



BHARAT HEAVY ELECTRICALS LIMITED
INDUSTRIAL VALVES PLANT
433, INDUSTRIAL COMPLEX
GOINDWAL SAHIB
DISTT. TARN TARAN- PUNJAB – 143422

No.BHEL:IVP:
SC:SP:AD
2019-20/01
Dated
11.04.2019

NOTICE INVITING APPLICATIONS FOR REGISTRATION OF SUB CONTRACTORS

BHARAT HEAVY ELECTRICALS LIMITED [BHEL] is manufacturing Industrial Valves and other Boiler accessories at its Industrial Valves Plant, Goindwal Sahib unit. For financial year 2019-20 we have to manufacture 2100 MT. Post machining of the component; certain special processes such as chrome plating, are required to be completed to achieve the desired specification.

Expression of interest and applications for registration are invited from sub-contractors (BHEL encourages procurement from Micro and Small Enterprises (MSEs), MSEs are requested to apply for registration) for doing the chrome plating, nickel plating, cadmium plating, phosphating, nitriding/tuffriding, heat treatment etc.

Special processes

Indicative list of components on which plating or other processes are required to be done is attached herewith as Annexure-I. Sample drawings of some components are also attached. (S.No of list – 28 and 40)

BHEL is looking for prospective Sub Contractors for above job work.

BHEL shall evaluate the vendors as per its established vendor selection, evaluation and registration procedure. Supplier Registration can be done online <https://supplier.bhel.in/>

BHEL invites such vendors to visit its above located plant on any working day from Monday to Saturday between 0900 Hrs to 1730 Hrs and contact undersigned for any clarification regarding:

Items details and requirement		Vendor registration form/procedure
Vineet Kumar Dy. Manager (Sub Contracting)	Mukesh Kumar Sr. Engineer (Sub Contracting)	Sahil Malhotra Dy. Manager (Sub-Contracting)
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BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL VALVES
PLANT, 433, INDUSTRIAL COMPLEX, GOINDWAL SAHIB,
DISTT. TARN TARAN, PUNJAB – 143 422

