



భారత్ హెవీ ఎలక్ట్రికల్స్ లిమిటెడ్
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Limited

Site office, 5 X 800 MW Yadadri Thermal Power Project
Dhamaracharla (M), Nalgonda(Dist), Telangana 508355

Ref: YTPS: SCT: 202312-184:Corr 2.

Date: 10.02.2024

To,

All Bidders

Sub: **Corrigendum-2:**

Job: YTPS: SCT: 202312-184- Fabrication, Erection, Testing and Commissioning of the Tanks in FGD area for 5x800 MW Yadadri TPS. Tender Specification No. YTPS: SCT: 202312-184 & Date – 27.01.2024

Bidders to kindly take note of following:

- Clarifications with BHEL list of approved welding electrodes, Procedure for grouting and Painting schedule. (Attached)
- Below clause have been modified as given in table

SL NO	Description	Existing as	Revised as
1	SL NO E of Annexure 1 (PRE-QUALIFYING REQUIREMENTS (PQR)) - Page 22 of NIT	Approval of Customer (if applicable) : "NOT Applicable"	Approval of Customer : "Applicable"
2	CL 19 of NIT : Reverse Auction - Page 16 of NIT	Reverse Auction: Reverse Auction is Applicable for this tender.	Reverse Auction (RA) is not applicable for this enquiry.

All other Terms and conditions of the Tender Specification shall remain unaltered unless expressly amended by BHEL in writing.

Bidders are requested to submit as a part of Technical Bid, a copy of this corrigendum duly countersigned by the authorized signatory and stamped with the Official seal as a token of Bidder's unqualified acceptance of this corrigendum.

Thanking You,

For and on behalf of
Bharat Heavy Electricals Limited

P Vineel

Dy Manager / Purchase & SCT

PAKALAPATI VINEEL
Deputy Manager/SCT & Purchase

BHEL PSSR 5X800MW YADADRI TPP

Head Office: BHEL PSSR, Tek Towers, No.11, Old Mahabalipuram Road, Okkiyam, Thoraiakkam, Chennai-600097.

Regd. Office: **BHEL House, Siri Fort, New Delhi – 110 049.**

BHEL Tender YTPS: SCT: 202312-184 S

Date 03rd Feb 2024

Fabrication, Erection, Testing and Commissioning of the Tanks in FGD area for 5x800 MW Yadadru TPS

S. No	Page No.	Clause no.	Short Description	Details	Concern / Query	Response by BHEL & Date
1	9 & 12 / 429	9.0	Assessment of Capacity shall be assessed based on its Load and performance and average annual turnover. On page 12 - However new vendor shall be considered qualified based on only load and performance. (... Pre-qualified on average annual turnover criterion	We are bidding as new vendor, registered our company in Nov 21. Technically and financially we are meeting tender requirement. 1. Please guide us, what performance data & financial data, we need to furnish to qualify? 2. Method of calculation for New Vendor qualification may please be shared with us.	Refer to Clause 9.IV.iii, Pg 13/429 in NIT
2	15/429	12.C	PVC & ORC	PVC & ORC Clauses are not applicable	In later part clause 2.12.3 P-96/429 & 2.17 P=101/429 PVC and ORC are applicable	PVC & ORC Clauses are not applicable. Refer Clause 35.0, Pg 20/429
3	16/429	18.C	Validity	Offer validity Three months	In later part validity is 6 months (81/429 cl. 1.13)	Offer validity Three months. Refer Clause 35.0, Pg 20/429
4	24 & 65/429	--	Pre-Qualification	Criteria Format	Please provide the format.	Refer pg 63, Annexure Z
5	39/429	1.2.1	Slurry Tanks	Material Specified is Mild Steel	1. Please confirm that no other special material like alloy steel or P-91 material is in the bidder scope. 2. Please confirm that No dissimilar material welding is in the scope. 3. List of Welding Electrodes and approved brands to be provided.	1. No Special Materials are applicable for Tanks 2. No dissimilar materials are applicable for Tanks 3. Refer BHEL list of approved welding electrodes (attached herewith).
6	40/429	1.2.7	Supply of Paint	Painting and application	For cost estimation purpose : 1. Brand names and tech specs of each Paint and Primer to be specified 2. Thickness of paint & lining to be specified 3. Any specific test to be performed on Paint / Lining?	Refer Painting schedule (attached herewith).
7	40/429	1.2.11	Surface Preparation	Surface preparation inside and outside of tanks for Paint and Glass flakes lining	Manual cleaning /mechanical buffing only considered. No shot / grit blasting or acid cleaning is considered in the scope.	Surface Preparation, is as per Clause 1.2.11 and 1.2.12, PG 40/429

Approved
CLINGARAJ PRADHAN
MANAGER

BIKASH MISHRA
ADMINISTRATIVE MANAGER
MECHANICAL
BHEL-PSSR-5X800MW YADADRI TPP
VEERLAPALEM, DAMARCHERLA,
Nalgonda Dist. Telangana-508 355.

8	40/429	1.2.13 - VI	Tanks Radiography	Tanks Radiography	In the respective drawing of each tank, Radiography is specified as Not applicable. Therefore Radiography is not in our scope	As per Drawing and TCC.
9	41/429	1.2.14	Gear Box & Drive Motor	Gear Box & Drive Motor	Scope and detailed specs of Electrical work to be specified	As per TCC
10	42/429	vii	Non Shrink flowable grout	Non Shrink cum plasticizer admixture shall be added	Please provide more details	Refer Clause 1.1.1 of PROCEDURE FOR GROUTING (attached herewith)
11	42/429	vii	Nominal thickness of grout 50 mm	Nominal thickness of grout 50 mm	Please confirm if thickness is more than 50 mm, extra cost of non shrink cement shall be paid by BHEL	As per TCC
12	43 / 429	ix	Representative from the supplier	Representative from the supplier for witnessing	As grouting work shall be done multiple times, it is not feasible to call supplier representative. However we will follow work method strictly and ensure Quality of Grout	Tender conditions prevail.
13	43 / 429	(xi)	Test Cubes are to be made	Test cubes are to be made and tested	BHEL shall provide required number of Cube moulds and cube testing facility free of charge	NO. Tender conditions prevail.
14	50/429	1.3.9	Gases		Industrial LPG allowed or not?	NO. Tender conditions prevail.
15	50/429	1.3.10 (iii)	Electrode storage	Storage of Electrode shall be done in Air Conditioned	Electrode Storage room will have Heaters (not AC)	Electrode Storage room should be humidity controlled as mentioned in Clause 1.3.10.
16	50 / 429	1.3.12	Other Facilities	Adequate Water Less Urinals	Waterless urinals and disposals are very expensive. Not recommended for project site work and labour. Conventional Toilet having water flushing with Soak Pit to be allowed	NO. Tender conditions prevail.
17	52 / 429	1.7.1	Progressive Payment	Progressive payment on percentage of work done.	Some clarity required for billing purpose: Say for line item (1) - weight of plates upto pre-assembly will be taken and 10% of the agreed rate multiplied by weight of plates will be considered. Then how weight of gratings, structure etc will be paid through this progressive payment model.	Payment of erected tonnage as per Clause 1.7.1 pg52/429.
18	52/429	1.7.2	Balance 10% payment	upon achievement of final painting and handing over	P 107/429 : Retention amount 5% is specified	NO. Tender conditions prevail.

Approved
(CLINGABAT PRADHAN)
MANAGER
 BHEL - PPSR-5X800MW YADADRI TPP
 VEERLAPALEM, DAMARACHERLA,
 Nellore Dist. Telangana-508 155.
 BHEL - PPSR-5X800MW YADADRI TPP
 VEERLAPALEM, DAMARACHERLA,
 Nellore Dist. Telangana-508 155.
 BHEL - PPSR-5X800MW YADADRI TPP
 VEERLAPALEM, DAMARACHERLA,
 Nellore Dist. Telangana-508 155.

19	52 / 429	1.7.4	Payment of running bills	within 30 days	As BHEL is not giving interest free advance, therefore BHEL is requested to change timeline to 7 to 14 working days max from the date of receipt of tax invoice alongwith approved measurement sheet	NO. Tender conditions prevail.
20	92/429	2.8.6	Fees and Regn fee of Boiler / Electrical Inspectorate	Boiler Inspector and related welding work	We have not considered any Tank need IBR welder or welding and consumables	Tender conditions prevail. Refer Clause 1.10.3 Pg 57/429 in NIT.
21	94 / 429	2.8.1-9	Idle charges	No Idle charges will be admissible - for labour and T&P	If the work stops or delays for the reasons not attributed to bidder, idle charges should be payable. Even for significant delay in receiving civil front and / or free issue material from BHEL, Idle charges should be payable on submission of proper records and justified reasons.	NO. Tender conditions prevail.
22	97 / 429	2.12.3.5	Max amount of ORC	Limited to 5,00,000/-	There should not be any cap / upper limit	ORC NOT APPLICABLE
23	97 / 429	2.12.3.6	ORC Limit	Lower limit 1,00,000/-	Lower limit should be min payable 2,00,000/-	ORC NOT APPLICABLE
24	99/429	2.14.1	Quantity variation	Limit of minus 15% of contract value, no compensation becomes payable	Minus limit should be 10% or less	Tender conditions prevail.
25	100/429	2.15.5	Man hour rate for Extra work	Rs 108/- per man hour including tools and consumables	1. Rate 108/- is very less. Consumables should be paid extra at actual. 2. Rate for skilled manpower should be more than unskilled manpower	Tender conditions prevail.
26	117/429	4.1.4	Electrodes for P-91	BHEL will supply filler wire and electrodes for P-91 piping	We understand P-91 material / welding is not in the scope	Not in the scope
27	216/429	--	Medical Centre	Medical Centre & Facilities	We understand all type of Medical Centre / Facilities / Ambulance / Male Nurses etc shall be provided by BHEL on cost sharing basis by each contractor. Bidder need not to provide any separate first aid / medical centre and medical staff.	Tender conditions prevail.
28	219 / 429	C	package wise deduction	calculation formula is linked with duration of contract	All calculations should be linked with Contract Value + average No. of workers in the month	Tender conditions prevail.
29	--		Planning and Scheduling	Planning and Scheduling	BHEL is requested to share L-2 schedule of the Project as well as the civil fronts work to plan our resources and manpower	To be provided after release of Work Order.
30						


 (LINGARAJ PRADHAN)
 MANAGER

BIKASH MISHRA
 GENERAL MANAGER
 ADDL. MECHANICAL
 MECHANICAL YADADRI TPP
 BHEL-PSSR-5X800MW YADADRI
 VEERLAPALEM, DAMARACHERLA,
 Andhra Pradesh - 508 155

