKS


Prepared


Checked

Sougat Mandal
Manager (R & D)
Heavy Plates and Vessels Plant
Bharat Heavy Electricals Ltd
HPVP-VISAKHAPATNAM 530 012

Approved