S.No	Gr. No	Job/Component Description	Description of Valve/ Product (Used in)	Special process
1	G2232	LOCK PIN-40021200	Wall Blower	Cadmium plating to a depth of 50 microns
2	G2235	THRUST WASHER-40025000	Wall Blower	Case Hardening to RC 40-45 to a depth of 0.5 mm
3	G2179	WORM-30011901	Wall Blower	to be case hardened to a depth of 0.8 mm to 1mm to a hardness RC 60-66
4	G2181	WORM L.H-30011902	Wall Blower	to be case hardened to a depth of 0.8 mm to 1mm to a hardness RC 60-66
5	G1402	STEM (with Hard Chrome Plating)	10-C150-GV-WC6	Chrome Plating
6	G1405	STEM (with Hard Chrome Plating)	10-C300-GV-WC9	Chrome Plating
7	G1410	STEM (with Hard Chrome Plating)	12-C300-GV-WC9/WC6	Chrome Plating
8	G1414	STEM (with Hard Chrome Plating)	14-C300-GV-WC9	Chrome Plating
9	G1418	STEM (with Hard Chrome Plating)	16-C300-GV-WC9	Chrome Plating
10	G2306	Stem	2.5-C1500-GLV/GNV-HO/MO-WCC	Chrome plating
11	G1428	STEM (with Hard Chrome Plating)	2-C300-RV/SV-WC6	Chrome Plating
12	G2307b	Stem	3-C1500-GLV/GNV-BW-HO/MO-WCB	Chrome plating
13	G1442	STEM (with Hard Chrome Plating)	3-C300-RV/SV-WC6	Chrome Plating
14	G2530	Split Ring Assy-3200/3396	450/500-C500-CRHIV-BW-WCB/WCC/WC9	Hard Chrome plating to a thickness of 30 to 40 microns
15	G2307	Stem	4-C1500-GLV/GNV-BW-HO/MO-WCB	Chrome plating
16	G1447	STEM (with Hard Chrome Plating)	4-C150-GV-WC9	Chrome Plating
17	G1450	STEM (with Hard Chrome Plating)	4-C300-GV-WC6/WC9	Chrome Plating
18	G1453	STEM (with Hard Chrome Plating)	4-C300-RV/SV-WC6/WC9	Chrome Plating
19	G2531	Split Ring Assy-3208/3390	550-C900-HRHIV-BW-WC9/C12A	Chrome plating to a thickness of 30 to 40 microns
20	G2346	Stem Machining	5-C1500-GLV-BW-MO-WC9	Chrome plating
21	G1458	STEM (with Hard Chrome Plating)	6-C150-GV-WC9	Chrome Plating
22	G1462	STEM (with Hard Chrome Plating)	6-C300-GV-WC6	Chrome Plating
23	G1465	STEM (with Hard Chrome Plating)	6-C300-RV/SV-WC9/WC6	Chrome Plating
24	G2425a	SPLIT RING ASSY	700-C600-CRHIV-BW-WCC	Hard Chrome plating to a thickness of 30 to 40 microns
25	G2425	SPLIT RING ASSY-3245/3316	750-C600-CRHIV-BW-WCC	Hard Chrome plating to a thickness of 15 to 30 microns
26	G1469	STEM (with Hard Chrome Plating)	8-C150-GV-WC6/WC9	Chrome Plating
27	G1473	STEM (with Hard Chrome Plating)	8-C300-GV-WC9	Chrome Plating
28	G2195	SWIVEL TUBE D60.3X4.8-30069900	Wall Blower	Hard Chrome plating to a thickness of 50 microns
29	G2224	GUIDE ROD-40019500	Wall Blower	Chrome plating to a thickness of 8 to 12 microns
30	G2325a	Sunk Key	2.5/3-C1500-GLV/GNV-BW-WCC/WCB/WC9	Hardness required is min 240 BHN
31	G2325b	Sunk Key	4-C1500-GLV-BW-HO-WCB	Hardness required is min 240 BHN
32	G2178	VALVE STEM CAP-40019800	Wall Blower	Heat Treat to 38-41 HRC
33	G2183	RAMP CAM-30013700	Wall Blower	Heat Treat to 50-55 RC
34	G2185	CAM SHAFT COLLAR-30014700	Wall Blower	To be Hardened to HRC 28
35	G2189	WORM GEAR SHAFT-30015500	Wall Blower	Heat Treat to RC 40-44
36	G2311i	Disc Final	6-C2500-GLV-BW-MO-WCC	Liquid Nitriding
37	G2308	Yoke Machining	2.5-C1500-GLV-HO/MO-WCC/WCB/WC9	Nickel Plating to a thickness of 25 to 35 microns
38	G2309	Yoke Machining	4-C1500-GLV-HO/MO-WCC/WCB/WC9	Nickel Plating to a thickness of 25 to 35 microns
39	G2186	WORM SHAFT-30015100	Wall Blower	to be phosphated
40	G2311a	Disc Final	2.5-C1500-GLV-BW-HO-WC9	Tufftriding/ Liquid nitriding
41	G2316a	Disc Nut	2.5-C1500-GLV-BW-HO-WC9	Tufftriding/ Liquid nitriding to be carried out to a Hardness of 600 to 800 Vickers
42	G2311b	Disc Final	3-C1500-GLV-BW-HO-WC9	Tufftriding/ Liquid nitriding
43	G2316b	Disc Nut	3-C1500-GLV-BW-HO-WC9	Tufftriding/ Liquid nitriding to be carried out to a Hardness of 600 to 800 Vickers
44	G2311j	Disc Final	3-C3500-GLV-BW-MO-WC9	Tufftriding/ Liquid nitriding
45	G2311c	Disc Final	4-C1500-GLV-BW-HO-WCB	Tufftriding/ Liquid nitriding