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
10081	ESAB INDIA LTD		DRMFL	WELDING FLUX-DRUM	AS PER BHEL WCPI	OK FLUX 10.71L	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	DRMFL	WELDING FLUX-DRUM	AS PER BHEL WCPI	MF-38	NOT APPLICABLE	Foreign Agent	PRESSURE PARTS
11712	TAPADIA ENGINEERS & TRADERS P.LTD.		DRMFL	WELDING FLUX-DRUM	AS PER BHEL WCPI	TAPADIA GR-80(M)	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
20516	LINCOLN ELECTRIC FRANCE S.A.	VENUS WELDS	FINFL	WELDING FLUX-FIN	AS PER BHEL WCPI	GM 80 - B2	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
19371	NOT FLUXES.		FINFL	WELDING FLUX-FIN	AS PER BHEL WCPI	BRAND-NOT WELD-50(S)	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
11712	TAPADIA ENGINEERS & TRADERS P.LTD.		MIG2A	GTAW WIRE FOR T92	GTAW WIRE FOR SA335T92 WELDING	BRAND NAME : TPD-50S	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VOESTALPINE BOHLER WELDING	MIG2A	GTAW WIRE FOR T92	GTAW WIRE FOR SA335T92 WELDING	THEIRMANIT 616	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING		MIG4A	ER80S-B2 BPGMAW WIRE	ASME SEC.II.C.SFA-5.28.ER80S-B2	UNION ER 80S B2	DIA.1.2MM	Manufacturer	PRESSURE PARTS
10081	ESAB INDIA LTD		MIG4A	ER80S-B2 BPGMAW WIRE	ASME SEC.II.C.SFA-5.28.ER80S-B2	MG-58082F	DIA.1.2MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIG4A	ER80S-B2 BPGMAW WIRE	ASME SEC.II.C.SFA-5.28.ER80S-B2	MG-58082F	DIA.1.2MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIG4A	ER80S-B2 BPGMAW WIRE	ASME SEC.II.C.SFA-5.28.ER80S-B2	UNION ER 80S B2	DIA.1.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	MIG4A	ER80S-B2 BPGMAW WIRE	ASME SEC.II.C.SFA-5.28.ER80S-B2	UNION ER 80S B2	DIA.1.2MM	Manufacturer	PRESSURE PARTS
21991	SPECIAL METALS WELDING PRODUCTS		MIG1N	GMAW WIRE ERNICKR-7A	ASME SEC.II.C.SFA-5.14.ERNICKRFE-7A	INCONEL 53M	DIA.0.8,0.9 & 1.0MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,		MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	GM 70SA1	DIA.0.8 MM (700 GM -1KG)	Manufacturer	PRESSURE PARTS
21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A	SATKUL ENTERPRISES LTD.	MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	INERFLGZMO	DIA.0.8MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	MG-570SA1	DIA.0.8,0.9,1.0,1.2 & 1.6MM	Foreign Agent	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	CMO	DIA.0.8, 0.9, 1.0 & 1.2 MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	UNION I MO	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
91875	Arva Engineering	SOREX WELDING CO LTD	MIG1	ER 70S-A1 GMAW WIRE	ER70S-A1	SMG-80B2	DIA.1.2MM	Indian Agent	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT.LTD.		MIG2	ER 80S-B2 GMAW WIRE	ASME SEC II C SFA-5.28 ER80S-B2	AUTOTHERM-CR-MO1	DIA.1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,		MIG2	ER 80S-B2 GMAW WIRE	ASME SEC II C SFA-5.28 ER80S-B2	GM80S-B2	DIA.1.0,1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIG2	ER 80S-B2 GMAW WIRE	ASME SEC II C SFA-5.28 ER80S-B2	METRODE ER80S-B2	DIA.1.0,1.2 & 1.6MM	Foreign Agent	PRESSURE PARTS
13690	GEE LIMITED,		MIG2	ER 80S-B2 GMAW WIRE	ASME SEC II C SFA-5.28 ER80S-B2	MG-5 80 B2F	DIA.1.0,1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
20047	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIG2	ER 80S-B2 GMAW WIRE	ASME SEC II C SFA-5.28 ER80S-B2	METRODE ER80S-B2	DIA.0.8,0.9,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
21411	ADOR FONTECH LIMITED,	SAICHEM COATINGS PVT.LTD.	MIG4	WELDS.WIRE-MIG ER347	ER347SI	MIG-120S SL	DIA.0.8MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIG4	WELDS.WIRE-MIG ER347	ER347SI	MG-5347S	DIA.0.8,1.0, & 1.2MM	Manufacturer	PRESSURE PARTS
11784	VENUS WIRE INDUSTRIES PVT LTD		MIG4	WELDS.WIRE-MIG ER347	ER347SI	VENUS 347SI	DIA.0.8,0.9,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIG4	WELDS.WIRE-MIG ER347	ER347SI	VENUS 347SI	DIA.0.8,0.9,1.0 & 1.2MM	Foreign Agent	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIG5	WELDS.WIRE-MIG ERNIC	ERNICK3	MG-570NICB	DIA.0.8,1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	MIG5	WELDS.WIRE-MIG ERNIC	ERNICK3	BRAND: 20.70NB	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
20057	VOESTALPINE BOHLER WELDING	MERIDIAN EXPORTS	MIG5	WELDS.WIRE-MIG ERNIC	ERNICK3	NIFL 600	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIG5	WELDS.WIRE-MIG ERNIC	ERNICK3	UTP A 68HH	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	MIG6	WELDS.WIRE-MIG ER90S	MIG ER90S-B9	9CRM0V-N MIG	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	MERIDIAN EXPORTS	MIG6	WELDS.WIRE-MIG ER90S	MIG ER90S-B9	CARBONFL CRM091	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		MIG6	WELDS.WIRE-MIG ER90S	MIG ER90S-B9	THERMANIT MTS 3	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
10758	ALPHA ARC PVT LTD		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	AUTOMIG --1	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
14791	ANAND ARC LTD.		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	ALPHA MIG	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
13549	ATHARVE WELDING TECHNOLOGIES (INDIA		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	ANAND MIG -1	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
13986	B&H ELECTRODES PVT. LTD.		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	ATHARV MIG WIRE	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
17814	CALCUTTA ELECTRODES PVT. LTD.,		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	B&H MIG	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
13763	D&H INDIA LIMITED		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	SHIVA-CO2	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
10774	D&H SECHERON ELECTRODES PVT.LTD.		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	CLASSIC MIG 70S	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
15924	DAYAHAND ENGINEERING INDUSTRIES		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	MIGARC WS 6	DIA.1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	AUTO THERME - 1	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
16166	EVERSHINE WIRES		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	FAIRWELD	DIA.1.20 MM	Manufacturer	STRUCTURALS
13690	GEE LIMITED,		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	ESAB MW 1	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
11288	JAGSHAAN INDUSTRIES		MIG7	GMAW WIRE ER 70S-6	ASME SEC II C-5.18 ER70S-6	SHINE ARC - 1	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS

S. NILA MAIDEEN
 Deputy General Manager
 Welding Technology Centre
 BHEL, TRICHY - 620 014.

Approved

Raja Pandian M F
 Senior Manager,
 MM / Services
 BHEL-HPBP, Trichy.

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
17813	K.M. CROWN WELDING CONSUMABLES PVT		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	CROWN MIG 6	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
16661	KUNWELD WIRES PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	KUNWELD	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
14458	M W WIRETECK PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	MARUTI MIG	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
13487	MAGNARC ELECTRODES PVT LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	MAGFIL	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
11378	MAILAM INDIA LIMITED		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	MAILAM MIG6	8	Manufacturer	STRUCTURALS
13906	MARUTI WELD PRIVATE LIMITED,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	MARUTI MIG	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
18705	MODI HITECH INDIA LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	WONDER -MIG	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
19305	MURU ELECTRODE PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	GMW	SIZE: DIA. 1.20MM	Manufacturer	STRUCTURALS
14340	NALLI ARC INDUSTRIE,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	NALLI ARC	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
16662	NATIONAL ENGINEERING ENTERPRISES,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	CARBOMIG S6	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
15810	NOUVEAUX INDUSTRIES (P) LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	NOUVAARC	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
17841	PRASHANTH CYLINDERS PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	PRAWELD	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
17842	PRECISION DRAWEL PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	PRECISION	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
15101	PRECISION WELDARC LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	PWT MIG 2	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
11528	RAJAMATNA ELECTRODES LTD		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	RAAJMIG-1(LAYER)	DIA.1.1.2.1.6.2 MM	Manufacturer	STRUCTURALS
13693	RASHI ELECTRODES LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	RASHI CO2	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
13911	ROYAL ARC ELECTRODES LIMITED		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	ROYAL 7056	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
15082	ROYAL WELDING WIRES PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	JACKSUN 705-6	SIZE DIA.1.20MM	Manufacturer	STRUCTURALS
13534	SHAKUNT ENTERPRISES PRIVATE LIMITED		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	RUPA MIG	DIA.0.8MM,1.0MM & 1.20MM	Manufacturer	STRUCTURALS
14478	SRI DHARAANI STEEL,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	LEND WIRE MIG	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
10737	STANDARD WIRE PRODUCTS		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	STAR	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
16575	UNIQUE WELDING PRODUCTS PVT.LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	UNIWELD	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
13743	VARUN ELECTRODES PVT. LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	PRIMA	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
91270	VEEPEES INDIA,	KISWEL LTD.,	MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	KC 28	DIA.1.0.1.2 & 1.6MM	Indian Agent	STRUCTURALS
15085	VOLTARC ELECTRODES (P) LTD,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	AUTOFIL-6	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
14575	WELD ALLOY PRODUCTS,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	M.W.A.705	DIA.1.0.1.2 & 1.6MM	Manufacturer	STRUCTURALS
16548	WELD EXCEL INDIA LTD.,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	EXCEL MAG1	DIA.0.8,1.0,1.2 & 1.6MM	Manufacturer	STRUCTURALS
17451	WELFAST ELECTRODES PVT LTD,		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	MIGFAST-1	DIA.0.80,1.0,1.20 & 1.60MM	Manufacturer	STRUCTURALS
14455	WIRE AND WIRE PRODUCTS		MIGW7	GMWAW WIRE ER70S-6	ASME SEC.II.C-5.18.ER70S-6	ESSARC	DIA. 0.8MM	Manufacturer	STRUCTURALS
21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A	SATKUL ENTERPRISES LTD.,	MIGW8	GMWAW WIRE ER80S-G	ASME SEC.II.C-SFA.5.28 ER80S-G	INEFL CROMO1	DIA. 0.8MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIGW8	GMWAW WIRE ER80S-G	ASME SEC.II.C-SFA.5.28 ER80S-G	MIG-51CM	DAI.0.8,0.9,1.0 & 1.2,1.4 & 1.6MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIGW8	GMWAW WIRE ER80S-G	ASME SEC.II.C-SFA.5.28 ER80S-G	1CRMO	DIA.0.8,1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
91270	VEEPEES INDIA,	KISWEL LTD.,	MIGW8	GMWAW WIRE ER80S-G	ASME SEC.II.C-SFA.5.28 ER80S-G	KC-81CMA	DIA. 0.8MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	MIGW9	GMWAW WIRE ER90S-G	ASME SEC.II.C-SFA.5.28 ER90S-G	2CRMO	DAI.0.8,0.9,1.0 & 1.2,1.4 & 1.6MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIGW9	GMWAW WIRE ER90S-G	ASME SEC.II.C-SFA.5.28 ER90S-G	MIG-52CM	DAI.0.8 & 1.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	MIGW9	GMWAW WIRE ER90S-G	ASME SEC.II.C-SFA.5.28 ER90S-G	UNION I CROMO910	DAI.0.8,0.9,1.0 & 1.2MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	KOBE STEELS LIMITED	MIGWA	GMWA WIRE FOR T23.	GMWAW WIRE T23	TGS-2CW	DIA.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
20563	METRODE PRODUCTS LIMITED,	VENUS WELDS	MIGWA	GMWA WIRE FOR T23.	GMWAW WIRE T23	2CRWV	DAI.0.8,0.9,1.0 & 1.2MM	Channel Partner	PRESSURE PARTS
23730	NIPPON STEEL & SUMIKIN BUSSAN	NIPPON STEEL & SUMIKIN BUSSAN INDIA	MIGWA	GMWA WIRE FOR T23.	GMWAW WIRE T23	T-HCM25	DAI.0.8,1.0 & 1.2MM	Manufacturer	PRESSURE PARTS
10091	ESAB INDIA LTD	VOESTALPINE BOHLER WELDING	P91FL	WELDING FLUX-P91	ASME SFA 5.23	OK 10.93	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	P91FL	WELDING FLUX-P91	ASME SFA 5.23	PF-9089	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	P91FL	WELDING FLUX-P91	ASME SFA 5.23	LA 491	NOT APPLICABLE	Foreign Agent	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	P91FL	WELDING FLUX-P91	ASME SFA 5.23	OP 90	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	P91FL	WELDING FLUX-P91	ASME SFA 5.23	MARATHON 543	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	P92FL	SAW FLUX FOR SA333P92	SAW FLUX FOR SA333P92	MARATHON 543	NOT APPLICABLE	Manufacturer	PRESSURE PARTS