List of Items which require special process as per design specification

Annexure - I

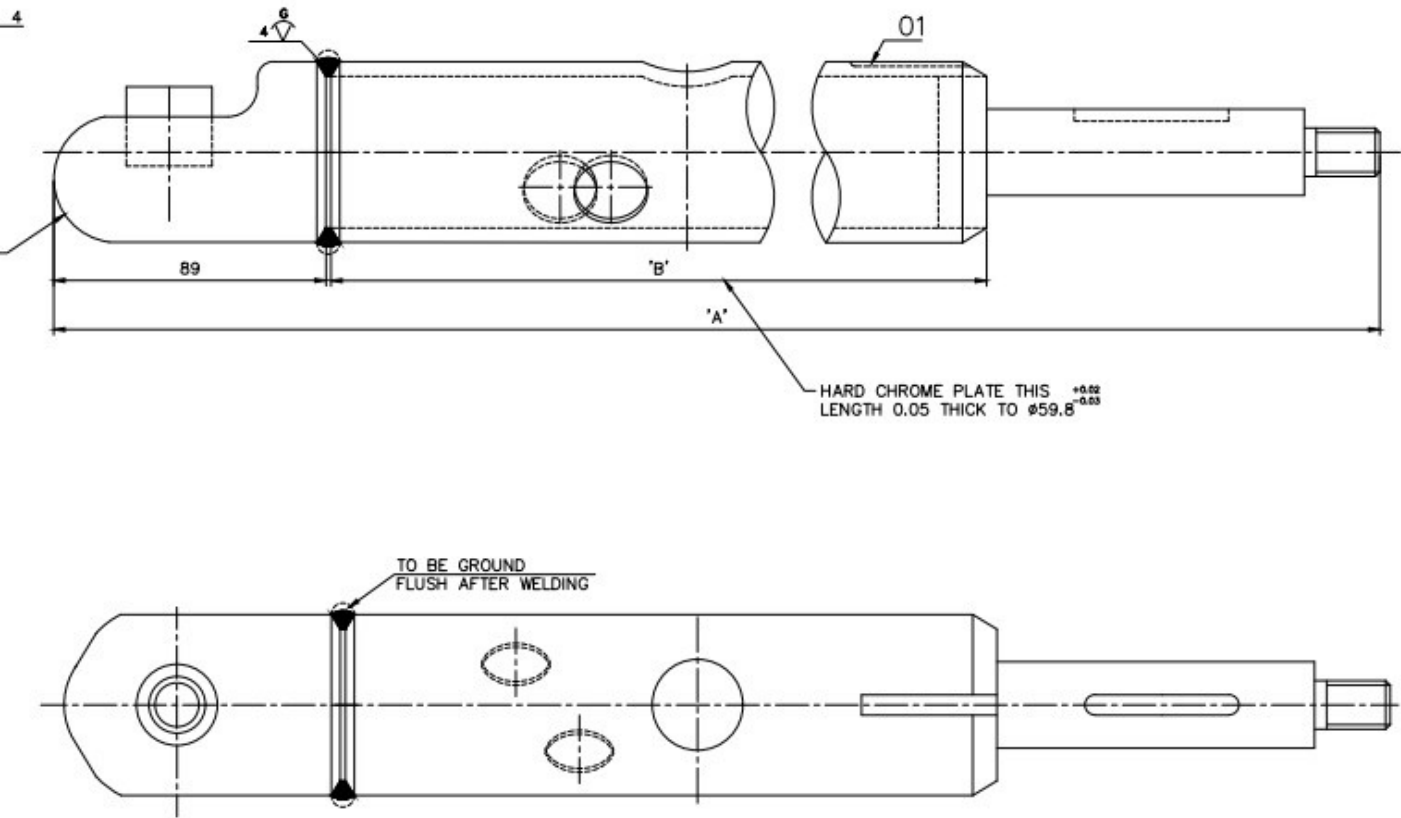
S.No	Gr. No	Job/Component Description	Description of Valve/ Product (Used in)	Special process
46	G2316c	Disc Nut	4-C1500-GLV-BW-HO-WCB	Tufftriding/ Liquid nitriding to be carried out to a Hardness of 600 to 800 Vickers
47	G2316d	Disc Nut	5-C1500-GLV-BW-GO-WC9	Tufftriding/ Liquid nitriding to be carried out to a Hardness of 600 to 800 Vickers
48	G2311k	Disc Final	6-C3500-GLV-BW-MO-WC9	Tufftriding/ Liquid nitriding
49	G2493	Orifice Plate		to be hardened and tempered to RC32 to 38
50	G2344	BASE PLATE-40159600	NOZZLE SETG.FIXT-30072500	to be phosphated
51	G2193	SPINDLE SLEEVE-30015200		Cadmium plating (0.005 mm to 0.0125 mm)
52	G2206	COVER PLATE-40012400		Cadmium plating (0.005 mm)
53	842099635600	KEY-40114200	SPECIAL KEY-40114100 (842099634400)	hardened and tempered to RC 40 to 42
54	842020104800	SPRING RETAINER-40019300	Wall Blower	Cadmium Plating (0.05mm)

2	3		6	7	8
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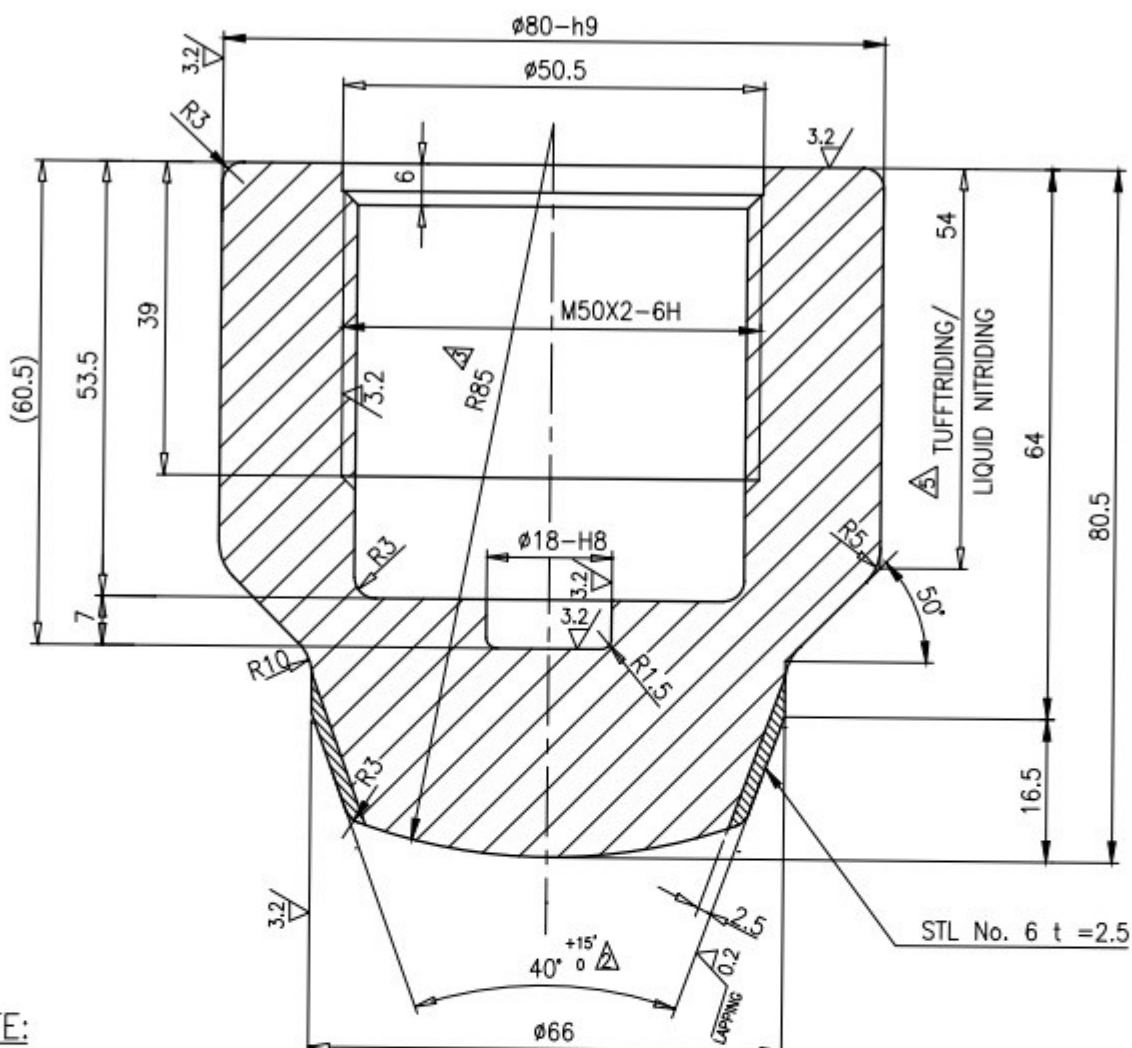
ALL DIMENSIONS ARE IN MILLIMETRES. FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP / QP