S. Nilmaideen

S. NILA MAIDEEN
 Deputy General Manager
 Welding Technology Centre
 BHEL, TRICHY - 620 014.

Aprade

Raja Pandian M P.
 Senior Manager,
 MM / Services,
 BHEL-HPBB, Trichy

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	SAWA1	SAW WIRE FOR SA335P92	SAW WIRE FOR SA335P92	9CRWV	DIA-3.2 MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	SAWA1	SAW WIRE FOR SA335P92	SAW WIRE FOR SA335P92	THERMANIT MTS 616	NOT APPLICABLE	Manufacturer	PRESSURE PARTS
13486	A V WELDECH PVT LTD,		STFL1	SAW FLUX STRUCT WELD	F48P2-EM12K	AV EZEWELD 18L	NOT APPLICABLE	Manufacturer	STRUCTURALS
13484	OSCAR AUTO FLUX,		STFL1	SAW FLUX STRUCT WELD	F48P2-EM12K	OSCAR AUTOFUX GR.II	NOT APPLICABLE	Manufacturer	STRUCTURALS
15059	THERMIT ALLOYS PRIVATE LTD,		STFL1	SAW FLUX STRUCT WELD	F7AZ-EL 8	CONWELD-AB	NOT APPLICABLE	Manufacturer	STRUCTURALS
10785	ADOR WELDING LIMITED		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	AUTOMELT GR.II	NOT APPLICABLE	Manufacturer	STRUCTURALS
14791	D&H INDIA LTD,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	ANAND MELT - 1	NOT APPLICABLE	Manufacturer	STRUCTURALS
13211	D&H INDIA LIMITED		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SUPERMELT II	NOT APPLICABLE	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	OK FLUX 10.81L	NOT APPLICABLE	Manufacturer	STRUCTURALS
11288	JAGSHAAN INDUSTRIES		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	JAG EZ WELD G 18L	NOT APPLICABLE	Manufacturer	STRUCTURALS
17813	K.M.CROWN WELDING CONSUMABLES PVT		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	CROWN FLUX II	NOT APPLICABLE	Manufacturer	STRUCTURALS
12184	LAKSHMI CHEMICAL INDUSTRIES		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	LAXMI FLUX	NOT APPLICABLE	Manufacturer	STRUCTURALS
17381	NOUVEFLUX CHEMICAL COMPANY		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	NOUVEFLUX	NOT APPLICABLE	Manufacturer	STRUCTURALS
13484	OSCAR AUTO FLUX,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	OSCAR AUTOWELD GR. I	NOT APPLICABLE	Manufacturer	STRUCTURALS
15101	PRECISION WELDARC LTD,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	PW18101	NOT APPLICABLE	Manufacturer	STRUCTURALS
14593	R.M.H.CHEMICAL INDUSTRIES		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	RMH AUTOWELD GR. I	NOT APPLICABLE	Manufacturer	STRUCTURALS
11528	RAURATNA ELECTRODES LTD		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	RAAJMELT-1	NOT APPLICABLE	Manufacturer	STRUCTURALS
19735	RENUKA FLUXES COMPANY,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	RENUKA	NOT APPLICABLE	Manufacturer	STRUCTURALS
15082	ROYAL WELDING WIRES PVT. LTD.,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	JACKSON SFA GRADE- 1	NOT APPLICABLE	Manufacturer	STRUCTURALS
13334	RUJA INDUSTRIES,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	RUPA MELT - 1	NOT APPLICABLE	Manufacturer	STRUCTURALS
14309	S-SCHEMS & ALLIED PRODUCERS PVT LIMI		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SURE FLUX GP	NOT APPLICABLE	Manufacturer	STRUCTURALS
19695	SUBMER FLUX TECHNOLOGIES,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SHINE FLUX	NOT APPLICABLE	Manufacturer	STRUCTURALS
14584	SUN ENTERPRISES		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SUN BRAND SUPER FLUX	NOT APPLICABLE	Manufacturer	STRUCTURALS
11701	SUPER WELD PRODUCTS		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SWP40T	NOT APPLICABLE	Manufacturer	STRUCTURALS
11712	TAPADIA ENGINEERS & TRADERS P.LTD.		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	TPD-50	NOT APPLICABLE	Manufacturer	STRUCTURALS
15099	THERMIT ALLOYS PRIVATE LTD,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	CONWELD - RM	NOT APPLICABLE	Manufacturer	STRUCTURALS
15085	VOLTARC ELECTRODES (P) LTD,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	SUBARC-1 (EL-8)	NOT APPLICABLE	Manufacturer	STRUCTURALS
19114	WELMET TECHNOLOGIES PVT. LTD.,		STFL	SAW FLUX STRUCT WELD	F7AZ-EL 8	WELMET FLUX 81-L	NOT APPLICABLE	Manufacturer	STRUCTURALS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	TIGW1	GTAW ROD - T92 / P92	GTAW ROD - T92/P92	9CRWV	DIA. 2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	TIGW1	GTAW ROD - T92 / P92	GTAW ROD - T92 / P92	THERMANIT 616	DIA. 1.6,2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	KOBE STEELS LIMITED	TIGS2	GTAW ROD ER309L	ASME SEC.II.C,SFA-5.9,ER309L	YT-309L	DIA. 1.6,2.0 & 2.4MM	Channel Partner	PRESSURE PARTS
23730	NIPPON STEEL & SUMIKIN BUSSAN	NIPPON STEEL & SUMIKIN BUSSAN INDIA	TIGS2	GTAW ROD ER309L	ASME SEC.II.C,SFA-5.9,ER309L	INERT ROD 309 L	DIA. 2.4MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	TIGFL 70S-A1	DIA. 2.40 MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	F CR MO	DIA. 1.6,2.0,2.4,2.5 & 3.2MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD,		TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	GETIG 70S-A1	DIA.2.40MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,		TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	HW 70SA1	SIZE DIA. 2.40 MM	Manufacturer	PRESSURE PARTS
11227	HONAVAR ELECTRODES PVT. LTD.,		TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	TG-570A1	DIA. 0.8,1.0,1.2,1.6,2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	MARUTHY TA1	DIA.2.4MM	Manufacturer	PRESSURE PARTS
15083	MARUTHI ELECTRODES (P) LTD.,		TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	CMO	DIA. 3.40 MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	TIGW1	ER 70S-A1 GTAW ROD	ER70S-A1	UNION I MO	DIA.1.6,2.0,2.4 & 3.0MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING		TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO	TIGFL 80S-82	DIA.2.40 MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO	F CR MO 1	DIA.1.6,2.0,2.4,2.5 & 3.2MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD,		TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO	OK TIGROD 13.16	DIA.2.40 MM	Manufacturer	PRESSURE PARTS
10081	ESAB INDIA LTD		TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO	GETIG 80S-82	SIZE DIA. 2.40 MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,		TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO	UNISCO 80S-82	DIA.2.40MM	Foreign Agent	PRESSURE PARTS
22456	I.A.BARNES & CO. LTD,	INVEK AGENCIES	TIGW2	ER 80S-B2 GTAW ROD	ER80SG 1.25CR 1/2MO				

S. NILA MAIDEEN
 Deputy General Manager
 Welding Technology Centre
 BHEL, TRICHY - 620 014.

Raja Pandian M P,
 Senior Manager,
 MM / Services,
 BHEL-HPBP, Trichy

Approved

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A	SATKUL ENTERPRISES LTD.	TIGW2	ER 805-82 GTAW ROD	ER805G 1.25CR 1/2MO	INETIG B2	DIA.2.0,2.4 & 2.5MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGW2	ER 805-82 GTAW ROD	ER805G 1.25CR 1/2MO	TG-S80B2	DIA.1.6,2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
15083	MARUTHI ELECTRODES (P) LTD.,	VENUS WELDS	TIGW2	ER 805-83 GTAW ROD	ER805G 1.25CR 1/2MO	MARUTHI TB2	DIA.2.4MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	TIGW3	ER 905-83 GTAW ROD	ER805G 1.25CR 1/2MO	METRODE ER805-82	DIA.1.6,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED	VENUS WELDS	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	TIGFIL 905 - B3	DIA: 2.40MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD.	NIVEK AGENCIES	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	FCRMO-2	DIA. 2.40MM	Foreign Agent	PRESSURE PARTS
22456	I.A. BARNES & CO. LTD.	VENUS WELDS	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	UNISCO 905-83	DIA.2.40MM	Manufacturer	PRESSURE PARTS
21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A	SATKUL ENTERPRISES LTD.	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	INETIG B3	DIA.2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	TG-S90B3	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
15083	MARUTHI ELECTRODES (P) LTD.,	VENUS WELDS	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	MARUTHI TB3	DIA.2.4MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VOESTALPINE BOHLER WELDING	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	METRODE ER905-83	DIA.1.6 & 2.4MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VENUS WELDS	TIGW3	ER 905-83 GTAW ROD	ER805G-2 1/4CR 1MO	UNION ER 90 5-B3	DIA.2.0,2.4 & 3.0MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,	VENUS WELDS	TIGW4	WELDG. WIRE-TIG ER347	ER347	GETIG 347	SIZE DIA.2.40MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGW4	WELDG. WIRE-TIG ER347	ER347	TG-S347	DIA.1.2,1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VENUS WELDS	TIGW4	WELDG. WIRE-TIG ER347	ER347	347596	DIA.1.0,1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VENUS WELDS	TIGW4	WELDG. WIRE-TIG ER347	ER347	THERMANIT H347	DIA.1.0,1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
14400	ADOR FONTECH LIMITED,		TIGW5	WELDG. WIRE-TIG ERNICK-3	ERNICK3	TIG-521	DIA.2.40MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGW5	WELDG. WIRE-TIG ERNICK-3	ERNICK3	TG-S70N3CB	DIA.0.8,0.9,1.0,1.2,1.6,2.0,2.4,3.2 & 4.0MM	Foreign Agent	PRESSURE PARTS
15083	MARUTHI ELECTRODES (P) LTD.,	VENUS WELDS	TIGW5	WELDG. WIRE-TIG ERNICK-3	ERNICK3	MARUTHY TNICK3	DIA.1.0 & 2.4MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VOESTALPINE BOHLER WELDING	TIGW5	WELDG. WIRE-TIG ERNICK-3	ERNICK3	20.70 NB	DIA: 2.40 MM	Manufacturer	PRESSURE PARTS
20563	KANEMATSU TRADING CORPORATION	VENUS WELDS	TIGW7	WELDG. WIRE - TIG ER905-B9	TIG ER905-B9	THERMANIT MICRO 82	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	VENUS WELDS	TIGW7	WELDG. WIRE - TIG ER905-B9	TIG ER905-B9	TGS-90 B9	DIA.1.6,2.0 & 2.4MM	Foreign Agent	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VOESTALPINE BOHLER WELDING	TIGW7	WELDG. WIRE - TIG ER905-B9	TIG ER905-B9	SCRMOV-N TIG	DIA.1.6,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	VOESTALPINE BOHLER WELDING	TIGW7	WELDG. WIRE - TIG ER905-B9	TIG ER905-B9	CARBOROD CRMO91	DIA.2.4MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	TIGW9	ER805 - D2 GTAW ROD	TIG ER805-D2	THERMANIT MTS 3	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED,	VOESTALPINE BOHLER WELDING	TIGW9	ER805 - D2 GTAW ROD	TIG ER805-D2	MNMO	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	TIGW9	ER805 - D2 GTAW ROD	TIG ER805-D2	UNION I MOMN	DIA.2.0,2.4 & 3.0MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	TIGWB	GTAW ROD SUPER 304 H	GTAW ROD SUPER 304 H	TG-SUPER304H	ONLY FOR DIA.2.40MM	Foreign Agent	PRESSURE PARTS
23730	NIPPON STEEL & SUMIKIN BUSSAN	NIPPON STEEL & SUMIKIN BUSSAN INDIA	TIGWB	GTAW ROD SUPER 304 H	GTAW ROD SUPER 304 H	YT-304H	(DIA.0.8MM STILL UNDER	Channel Partner	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	TIGWB	GTAW ROD SUPER 304 H	GTAW ROD SUPER 304 H	THERMANIT 304CU	DIA.0.8MM, 1.0MM & 2.40MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD.	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	MOLYTHERME	DIA.0.8 & 1.0 & 2.40 MM	Manufacturer	PRESSURE PARTS
11227	HONAVAR ELECTRODES PVT. LTD.,	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	ULTIMATE 18A1	DIA.2.50,3.15,4.00,5.00 & 6.30MM	Manufacturer	PRESSURE PARTS
11378	MALIAM INDIA LIMITED	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	MALARC-MO	DIA.2.5, 3.15, 4.0, 5.0 & 6.30MM	Manufacturer	PRESSURE PARTS
15090	FAJ KESARI ELECTRODES PVT LTD.	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	RAIWELD-18A1	DIA.2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	ROYAL THERM-MOLY	DIA.2.50,3.15,4.00 & 5.00 MM	Manufacturer	PRESSURE PARTS
18432	VUEY ELECTRODES AND WIRES PVT.	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	VJ-7018 A1	DIA.2.50,3.15,4.00 & 5.00 MM	Manufacturer	PRESSURE PARTS
17451	ADOR WELDING LIMITED	VOESTALPINE BOHLER WELDING	WCA08	SMAW Electrode E7018-A1	E7018-A1	WELDFAST CROMO 0500	DIA.2.5,3.15,4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS
10785	D&H SECHERON ELECTRODES PVT LTD.	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	CROMOTEN	DIA.2.5,3.15,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD.	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	CRMOTHERME-1	DIA.2.0,2.5,3.2,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	GRUDITAC	DIA.2.5,3.15, 4 & 5 MM	Manufacturer	PRESSURE PARTS
11378	HONAVAR ELECTRODES PVT. LTD.,	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	MALARC 1CR	DIA.2.5,3.2,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13906	MALIAM INDIA LIMITED	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	ULTRA-CR-1	DIA.2.5,3.15,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
18705	MODI HITECH INDIA LTD.,	VOESTALPINE BOHLER WELDING	WCA10	SMAW Electrode E8018-B2	E8018-B2	GM 80-B2	DIA.2.5,3.15, 4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS

S. NILA MAIDF
 Deputy General Manager
 Welding Technology
 BHEL, TRICHY - 620 014.

L. Pradeep

Raja Pandian M P
 Senior Manager,
 MM / Services,
 BHEL-HPBP, Trichy

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat. Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
15090	RAJ KESARI ELECTRODES PVT. LTD.		WCA10 SMAW Electrode E8018-B2	E8018-B2	RAIWELD-8018B2	DIA. 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCA10 SMAW Electrode E8018-B2	E8018-B2	ROYAL CHROME-1	DIA. 3.15, 4.0 & 5.0MM ONLY [2.5 MM UNDER DEVELOPMENT]	Manufacturer	PRESSURE PARTS
18432	VIJAY ELECTRODES AND WIRES PVT.		WCA10 SMAW Electrode E8018-B2	E8018-B2	VI-8018-B2	DIA. 2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS
17451	WELDFAST ELECTRODES PVT. LTD.		WCA10 SMAW Electrode E8018-B2	E8018-B2	WELDFAST CROMO 1500	DIA. 2.5MM, 3.15MM, 4.0MM & 5.0MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		WCA12 SMAW Electrode E9018-B3	E9018-B3	CROMOTEN - C	DIA. 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13211	D&H INDIA LIMITED		WCA12 SMAW Electrode E9018-B3	E9018-B3	SUPER - CR - 2	DIA. 2.5, 3.15, 4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCA12 SMAW Electrode E9018-B3	E9018-B3	CROMOTHERME-2	DIA. 2.0, 2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED.		WCA12 SMAW Electrode E9018-B3	E9018-B3	GRIDOUT - 4	DIA. 2.5, 3.15, 4 & 5 MM	Manufacturer	PRESSURE PARTS
11227	HONAVAR ELECTRODES PVT. LTD.,		WCA12 SMAW Electrode E9018-B3	E9018-B3	ULTIMATE 90B3	DIA. 2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
11378	MALAM INDIA LIMITED		WCA12 SMAW Electrode E9018-B3	E9018-B3	MAILARC 2CR	DIA. 2.5, 3.15, 4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS
13906	MARUTI WELD PRIVATE LIMITED,		WCA12 SMAW Electrode E9018-B3	E9018-B3	ULTRA - CR-2	DIA. 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
18705	MOOI HITECH INDIA LTD.,		WCA12 SMAW Electrode E9018-B3	E9018-B3	GM 90 B3	DIA. 2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCA12 SMAW Electrode E9018-B3	E9018-B3	ROYAL CHROME 2	DIA. 2.5, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS
18432	VIJAY ELECTRODES AND WIRES PVT.		WCA12 SMAW Electrode E9018-B3	E9018-B3	VI-9018-B3	DIA. 2.5, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS
17451	WELDFAST ELECTRODES PVT. LTD.		WCA12 SMAW Electrode E9018-B3	E9018-B3	WELDFAST CROMO 2251	DIA. 2.5MM, 3.15MM, 4.0MM & 5.0MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	CROMOTHERME-91	DIA. 2.5 MM, 3.2 MM & 4.00 MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	KOBE STEELS LIMITED	WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	CM-95891	DIA. 2.6, 3.2, 4.0 & 5.0MM	Foreign Agent	PRESSURE PARTS
11378	MALAM INDIA LIMITED		WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	MAILARC 9589	DIA. 2.50, 3.20, 4.0 MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED.	VENUS WELDS	WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	CHROMET 9MVM-H+	DIA. 2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	CROMO E91	DIA. 2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
20011	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCA23 SMAW Electrode E9015-B91	ASME SEC.II.C.SFA-5.5E9015-891	FOX CNMV	DIA. 2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED.	VENUS WELDS	WCA25 SMAW Electrode for T92/P92	SMAW Electrode for T92/P92	CHROMET 92	DIA. 2.5, 3.2 & 4.0MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCA25 SMAW Electrode for T92/P92	SMAW Electrode for T92/P92	THERMANIT MTS - 616	DIA. 2.5, 3.2 & 4.0MM	Manufacturer	PRESSURE PARTS
14534	AARIYA ELECTRODES.		WCC01 SMAW Electrode E6013	E6013	AARYA-13	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
19875	ACCURATE WELDARC PVT LTD		WCC01 SMAW Electrode E6013	E6013	SUNWELD	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
10758	ALPHA ARC PVT LTD		WCC01 SMAW Electrode E6013	E6013	ACCURATE ARC E6013	DIA. 2.50, 3.15, 4.00 & 5.0MM	Manufacturer	STRUCTURALS
14429	ALPHA FLUX & ELECTRODES.		WCC01 SMAW Electrode E6013	E6013	ALPHA 6013	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
17778	ANUVRAT INDUSTRIES		WCC01 SMAW Electrode E6013	E6013	WELDER - G	DIA. 2.5, 3.15, 4.0, & 5.0 MM	Manufacturer	STRUCTURALS
13549	ATHARVE WELDING TECHNOLOGIES (INDIA		WCC01 SMAW Electrode E6013	E6013	ANUBOND 6013	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
13986	B&H ELECTRODES PVT. LTD.		WCC01 SMAW Electrode E6013	E6013	SUNGOLD	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
19906	BAGHERWAL ELECTRODES PVT. LTD.,		WCC01 SMAW Electrode E6013	E6013	AWT E6013	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
14457	BALAJI ELECTRODES		WCC01 SMAW Electrode E6013	E6013	B&H ULTRA	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
14448	BRIGHT WELD TECHNOLOGIES		WCC01 SMAW Electrode E6013	E6013	MONARC-5	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
17814	CALCUTTA ELECTRODES PVT. LTD.,		WCC01 SMAW Electrode E6013	E6013	SONY ARC E6013	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
13783	CLASSIC ELECTRODES (INDIA) LTD.,		WCC01 SMAW Electrode E6013	E6013	A-ONE E6013	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
18846	COSMOS ELECTRODES PVT., LTD.,		WCC01 SMAW Electrode E6013	E6013	SHIVA-S	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
13311	D&H INDIA LIMITED		WCC01 SMAW Electrode E6013	E6013	CLASSIC 6013 PLUS.	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCC01 SMAW Electrode E6013	E6013	ATLAS-13	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		WCC01 SMAW Electrode E6013	E6013	STANDARD	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
10667	EUREKA SYSTEMS AND ELECTRODES P.LTD		WCC01 SMAW Electrode E6013	E6013	NORMA	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
11881	FUSION ENGG. PRODUCTS PRIVATE LTD.,		WCC01 SMAW Electrode E6013	E6013	ESAB FERROSPEED PLUS	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
13690	GEE LIMITED.		WCC01 SMAW Electrode E6013	E6013	NUMBER ONE	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
			WCC01 SMAW Electrode E6013	E6013	ELECTRA-6	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS
			WCC01 SMAW Electrode E6013	E6013	GEECON PINK	DIA. 2.50, 3.15, 4.00 & 5.00	Manufacturer	STRUCTURALS

Raja Pandian M P
 Senior Manager,
 MM / Services,
 BHEL-HPBP, Trichy

S. Nilmaideen
 S. NILA MAIDEEN
 Deputy General Manager
 Welding Technology Centre
 BHEL, TRICHY - 620 014.

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
100200	H.D. WIRES PVT. LTD.		WCC01	SMAW Electrode E6013	E6013	YAGYA 135	DIA 2.5, 3.2, 4.0 & 5.0 MM	Manufacturer	STRUCTURALS
11227	HONAVAR ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	REGULAR-S	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14449	IDEAL ELECTRODES		WCC01	SMAW Electrode E6013	E6013	IDEAL 40	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17913	K.M. CROWN WELDING CONSUMABLES PVT		WCC01	SMAW Electrode E6013	E6013	CROWN 135	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18540	KOLIPARA ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	KELARC 6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13487	MAGNARC ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	MAGNARC 63	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11378	MAILLAM INDIA LIMITED		WCC01	SMAW Electrode E6013	E6013	MAILLARC 13R	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11390	MALU ELECTRODES PVT. LIMITED		WCC01	SMAW Electrode E6013	E6013	MANGALAM E 6013	DIA 2.5, 3.15, 4.0 & 5.0 MM	Manufacturer	STRUCTURALS
19684	MANOHAR ELECTRODES PVT. LTD		WCC01	SMAW Electrode E6013	E6013	MANOHAR E-6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15083	MARUTHI ELECTRODES (P) LTD.,		WCC01	SMAW Electrode E6013	E6013	MARUTHI 44-	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13906	MARUTI WELD PRIVATE LIMITED,		WCC01	SMAW Electrode E6013	E6013	MEGA E6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19745	MEGA WELD TECHNOLOGIES,		WCC01	SMAW Electrode E6013	E6013	MICRO-6013	DIA 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	STRUCTURALS
16344	MICRO WELD (INDIA)		WCC01	SMAW Electrode E6013	E6013	MIGLANI ARK-X	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
16003	MIGLANI ENGINEERS		WCC01	SMAW Electrode E6013	E6013	GM 20	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18705	MODI HITECH INDIA LTD.,		WCC01	SMAW Electrode E6013	E6013	MEDAL ARC	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15088	NIVETHA ELECTRODES,		WCC01	SMAW Electrode E6013	E6013	ERNO WELD	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18433	NUCOR WELD(INDIA)PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	GALA WELD	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13729	ORANGE ELECTRODES INDUSTRIES,		WCC01	SMAW Electrode E6013	E6013	ANAND-13	SIZE DIA. 2.5,3.15,4.0 & 5.0MM	Manufacturer	STRUCTURALS
16168	P.R. Industries		WCC01	SMAW Electrode E6013	E6013	RATNA 6013X	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11528	RAAJRATNA ELECTRODES LTD		WCC01	SMAW Electrode E6013	E6013	RAICORD-135	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15090	RAJ KESARI ELECTRODES PVT. LTD.		WCC01	SMAW Electrode E6013	E6013	RASHI E6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13693	RASI ELECTRODES LTD.,		WCC01	SMAW Electrode E6013	E6013	ROYAL S	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13911	ROYAL ARC ELECTRODES LIMITED		WCC01	SMAW Electrode E6013	E6013	BALAJI	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15082	ROYAL WELDING WIRES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	KAYNOZ 75	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
12893	RUKHMANI ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	ESL ARC-62	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17820	SETH ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	VATSARC 19 PLUS,	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18597	S-HIELDARC EQUIPMENTS PVT. LTD.		WCC01	SMAW Electrode E6013	E6013	SUDO 6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15102	SOLARC WELD RODS,		WCC01	SMAW Electrode E6013	E6013	SUNSHINE E6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19111	SPECTRA SUPER ALLOYS LTD.		WCC01	SMAW Electrode E6013	E6013	BLAZE ARC	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15086	SRI BENGGA ELECTRODES (P) LTD,		WCC01	SMAW Electrode E6013	E6013	SUN GP 13	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17802	SRI VARSHA ELECTRODES,		WCC01	SMAW Electrode E6013	E6013	SUNDEEP 135	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14584	SUN ENTERPRISES		WCC01	SMAW Electrode E6013	E6013	OVERCORD S	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17643	SUNDEEP ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	BEST ARC MS11-	DIA 2.5, 3.15, 4.0 & 5.0 MM	Manufacturer	STRUCTURALS
18300	SUPERION SCHWEISSTECHNIK INDIA LTD.,		WCC01	SMAW Electrode E6013	E6013	VAISHALI ADVANI 6013	DIA 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	STRUCTURALS
15087	V.N.C. ELECTRODES,		WCC01	SMAW Electrode E6013	E6013	PRIMEARC-13	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19808	VAISHALI ELECTRODES		WCC01	SMAW Electrode E6013	E6013	SPEEDARC E-6013	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17518	VALENCY COMPOUNDS SERVICES PVT LTD		WCC01	SMAW Electrode E6013	E6013	WIA 6013-S	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17644	VARUN ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	WELDALL	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15085	VOLTARC ELECTRODES (P) LTD,		WCC01	SMAW Electrode E6013	E6013	NOVAX - 13	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14575	WELD ALLOY PRODUCTS,		WCC01	SMAW Electrode E6013	E6013	MAXIMA-6013X	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15929	WELDALL ELECTRODES (INDIA)		WCC01	SMAW Electrode E6013	E6013	WELDFAST SUPER	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15538	WELDCOM ELECTRODES PVT. LTD.,		WCC01	SMAW Electrode E6013	E6013	AARYA-18	DIA 2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS
15089	WELDCRAFT PRIVATE LIMITED,		WCC05	SMAW Electrode E7018	E7018	SUPABASE 7018	DIA 2.50,3.15,4.00 & 5.00MM	Manufacturer	PRESSURE PARTS
17451	WELDFAST ELECTRODES PVT. LTD.		WCC05	SMAW Electrode E7018	E7018	ANAND THERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
14534	AARYA ELECTRODES PVT. LTD.		WCC05	SMAW Electrode E7018	E7018				
10785	ADOR WELDING LIMITED		WCC05	SMAW Electrode E7018	E7018				
14791	ANAND ARC LTD.,		WCC05	SMAW Electrode E7018	E7018				

R.P.V.
Raja Pandian M P,
 Senior Manager,
 MIM / Services,
 BHEL-HPBP, Trichy

Apradev

S. Nilmaideen

S. NILA MAIDEEN
 Deputy General Manager
 Welding Technology Centre
 BHEL, TRICHY - 620 014.

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
13986	B&H ELECTRODES PVT. LTD.		WCC05	SMAW Electrode E7018	E7018	B&H-7018	DIA 2.50 & 3.15 MM	Manufacturer	PRESSURE PARTS
18846	COSMOS ELECTRODES PVT., LTD.		WCC05	SMAW Electrode E7018	E7018	SUPRA MAX-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
13211	D&H INDIA LIMITED		WCC05	SMAW Electrode E7018	E7018	SUPER LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCC05	SMAW Electrode E7018	E7018	SUPRATHERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED.		WCC05	SMAW Electrode E7018	E7018	GRICON GREEN	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
11227	HONAVAR ELECTRODES PVT. LTD.,		WCC05	SMAW Electrode E7018	E7018	ULTIMATE - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
18540	KOLIPAKA ELECTRODES PVT.LTD.,		WCC05	SMAW Electrode E7018	E7018	MAIL ARC 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
11378	MAILAM INDIA LIMITED		WCC05	SMAW Electrode E7018	E7018	MARUTHI 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15083	MARUTHI ELECTRODES (P) LTD.,		WCC05	SMAW Electrode E7018	E7018	ULTRA - 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
13906	MARUTI WELD PRIVATE LIMITED,		WCC05	SMAW Electrode E7018	E7018	GM 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
18705	MODI HITECH INDIA LTD.,		WCC05	SMAW Electrode E7018	E7018	ERNO WELD	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
18433	NUCOR WELD(INDIA)PVT.LTD.,		WCC05	SMAW Electrode E7018	E7018	SUPERLET - 18,	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15090	RAJ KESARI ELECTRODES PVT LTD.		WCC05	SMAW Electrode E7018	E7018	RASI 7018LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
13693	RASI ELECTRODES LTD.		WCC05	SMAW Electrode E7018	E7018	ROYAL THERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCC05	SMAW Electrode E7018	E7018	JACKSON 18H	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15082	ROYAL WELDING WIRES PVT. LTD.,		WCC05	SMAW Electrode E7018	E7018	SAITRON LH-7018	DIA 2.50,3.15,4.00 & 5.00MM	Manufacturer	PRESSURE PARTS
13542	SAITRON ENGINEERS PVT. LTD.		WCC05	SMAW Electrode E7018	E7018	SUNSHINE - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15086	SRI RENGIA ELECTRODES (P) LTD.		WCC05	SMAW Electrode E7018	E7018	SUNDEEP 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
17643	SUNDEEP ELECTRODES PVT. LTD.		WCC05	SMAW Electrode E7018	E7018	SUPERCTO OERLUCON E	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
18300	SUPERON SCHWEISSTECHNIK INDIA LTD.,		WCC05	SMAW Electrode E7018	E7018	SEVEN ARCS-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15833	THIRUMALA ELECTRODES CO.,		WCC05	SMAW Electrode E7018	E7018	PRIMA7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
17644	VARIUN ELECTRODES PVT. LTD.,		WCC05	SMAW Electrode E7018	E7018	VI-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
18432	VIEY ELECTRODES AND WIRES PVT.		WCC05	SMAW Electrode E7018	E7018	SPEEDARC E-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	PRESSURE PARTS
15085	VOLTARC ELECTRODES (P) LTD.		WCC05	SMAW Electrode E7018	E7018	EXCEL - 18---	DIA: 2.50, 3.15,4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS
16546	WELD EXCEL INDIA LTD.,		WCC05	SMAW Electrode E7018	E7018	WELDALLH 7018	DIA: 2.50, 3.15,4.0 & 5.0 MM	Manufacturer	PRESSURE PARTS
15929	WELDALL ELECTRODES (INDIA)		WCC05	SMAW Electrode E7018	E7018	WELDFAST LH 18	DIA 2.50,3.15,4.00 & 5.00 MM	Manufacturer	PRESSURE PARTS
17451	WELDFAST ELECTRODES PVT LTD,		WCC06	SMAW Electrode E7018-1	E7018-1	TENALLOY-2-PLUS	DIA 2.5MM,3.15MM & 4.0MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		WCC06	SMAW Electrode E7018-1	E7018-1	SUPER-LH(SPL)	DIA 2.50,3.15 & 4.00MM	Manufacturer	PRESSURE PARTS
13211	D&H INDIA LIMITED		WCC06	SMAW Electrode E7018-1	E7018-1	SUPERATHERME-(SPL)	DIA 2.50,3.15,4.00 & 5.00 & 6.30MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCC06	SMAW Electrode E7018-1	E7018-1	GRICON GREEN (SPL)	DIA 2.50,3.15,4.00,5.00 & 6.30 MM	Manufacturer	PRESSURE PARTS
13690	GEE LIMITED,		WCC06	SMAW Electrode E7018-1	E7018-1	ULTIMATE-18 (SPL)	DIA 2.50,3.15,4.00 & 5.00 & 6.30MM	Manufacturer	PRESSURE PARTS
11227	HONAVAR ELECTRODES PVT. LTD.,		WCC06	SMAW Electrode E7018-1	E7018-1	MAILARC-18PLUS	DIA 2.50,3.15 & 4.00 MM	Manufacturer	PRESSURE PARTS
11378	MALAM INDIA LIMITED		WCC06	SMAW Electrode E7018-1	E7018-1	ROYAL THERME SPL	DIA 2.5MM,3.15MM & 4.0MM	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCC06	SMAW Electrode E7018-1	E7018-1	VI 7018-1	DIA 2.50, 3.15, 4.00 & 5.00 MM	Manufacturer	PRESSURE PARTS
18432	VIEY ELECTRODES AND WIRES PVT.		WCC10	SMAW Electrode E7018-1	E7018-1	SUPABASE 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
10785	ADOR WELDING LIMITED		WCC10	SMAW Electrode E7018	E7018	ALPHA 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
10738	ALPHA ARC PVT LTD		WCC10	SMAW Electrode E7018	E7018	SUPER WELD 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14429	ALPHA FLUX & ELECTRODES,		WCC10	SMAW Electrode E7018	E7018	ANAND THERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14791	ANAND ARC LTD.		WCC10	SMAW Electrode E7018	E7018	MONOTHERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19906	BAGHERWAL ELECTRODES PVT.LTD,		WCC10	SMAW Electrode E7018	E7018	SHVATHATHEME-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17814	CALCUTTA ELECTRODES PVT. LTD.,		WCC10	SMAW Electrode E7018	E7018	CLASSIC LH 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13763	CLASSIC ELECTRODES (INDIA) LTD.,		WCC10	SMAW Electrode E7018	E7018	SUPRA MAX-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18846	COSMOS ELECTRODES PVT., LTD,		WCC10	SMAW Electrode E7018	E7018	SUPER LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13211	D&H INDIA LIMITED		WCC10	SMAW Electrode E7018	E7018			Manufacturer	STRUCTURALS

S. Nilmaideen

S. NILA MAIDEEN
Deputy General Manager
Welding Technology Centre
BHEL, TRICHY - 620 014.

Approved

Raja Pandian M P
Raja Pandian M P,
Senior Manager,
MM / Services,
BHEL-HPBP, Trichy

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group	Material Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
10774	D8H SECHERON ELECTRODES PVT LTD.		WCC10	SMAW Electrode E7018	E7018	SUPRATHERME	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		WCC10	SMAW Electrode E7018	E7018	ESAB-36H	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
10667	EUREKA SYSTEMS AND ELECTRODES P.LTD		WCC10	SMAW Electrode E7018	E7018	EUTHERME LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11881	FUSION ENGG. PRODUCTS PRIVATE LTD.,		WCC10	SMAW Electrode E7018	E7018	BASICOTE 6	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13690	GEE LIMITED,		WCC10	SMAW Electrode E7018	E7018	GRICON GREEN	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11227	HONAVAR ELECTRODES PVT. LTD.,		WCC10	SMAW Electrode E7018	E7018	ULTIMATE - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17813	K.M.CROWN WELDING CONSUMABLES PVT		WCC10	SMAW Electrode E7018	E7018	CROWN-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18540	KOLLIPARA ELECTRODES PVT.LTD.,		WCC10	SMAW Electrode E7018	E7018	RELARC-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15091	MAGNA ENGINEERING		WCC10	SMAW Electrode E7018	E7018	MAGNARAC-LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13487	MAGNARAC ELECTRODES PVT.LTD.,		WCC10	SMAW Electrode E7018	E7018	MAGNARAC LH	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11378	MAILAM INDIA LIMITED		WCC10	SMAW Electrode E7018	E7018	MAIL ARC 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11380	MALU ELECTRODES PVT LIMITED		WCC10	SMAW Electrode E7018	E7018	MANGALAM E 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15083	MARUTHI ELECTRODES (P) LTD.,		WCC10	SMAW Electrode E7018	E7018	MARUTHI 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13906	MARUTI WELD PRIVATE LIMITED,		WCC10	SMAW Electrode E7018	E7018	ULTRA - 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18705	MODIHITECH INDIA LTD.,		WCC10	SMAW Electrode E7018	E7018	GM 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19305	MURLI ELECTRODE PVT. LTD,		WCC10	SMAW Electrode E7018	E7018	SUPERIAL LH E7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18433	N.JCOR WELD(INDIA)PVT.LTD.,		WCC10	SMAW Electrode E7018	E7018	EKNOWELD	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
11528	RAAJRATNA ELECTRODES LTD		WCC10	SMAW Electrode E7018	E7018	RATNA 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15090	RAJ KESARI ELECTRODES PVT LTD.		WCC10	SMAW Electrode E7018	E7018	SUPERLET - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13693	RASI ELECTRODES LTD.,		WCC10	SMAW Electrode E7018	E7018	ROYAL THERM	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13911	ROYAL ARC ELECTRODES LIMITED		WCC10	SMAW Electrode E7018	E7018	JACKSON 18H	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15082	ROYAL WELDING WIRES PVT. LTD.,		WCC10	SMAW Electrode E7018	E7018	REFL 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
12893	RUKHMANI ELECTRODES PVT.LTD.,		WCC10	SMAW Electrode E7018	E7018	SATRON LH-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13542	SATRON ENGINEERS PVT. LTD,		WCC10	SMAW Electrode E7018	E7018	SUPRADYNE	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15102	SOLARC WELD RODS,		WCC10	SMAW Electrode E7018	E7018	SUDO 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
19111	SPECTRA SUPER ALLOYS LTD.		WCC10	SMAW Electrode E7018	E7018	SUNSHINE - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15086	SRI RENGAL ELECTRODES (P) LTD.,		WCC10	SMAW Electrode E7018	E7018	SUNDEEP 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17643	SUNDEEP ELECTRODES PVT. LTD.,		WCC10	SMAW Electrode E7018	E7018	SUPERGITO OERLICON E	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18300	SUPERON SCHWEISSTECHNIK INDIA LTD.,		WCC10	SMAW Electrode E7018	E7018	ISWP SPARK 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
13388	THE INDIAN SEEL & WIRE PRODUCTS LTD		WCC10	SMAW Electrode E7018	E7018	SEVEN ARCS-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15833	THIRUMALA ELECTRODES CO.,		WCC10	SMAW Electrode E7018	E7018	BESTARC-LH-18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15087	V.N.C.ELECTRODES,		WCC10	SMAW Electrode E7018	E7018	PRIMA 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
17644	VARUN ELECTRODES PVT. LTD.,		WCC10	SMAW Electrode E7018	E7018	VJAY-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
18432	VJIEY ELECTRODES AND WIRES PVT.		WCC10	SMAW Electrode E7018	E7018	WA 7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15085	VOLTARC ELECTRODES (P) LTD.		WCC10	SMAW Electrode E7018	E7018	EXCEL - 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
14575	WELD EXCEL INDIA LTD.,		WCC10	SMAW Electrode E7018	E7018	MAXIDURE-7018	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
16548	WELD EXCEL INDIA LTD.,		WCC10	SMAW Electrode E7018	E7018	WELDFAST LH 18	DIA 2.50,3.15,4.00 & 5.00	Manufacturer	STRUCTURALS
15089	WELDCRAFT PRIVATE LIMITED,		WCC10	SMAW Electrode E7018	E7018	GFC-71	DIA 1.2 MM & 1.6 MM	Manufacturer	STRUCTURALS
17451	WELDFAST ELECTRODES PVT LTD,		WCF01	Flux Cored Welding Wire -CS	E71T-1	DW-100	DIA 1.2, 1.4 & 1.6MM	Foreign Agent	PRESSURE PARTS
13690	GEE LIMITED,	SAICHEM COATINGS PVT.LTD.	WCF01	Flux Cored Welding Wire -CS	E71T-1	MGA-12	DIA 1.2 MM (DEVT IN DIA 1.6 MM)	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION		WCF01	Flux Cored Welding Wire -CS	E71T-1	ROYAL FIL GS12R	DIA 1.2 MM	Manufacturer	PRESSURE PARTS
11378	MAILAM INDIA LIMITED		WCF01	Flux Cored Welding Wire -CS	E71T-1	CSF-71T	DIA 1.20MM	Indian Agent	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCF01	Flux Cored Welding Wire -CS	E71T-1	LW-71	DIA 1.2 & 1.6MM	Manufacturer	PRESSURE PARTS
91820	SATKUL ENTERPRISES LTD.	CHOSUN WELDING CO. LTD.,	WCF01	Flux Cored Welding Wire -CS	E71T-1	TWE-711	DIA 1.2 & 1.6 MM	Manufacturer	PRESSURE PARTS
20970	THE SHANGHAI LINCOLN ELECTRIC	ITW INDIA LIMITED- WELDING GROUP,	WCF01	Flux Cored Welding Wire -CS	E71T-1	K-71T	DIA 1.2 & 1.6MM	Indian Agent	PRESSURE PARTS
21180	TIEN TAI ELECTRODE CO., LTD.	KISWEL LTD.,	WCF01	Flux Cored Welding Wire -CS	E71T-1				
91270	VEEPEES INDIA,		WCF01	Flux Cored Welding Wire -CS	E71T-1				

S. Nilmaideen

S. NILA MAIDEEN
Deputy General Manager
Welding Technology Centre
BHEL, TRICHY - 620 014.

Preeda

Raja Pandian M P,
Senior Manager,
MM / Services,
BHEL-HPBP, Trichy

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Description	Material Group	Specification	Brand	Size Detail	Vendor Type	Welding
91875	Arya Engineering	SOREX WELDING CO LTD	WCF02 Flux Cored Welding Wire -SS	E309T0-1	SFC09L	DIA. 1.20 MM	Indian Agent	PRESSURE PARTS	
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCF02 Flux Cored Welding Wire -SS	E309T0-1	DW-309	DIA.1.2 & 1.6MM	Foreign Agent	PRESSURE PARTS	
91820	SATKUL ENTERPRISES LTD.	CHOSHUN WELDING CO. LTD.	WCF04 Flux Cored Welding Wire -LAS	E551T1-B2C	CF-309H	SIZE DIA.1.20MM	Indian Agent	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCF04 Flux Cored Welding Wire -LAS	E551T1-B2C	DUALSHIELD 8000-B2	DIA.1.2 & 1.6MM	Manufacturer	PRESSURE PARTS	
21065	HUNDAI WELDING CO. LTD.	SAICHEM COATINGS PVT.LTD.	WCF04 Flux Cored Welding Wire -LAS	E551T1-B2C	SC-81B2	DIA.1.2, 1.4 & 1.6MM	Foreign Agent	PRESSURE PARTS	
20047	KANEMATSU TRADING CORPORATION	VENUS WELDS	WCF04 Flux Cored Welding Wire -LAS	E551T1-B2C	DW-81B2	SIZE DIA.1.20MM	Manufacturer	PRESSURE PARTS	
21411	METRODE PRODUCTS LIMITED,	KISWEL LTD.,	WCF04 Flux Cored Welding Wire -LAS	E551T1-B2C	CORMET 1	DIA.1.2 & 1.6MM	Indian Agent	PRESSURE PARTS	
91270	VEEPES INDIA,	CHOSHUN WELDING CO. LTD.	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	CF-91B3	DIA.1.20MM & 1.60MM	Indian Agent	PRESSURE PARTS	
91820	SATKUL ENTERPRISES LTD.	CHOSHUN WELDING CO. LTD.	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	TWE-91TB3	DIA.1.20MM & 1.60MM	Manufacturer	PRESSURE PARTS	
21180	TIEN TAI ELECTRODE CO., LTD.	ITW INDIA LIMITED; WELDING GROUP.	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	DW-81B2	DIA.1.6 MM	Foreign Agent	PRESSURE PARTS	
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	TWE-91TB3	DIA.1.6 MM	Manufacturer	PRESSURE PARTS	
21180	TIEN TAI ELECTRODE CO., LTD.	ITW INDIA LIMITED; WELDING GROUP.	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	TWE-91TB3	DIA.1.6 MM	Manufacturer	PRESSURE PARTS	
91270	VEEPES INDIA,	KISWEL LTD.,	WCF05 Flux Cored Welding Wire -AS	E91T1-B3	K81TB2	SIZE: DIA.3.2MM	Manufacturer	PRESSURE PARTS	
13690	GEE LIMITED,		WCH05 SMAW Electrode ECoCr-E	ECoCr-E	GEMET ST-21	DIA: 3.20 & 4.0 MM	Manufacturer	PRESSURE PARTS	
20018	KENNAMETAL STELLITE		WCH05 SMAW Electrode ECoCr-E	ECoCr-E	ECOORE	DIA 3.2 MM ONLY (DEVT IN 2.5 & 4.0 MM)	Manufacturer	PRESSURE PARTS	
11378	MALIAM INDIA LIMITED		WCH05 SMAW Electrode ECoCr-E	ECoCr-E	ME-71	DIA.2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
20073	WEARTECH INTL INC		WCH05 SMAW Electrode ECoCr-E	ECoCr-E	WT-21	DIA.2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
91875	Arya Engineering	SOREX WELDING CO LTD	WGL07 SMAW Electrode ENICrFe-3	ENICrFe-3	SNF-3	DIA 2.5 MM	Indian Agent	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WGL07 SMAW Electrode ENICrFe-3	ENICrFe-3	D&H 1212 NS	DIA.2.5, 3.2, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
13690	GEE LIMITED,		WGL07 SMAW Electrode ENICrFe-3	ENICrFe-3	GEMET 821N	DIA. 2.50, 3.15 & 4.00MM	Manufacturer	PRESSURE PARTS	
20563	VOESTALPINE BOHLER WELDING		WGL07 SMAW Electrode ENICrFe-3	ENICrFe-3	CRYOMATE-3NS	DIA. 2.50, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS	
21991	HONAVAR ELECTRODES PVT. LTD.,	VOESTALPINE BOHLER WELDING	WGL07 SMAW Electrode ENICrFe-3	ENICrFe-3	TRYSMANIT NICO 182	DIA. 2.5, 3.2 & 4.0 MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WGL08 SMAW Electrode ENICrFe-7	ENICrFe-7	INCONEL 152M	DIA.2.0, 2.5, 3.15, 4.0 & 4.8	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS20 SMAW Electrode E308-16	E308-16	RUTOX-A	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
11378	MALIAM INDIA LIMITED		WCS20 SMAW Electrode E308-16	E308-16	OK 61.50	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS20 SMAW Electrode E308-16	E308-16	MAILEX-A	DIA.2.5, 3.15, 4.0 & 5.0	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS21 SMAW Electrode E308L-16	E308L-16	RUTOX-8	DIA.2.50, 3.15 AND 4.0MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS21 SMAW Electrode E308L-16	E308L-16	OK 61.30	DIA.2.50, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS21 SMAW Electrode E308L-16	E308L-16	OK 61.30	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS22 SMAW Electrode E309-16	E309-16	OK 67.67	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
11227	HONAVAR ELECTRODES PVT. LTD.,		WCS22 SMAW Electrode E309-16	E309-16	SILVERSHINE - 309.	DIA.2.5, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS	
11378	MALIAM INDIA LIMITED		WCS22 SMAW Electrode E309-16	E309-16	MAILEX-25/12	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
13911	ROYAL ARC ELECTRODES LIMITED		WCS22 SMAW Electrode E309-16	E309-16	ROYAL-D2	DIA.2.5, 3.15, 4.0 & 5.0 MM.	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS22 SMAW Electrode E309-16	E309-16	D&H 310-16	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS27 SMAW Electrode E310-16	E310-16	OK 67.13	DIA.2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS	
11378	MALIAM INDIA LIMITED		WCS27 SMAW Electrode E310-16	E310-16	MAILEX-25/20	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS27 SMAW Electrode E310-16	E310-16	RUTOX-MO	DIA.2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS28 SMAW Electrode E316-16	E316-16	OK 63_50	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS28 SMAW Electrode E316-16	E316-16	ROYAL - 2A	DIA.2.5, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS	
13911	ROYAL ARC ELECTRODES LIMITED		WCS28 SMAW Electrode E316-16	E316-16	RUTOX-D	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS29 SMAW Electrode E316L-16	E316L-16	OK 63_30	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS29 SMAW Electrode E316L-16	E316L-16	GRINOX-16L	2.5, 3.15 & 4.0 MM	Manufacturer	PRESSURE PARTS	
13690	GEE LIMITED,		WCS29 SMAW Electrode E316L-16	E316L-16	MAILEX-MOL	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
11378	MALIAM INDIA LIMITED		WCS30 SMAW Electrode E347-16	E347-16	RUTOX-A (S1)	DIA.2.0, 2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10774	D&H SECHERON ELECTRODES PVT LTD.		WCS30 SMAW Electrode E347-16	E347-16	OK 61.80	DIA.2.5, 3.15, 4.0 & 5.0MM	Manufacturer	PRESSURE PARTS	
10081	ESAB INDIA LTD		WCS30 SMAW Electrode E347-16	E347-16	GRINOX 47	DIA.2.50, 3.15 & 4.0MM	Manufacturer	PRESSURE PARTS	
13690	GEE LIMITED,		WCS30 SMAW Electrode E347-16	E347-16			Manufacturer	PRESSURE PARTS	

Raja Pandian M P,
Senior Manager,
MM / Services,
BHEL-HPBP, Trichy

S. NILA MAIDEN
Deputy General Manager
Welding Technology Centre
BHEL, TRICHY - 620 014.

Approved

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
11227	HONAVAR ELECTRODES PVT. LTD.,		WC30 SMAW Electrode E347-16	E347-16	SILVERSHINE - 347-16	DIA.2.5,3.15,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
11378	MALAM INDIA LIMITED		WC30 SMAW Electrode E347-16	E347-16	MALEX-ANB	DIA.2.5,3.15,4.0 & 5.0MM	Manufacturer	PRESSURE PARTS
13906	MARUTI WELD PRIVATE LIMITED,		WC30 SMAW Electrode E347-16	E347-16	SUPERALLOY 1A(S)	DIA.2.5,3.15 & 4.0MM	Manufacturer	PRESSURE PARTS
18705	MDDI HITECH INDIA LTD.,		WC30 SMAW Electrode E347-16	E347-16	GM 347	DIA.2.5,3.15 & 4.0MM	Manufacturer	PRESSURE PARTS
13911	ROYAL ARC ELECTRODES LIMITED		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	ROYAL-1B	DIA. 4.0 MM	Manufacturer	STRUCTURALS
13486	A.V WELDTCH PVT.LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	AV 1	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
10785	ADOR WELDING LIMITED		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	AUTOMELT GR.A	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
14791	ANAND ARC LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	ANAND SAW - 1	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
13211	D&H INDIA LIMITED		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	SUPERMELT GR-A	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
10774	D&H SECHERON ELECTRODES PVT. LTD.		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	AUTOTHERMIE GRADE A	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	OK AUTROD 12.0BL	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
16166	EVERSHINE WIRES		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	SHINE ARC	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
11288	JAGSHAAN INDUSTRIES		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	JAG 1 A	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
17813	K.M.CROWN WELDING CONSUMABLES PVT		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	CROWN EL 8	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
11378	MALAM INDIA LIMITED		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	MALAM SAW 8	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
14340	NALLI ARC INDUSTRIE,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	NALLI SA -1	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
15810	NOUVEAUX INDUSTRIES (P) LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	NOUVA	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
15101	PRECISION WELDAC LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	METASPOOLS/DIA4.00MM	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
11528	RAJURATNA ELECTRODES LTD		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	RAJURATNA	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
13693	RASI ELECTRODES LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	RASI EL 8	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
13534	RUPA INDUSTRIES,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	RUPA SAW-1	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
14584	SUN ENTERPRISES		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	SUN WIRES	DIA.2.50MM TO 5.0MM	Manufacturer	STRUCTURALS
16314	SUN WIRES		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	SUN FINE SAW WIRE	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
19905	T.M.INDUSTRIES,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	BRAND-TM-1(S)	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
15085	VOLTARC ELECTRODES (P) LTD,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	SAW WIRE EL - B	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
19114	WELMET TECHNOLOGIES PVT. LTD.,		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	WELMET WIRE ELB	DIA.2.0 TO 5.0MM	Manufacturer	STRUCTURALS
14455	WIRE AND WIRE PRODUCTS		WCW01 EL-8 SAW WIRE	AWS A5.17 EL-8	ESARC	DIA.2.4,3.2 & 4.0MM	Manufacturer	STRUCTURALS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW02 SAW Welding Wire EB3	EB3	US-521	DIA 3.2,4.0 & 4.8 MM	Foreign Agent	PRESSURE PARTS
91270	VEEPEES INDIA,	KISWEL LTD.,	WCW02 SAW Welding Wire EB3	EB3	EF-200HX KD-B3	DIA.4.0MM	Indian Agent	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCW02 SAW Welding Wire EB3	EB3	UNION S1 CR MO 2	DIA.3.2,4.0 & 4.8MM	Foreign Agent	PRESSURE PARTS
22456	LA BARNES & CO. LTD,	NIVEK AGENCIES	WCW06 SAW Welding Wire EB2	EB2	UNISCO EB2	DIA. 4.0MM	Manufacturer	PRESSURE PARTS
21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A	SATKUL ENTERPRISES LTD,	WCW06 SAW Welding Wire EB2	EB2	INESUB EB2	DIA.2.0MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW06 SAW Welding Wire EB2	EB2	US-511	DIA 2.0,3.2,4.0 & 4.8 MM	Foreign Agent	PRESSURE PARTS
20516	LINCOLN ELECTRIC FRANCE S.A.	VENUS WELDS	WCW06 SAW Welding Wire EB2	EB2	LNS 150	DIA.2.0MM AND 4.0MM	Foreign Agent	PRESSURE PARTS
91270	VEEPEES INDIA,	KISWEL LTD.,	WCW06 SAW Welding Wire EB2	EB2	UNION S2 CR MO	DIA.3.2,4.0 & 4.8MM	Foreign Agent	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCW08 SAW Welding Wire EA4	EA4	UNION S3 MO	DIA.2.0,2.4,3.2,4.0 & 4.8MM	Foreign Agent	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW09 SAW Welding Wire EA4	EA4	UNION S3 MO	DIA.2.0,2.4,3.2,4.0 & 4.8MM	Foreign Agent	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCW09 SAW Welding Wire EM12K	EM12K	AUTOMELT EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
10785	ADOR WELDING LIMITED		WCW09 SAW Welding Wire EM12K	EM12K	AUTOTHERMIE GRADE B	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
10774	D&H SECHERON ELECTRODES PVT LTD.		WCW09 SAW Welding Wire EM12K	EM12K	OK AUTROD 12.2ZL	DIA.1.6,2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
10081	ESAB INDIA LTD	SAICHEM COATINGS PVT.LTD.	WCW09 SAW Welding Wire EM12K	EM12K	US-29	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW09 SAW Welding Wire EM12K	EM12K	UNION S21	DIA.1.6,2.0,2.4 & 3.2MM	Foreign Agent	PRESSURE PARTS
11378	MALAM INDIA LIMITED		WCW09 SAW Welding Wire EM12K	EM12K	NOUVAARC S2	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
15810	NOUVEAUX INDUSTRIES (P) LTD.,		WCW09 SAW Welding Wire EM12K	EM12K	UNION 5251	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCW09 SAW Welding Wire EM12K	EM12K	ESARK EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
14455	WIRE AND WIRE PRODUCTS		WCW09 SAW Welding Wire EM12K	EM12K	OK 13.35	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
10081	ESAB INDIA LTD		WCW12 SAW Welding Wire EB-9	SFA 5.23 EB9		DIA.2.5 & 3.2MM	Manufacturer	PRESSURE PARTS

Attamondan

S. NILA MAIDEEN
Deputy General Manager
Welding Technology Centre
BHEL, TRICHY - 620 014.

Spreads

Papa Pandian M P,
Senior Manager,
MM / Services,
BHEL-HPBP, Trichy.

LIST OF APPROVED WELDING CONSUMABLES AS ON 31.01.2019

Vendor No	Vendor Name	PARTNER NAME	Mat Group Description	Specification	Brand	Size Detail	Vendor Type	Welding
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW12 SAW Welding Wire EB-9	SFA 5.23 EB9	US-9089	DIA.1.6,2.4 & 3.2 & 4.0MM	Foreign Agent	PRESSURE PARTS
21411	METRODE PRODUCTS LIMITED.	VENUS WELDS	WCW12 SAW Welding Wire EB-9	SFA 5.23 EB9	9CRM0V-N	DIA.2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
22391	THE LINCOLN ELECTRIC COMPANY FRANCE	MERIDIAN EXPORTS	WCW12 SAW Welding Wire EB-9	SFA 5.23 EB9	OE-S1CRM091	DIA.2.4 & 3.2MM	Manufacturer	PRESSURE PARTS
20563	VOESTALPINE BOHLER WELDING	VOESTALPINE BOHLER WELDING	WCW15 SAW WeldWire EM12K	SFA 5.23 EB9	THERMANT MTS-3	DIA. 1.6, 2.5 & 3.2 MM	Manufacturer	PRESSURE PARTS
13486	A.V WELDTCH PVT.LTD.,		WCW15 SAW WeldWire EM12K	EM12K	AV 2	DIA/4 MM ONLY	Manufacturer	STRUCTURALS
10785	AJOR WELDING LIMITED		WCW15 SAW WeldWire EM12K	EM12K	AUTOMELT EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
10774	D&H SECHERON ELECTRODES PVT.LTD.		WCW15 SAW WeldWire EM12K	EM12K	AUTOTHERME GRADE B	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
10081	ESAB INDIA LTD		WCW15 SAW WeldWire EM12K	EM12K	OK AUTROD 12.22L	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
16166	EVERSHINE WIRES		WCW15 SAW WeldWire EM12K	EM12K	SHINE ARC-12K	DIA.2.0, 2.4, 3.2 & 4.0 MM	Manufacturer	STRUCTURALS
11288	JAGSHAAN INDUSTRIES		WCW15 SAW WeldWire EM12K	EM12K	JAG3	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
17813	K.M.CROWN WELDING CONSUMABLES PVT		WCW15 SAW WeldWire EM12K	EM12K	CROWN EM12K	DIA.2.0,3.20 & 4.0MM	Manufacturer	STRUCTURALS
20047	KANEMATSU TRADING CORPORATION	SAICHEM COATINGS PVT.LTD.	WCW15 SAW WeldWire EM12K	EM12K	US-29	DIA.1.6,2.0,2.4 & 3.2MM	Foreign Agent	STRUCTURALS
11378	MAILAM INDIA LIMITED		WCW15 SAW WeldWire EM12K	EM12K	MAILAM SAW12	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
14340	NALLI ARC INDUSTRIE,		WCW15 SAW WeldWire EM12K	EM12K	NALLI EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
15810	NOUVEAUX INDUSTRIES (P) LTD.,		WCW15 SAW WeldWire EM12K	EM12K	NOUVAARC S2	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
15101	PRECISION WELDARC LTD.		WCW15 SAW WeldWire EM12K	EM12K	PEL SAW3.	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
20563	VOESTALPINE BOHLER WELDING		WCW15 SAW WeldWire EM12K	EM12K	UNION S2S1	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
19114	WELMET TECHNOLOGIES PVT. LTD.,	VOESTALPINE BOHLER WELDING	WCW15 SAW WeldWire EM12K	EM12K	WELMET WIRE EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS
14455	WIRE AND WIRE PRODUCTS		WCW15 SAW WeldWire EM12K	EM12K	ESARK EM12K	DIA.1.6,2.0,2.4 & 3.2MM	Manufacturer	STRUCTURALS

[Handwritten Signature]

Raja Pandian M P,
Senior Manager,
MM / Services,
BHEL-HPBP, Trichy

[Handwritten Signature]

S. NILA MAIDEEN
Deputy General Manager
Welding Technology Centre
BHEL, TRICHY - 620 014.

[Handwritten Signature]

PAINTING SCHEDULE

SI No	SURFACE LOCATION	PGMA	SURFACE PREP.	PRIMER		FINISH		TOTAL DFT IN (µm min.)
				DFT (µm min.)	PAINT	DFT (µm min.)		
52	Lime stone slurry storage tank, Auxiliary absorber tank, Filtrate tank, Wastage water tank, Lime Tank, Hydro cyclone waste water tank, Process Water tank, Outside surfaces	FW 742	Blast cleaning to Sa 2½ (Near white metal) with surface profile 35-50µm	Primer Coat: One coat of epoxy based Zinc phosphate primer to IS 13238; DFT- 100µm Intermediate Coat: One coat of Epoxy based MIO pigmented intermediate coat; DFT- 100µm	100	Finish coat: One coat of Epoxy based finish coat to IS 14209; DFT- 75µm + One coat of Aliphatic acrylic polyurethane paint to IS 13213; Shade no: 631 of IS 5	75	300
		FW 743 FW 744 FW 745 FW 746 FW 747 FW 748						
53	Lime stone slurry storage tank, Auxiliary absorber tank, Filtrate tank, Wastage water tank, Lime Tank, Hydro cyclone waste water tank, Process Water tank, Inside surfaces	FW 742	Blast cleaning to Sa 2½ (Near white metal) with surface profile 35-50µm	Primer: One coat of Red Oxide Zinc phosphate primer to IS 12744; DFT- 30µm as liner is envisaged in the inside surfaces of tanks	30	--	--	30
		FW 743 FW 744 FW 745 FW 746 FW 747 FW 748						
54	Process water pipe& accessories Cooling water pipe& accessories Slurry pipe& accessories Service Air pipe& accessories Instrument air pipe& accessories For Inside surfaces, one coat of Red Oxide Zinc phosphate primer, DFT- 30µ will be applied as liner is given in the inside surfaces.	FW 751	Blast cleaning to Sa 2½ (Near white metal) with surface profile 35-50µm	Primer Coat: One coat of epoxy based Zinc phosphate primer to IS 13238; DFT- 100µm Intermediate Coat: One coat of Epoxy based MIO pigmented intermediate coat; DFT- 100µm	100	Finish coat: One coat of Epoxy based finish coat to IS 14209; DFT- 75µm + One coat of Aliphatic acrylic polyurethane paint to IS 13213, DFT- 25µm; (Shade: Sky blue (Shade no: 101 for FW 751) Shade: Smoke grey for FW 752, FW 753 (shade no:692 of IS: 5) Shade: Light blue (RAL 5012) for FW 754 Shade: Dark blue (RAL 5003) for FW 755)	75+ 25	300
		FW 752 FW 753 FW 754 FW 755						
55	Valves and fittings (Temp <95 deg C)	FW 758	Power Tool Cleaning to St3 (SSPC-SP3)	Red Oxide Zinc Phosphate Primer to IS: 12744 (Two coat) DFT- 30µm/coat	60	Two coats of Synthetic Enamel to IS 2932 DFT- 20µm/coat Shade: Smoke Grey Shade no. 692 of IS:5	40	100

f. K. S. K.

PROCEDURE FOR GROUTING



**BHARAT HEAVY ELECTRICALS LTD.
POWER SECTOR- SOUTHERN REGION
CHENNAI**

Lprade

IMPORTANT

- **THIS PROCEDURE PROVIDES BROAD BASED GUIDELINES FOR GROUTING WORK AT SITES.**

- **HOWEVER , SITES MUST ENSURE ADHERANCE TO THE PRIMARY DOCUMENTS LIKE CONTRACT DRAWINGS / PLANTS CORPORATE STANDARDS, WHEREVER SUPPLIED, TECHNICAL DIRECTIVES FROM TS / HQ CONTRACTUAL OBLIGATIONS, IF ANY AND SPECIAL INSTRUCTIONS ISSUED BY MANUFACTURING UNITS SPECIFIC TO THE PROJECT**

- **PL REFER, PS TS: TECHNICAL CIRCULARS REGARDING TG AREA GROUTING DETAILS.**

Lprade

PROCEDURE FOR GROUTING

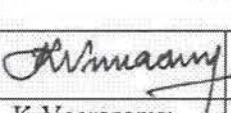
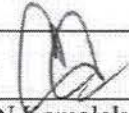
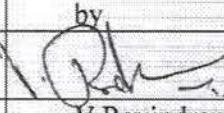
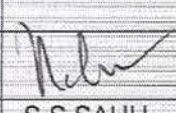
CONTROLLED / INFORMATION COPY

ORIGINAL ISSUE DATE : 10/04/2014

COPY NO.

ISSUED TO :

ISSUED BY :

	Prepared by		Reviewed by	Approved by
Signature				
Name	K. Veerasamy	N. Kamalakannan	V. Ravindran	S.S. SAHU,
Designation	Engineer / Quality	Sr. Manager / Quality	AGM / PMX	AGM / QLY, B.E & M.R(QMS)

**BHARAT HEAVY ELECTRICALS LTD.
POWER SECTOR- SOUTHERN REGION
CHENNAI**

Procedure

INDEX

		PAGE NO
1.0	OBJECTIVE	05
2.0	SCOPE	05
3.0	SCOPE	
3.1	FOUNDATION PREPARATION	06
3.2	MATERIAL, MECHANICAL MIXER AND EQUIPMENT READINESS	06
4.	GROUTING WITH PORTLAND CEMENT	
4.1	MIXING	07
4.2	PLACING	07
4.3	TESTING	08
5.0	GROUTING WITH NON SHRINK FREE FLOW CEMENTITIOUS GROUT	
5.1	MIXING	08
5.2	PLACING	09
5.3	TESTING	09
6.0	DOCUMENTS ENCLOSED	10
7.0	DOCUMENTS REFERRED	10
	ANNEXURE-I	
	FORMAT NO. QMS / PSSR / GRO - F 01/00	11
	FORMAT NO. QMS / PSSR / GRO - F 02100	12

Zpradea

GROUTING PROCESS IN POWER PLANT

(COLUMN FOUNDATIONS &EQUIPMENT PEDESTALS)

1.0 OBJECTIVE:

The term 'Grout' refers to the material for filling the gap between the Column / Equipment base and the rough top surface of the foundation and for filling the annular space in bolt holes. Grouting helps to maintain the precise alignment of the equipment! structure. Grouting ensures a monolithic nature of link between the Columns/ Equipment and the foundation to ensure uniform transmission of the mass forces | Equipment vibrations to the foundation thereby leading to dynamic stability of the foundation system as a whole.

1.1 GROUT:

The grout shall have a minimum characteristic compressive strength of one grade higher than the foundation for structures. The grout shall be chloride free, cement based, free flowing, non- metallic and non-shrinking type.

1.1.1 a) The Grout shall have good flow ability even at very low water/grout powder ratio. The Grout shall have characteristics of controlled expansion to be able to occupy its original volume to fill the voids and to compensate for shrinkage.

b) Grout shall be of pre-mix variety so that only water needs to be added before use wherever use of Non shrink free flow high ultimate strength cementitious grout (such as Conbextra GP1, GP2,Pidi Grout10-M ,Pagel V-11, Sika Grout214) is envisaged (other than Ordinary Portland cement (OPC))

1.1.2 The mixing of the Grout shall conform to the recommendations of the manufacturer of the Grout.

2.0 SCOPE:

This Procedure deals with Grouting of :

A) Structures | Static loading Structure / Equipment such as

- 1) Boiler Main Columns
- 2) Boiler Auxiliary Columns
- 3) ESP Columns
- 4) ID System Foundations
- 5) Tanks & Vessels
- 6) Piping Supports &
- 7) Other Structures .

Procedure

B) Rotating (Dynamic loading) Equipment such as

- 1) Turbine
- 2) Generator
- 3) Feed Pump (Driven by Motor I Turbine)
- 4) Motors
- 5) Hydraulic Couplings
- 6) Mills
- 7) Fans
- 8) All other Pumps (Which is not skid mounted) &
- 9) Other rotating equipment

2.1 OPC or Non shrink free flow cementitious grout (such as Conbextra GP 1, sikka 104 & pidigrout 10M) are generally used for grouting of static loading structures or as per drawing.

2.2 Non shrink free flow high ultimate strength cementitious grout (such as Conbextra GP2,Pidi Grout-10M ,Pagel V-11, Sika Grout214, Shrinkkom-30) is generally used for grouting of dynamic loading equipment or as per drawing.

3.1 **PRE -GROUTING PREPARATION** (Common for all types of grouting) Foundation Preparation:

3.1.1 Prior to pouring of cement grout, the top of the foundation shall be clean and free of all loose particles, oil, grease, dead mortar etc. and shall be wetted thoroughly. This surface except pocket holes shall be made rough so as to secure good bond with fresh cement. All pockets shall be properly vented to allow full penetration of the grout.

3.1.2 After cleaning, the pockets shall be filled with water and left for 1 day before grouting. The grout shall be placed after removing all the water using a hand pump and compressed air.

3.2 **Material, Mechanical Mixer and Equipment Readiness:**

3.2.1 The materials procured shall be checked and stacked near the grouting area .

3.2.2 Shuttering should be strong and all possible gaps between concrete and shuttering shall be sealed. Grout shoulders around the base plate should not be more than 50 mm except at the pouring side where it should not be more than 150 mm.

Jprade

4.0 GROUTING WITH PORTLAND CEMENT:

Ordinary Portland cement conforming to IS:269 is to be used.

4.1 Mixing of OPC Grout:

4.1.1 Where the grouting thickness to be filled is less than 25mm, Cement, sand mortar in the ratio 1 : 1 to be used. Water added should be kept to a minimum requirement for free flow subject to a maximum water- cement ratio of 0.44

4.1.2 Where the grouting thickness to be filled is more than 25mm, cement sand mix in the ratio 1:2 shall be used with a maximum water cement ratio of 0.53. This mix proportion can be used for grouting gaps up to 50mm.

4.1.3 Above 25mm and where conditions permit it is desirable to use with cement mortar, stone chips of size 6mm and downgraded. This cement concrete grout shall consist by volume: one part of cement, one part of clean, dry, well graded sand and two parts of stone chips. Water added should be a minimum required to make the grout workable. The maximum water cement ratio shall be 0.53.

4.1.4 An important point to be considered in any grouting operation is the necessity to control shrinkage or reduction in volume after hardening. The extent of shrinkage will depend on the water content of the grout. Hence water content should be restricted to the corresponding water cement ratio given above and mixing of aluminum powder (2 grams per 50 kg bag of cement to be mixed in dry condition) is necessary to make it shrink free.

4.2 Placing of OPC Grout:

4.2.1 The grout shall be placed in position within 20 minutes after mixing. The grout shall cover all shims which are to be retained. All anchor bolts shall be completely filled with grout. Enough care should be taken to avoid any air or water pockets beneath the bases. The finished surface shall be floated smooth and shall slope away from the base.

4.2.2 Curing should start immediately after 24 hours after laying of the grout and final finish. The surface shall be thoroughly wetted and kept wet for a minimum period of 7 days.

Lprade

4.3 Testing of OPC Grout

- 4.3.1 The cube moulds are cleaned thoroughly and a thin coating of mould oil is applied in the interior faces. The cube moulds are filled with the grout mix at the time of grouting. Finish the top of the cube in the mould by smoothing the surface with the blade of a trowel.
- 4.3.2 After the completion of 24 hours, remove cubes from moulds and immediately submerge in water until taken out just prior to testing 3 and 7 days.
- 4.3.3 Depending up on the quantity of grout the number of cubes shall be taken. For e.g., 6 cubes will be taken for the grout upto 10 bags and an additional 6 cubes will be taken if quantity of grout exceeds 10 bags.
- 4.3.4 Out of 6 cubes taken 3 cubes will be tested after 3 days and 3 cubes after 7 days.
- 4.3.5 The minimum compressive strength shall be as follows:
a) 3 Days.. Not less than 160 kg/sq.cm.
b) 7 Days.. Not less than 220 kg/sq.cm.
- 4.3.6 Results obtained are to be recorded as per formats given in Annexure -I.

5.0 GROUTING WITH NON SHRINK FREE FLOW CEMENTITIOUS GROUT

Non shrink free flow high ultimate strength cementitious grout (such as Conbextra GP11 GP2, Pidi Grout10-M ,Pagel V-11, Sika Grout214, Shrinkkom-30 or equivalent) is a ready to use grouting compound in powder form available in 25 kg bags. Test certificate from the manufacturer should be insisted upon at the time of purchase of grout materials, to note the date of manufacturing, shelf life. (Normally shelflife is 6 months from the date of manufacturing). Presence of Manufacturers' representative at the time of grouting process is recommended.

5.1 Mixing of Non shrink free flow Cementitious grout:

- 5.1.1 Store the grout in a well enclosed space protected from moisture. However, if by any chance the shelf life exceeds 6 months, then the grout should be tested before actual use, and results verified with the values given in test Certificate.
- 5.1.2 Water to be mixed as per manufacturers' recommendations. Water Powder ratio shall be followed as per the manufacturers' Technical literature/ Recommendation. Under no circumstances more water be added and should be precisely measured for each batch of grout. When mixing large quantities (more than 100 kg), slight reduction of water is possible. However a trial mix should be made with reduced water to ascertain whether the fluidity obtained is sufficient for the job.
- 5.1.3 Mixing should take place for a minimum period of 5 minutes.

Spred

5.2 Placing of Non shrink free flow Cementitious Grout:

5.2.1 Grouting shall be done preferably in a single stage for both the parts except where equipment requirement is two stage requirement with respect to alignment.

- A) Bolt pocket grouting
- B) Base plate grouting

5.2.1.1 The grout mix should be placed in position within 20 minutes after mixing. If the ambient temperature is very high (above 40°C), the grout mix tends to loose moisture fast and thus the fluidity is reduced. Temp.to be reduced by using cold water if temp of grout is more than 30°

5.2.2 A) Bolt pocket grouting :

5.2.2.1 The shear key pockets shall be filled with grout upto 20mm below the top surface. This is to form a key with the second stage when grouting of base plate or base frame is done.

5.2.3 B) Base Plate Grouting

5.2.3.1 Pouring shall be kept continuous and from one side only by moving the container along the length of pouring side.

5.2.3.2 The shuttering shall be observed all round to detect any leaks.

5.2.3.3 Vibrators should not be used at the time of placing of grout. Grout should be poured from one side /end only.

5.2.3.4 Grouting shall be done up to 1/3 thickness of base plate.

5.2.3.5 Grouting of Pedestals | Columns | Equipment should be completed in one stretch.

5.2.3.6 Loading shall be done on the third day subject to the 3'd day cube test results are Found satisfactory.

5.2.3.7 Curing may commence when the grout has reached hard state. This takes approximately 8- 11 hours after mixing. Curing shall be done for 7 days.

5.3 TESTING OF NON SHRINK FREE FLOW CEMENTITIOUS GROUT:

5.3.1 Compressive strength is tested at site by casting cubes during the placement of grout.

5.3.2 Depending upon the quantity of grout, the number of cubes shall be taken 6 cubes will be taken for the grout upto 10 bags and an additional 6 cubes shall be taken (if quantity of grout exceeds 10 bags) 11 cubes are required for the tests of 1,3,7 & 28 days (i.e., 3 for each day test)

Lprade

Procedure No. : PRO /PSSR / GRO

Page 11 of 12

Rev. No. :02

Effective Date:17/10/2016

Doc.no.1320

Annexure - I

No. : PRO:PSSR:QLY:GRO F 01 I 00

SITE

UNIT

AREA

DATE

SI. No	Description of System	Batch No.	Supplied Qty	Consumed Qty.	Remaining Qty	Remarks

SIGNATURE: With Date

Contractor

Supplier

BHEL

Customer

(If available)

Lprade