NOTES:-

- VARIANT No. 02, 03 & 04 MEANT FOR COPE'S VULCON SWIVEL TUBE ASSEMBLY REPLACEMENT.
- FOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURES.
- WELD NOZZLE HEAD ASSEMBLY WITH SWIVEL TUBE IN SUCH A WAY THAT THE 'V' GROOVE PROVIDED ON SWIVEL TUBE SHOULD BE INLINE WITH THE CENTRE LINE OF NOZZLEFOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURES.
- VARIANT No. 05 MEANT FOR STAINLESS STEEL (SS) SWIVEL TUBE MATERIAL.
- HARD CHROME PLATING IS NOT REQUIRED FOR VARIANT No. 5 (SS SWIVEL TUBE).



	02	NOZZLE HEAD ASSY.	4-20-201-00164	842020125600	0.920
				WELDMENT	1
	01	SWIVEL TUBE	3-20-201-02010	842020135503	9.200
				WELDMENT	1
05		SWIVEL TUBE ASSY.(SS)	2-20-201-00280	842020125503	10.120
				WELDMENT	1
	02	NOZZLE HEAD ASSY.	4-20-201-00164	842020125600	0.920
				WELDMENT	1
	01	SWIVEL TUBE	3-20-201-00903	-	8.436
				WELDMENT	1
04		SWIVEL TUBE ASSY.	2-20-201-00280	-	9.356
				WELDMENT	1
	02	NOZZLE HEAD ASSY.	4-20-201-00164	842020125600	0.920
				WELDMENT	1
	01	SWIVEL TUBE	3-20-201-00846	-	8.580
				WELDMENT	1
03		SWIVEL TUBE ASSY.	2-20-201-00280	842020126400	9.500
				WELDMENT	1
	02	NOZZLE HEAD ASSY.	4-20-201-00164	842020125600	0.920
				WELDMENT	1
	01	SWIVEL TUBE	3-20-201-00810	-	8.196
				WELDMENT	1
02		SWIVEL TUBE ASSY.	2-20-201-00280	842020102400	9.106
				WELDMENT	1
	02	NOZZLE HEAD ASSY	4-20-201-00164	842020125600	0.920
				WELDMENT	1
	01	SWIVEL TUBE	3-20-201-00699	842020135500	8.580
				WELDMENT	1
01		SWIVEL TUBE ASSY.	2-20-201-00280	842020125500	9.500
				WELDMENT	1
VARIANT No.	ITEM No.	DESCRIPTION	DRAWING No.	MATL. CODE	UNIT WT.(kg)
				MATL. SPEC.	QTY(Nos)





NOTE:

LATEST APPLICABLE QUALITY WORK INSTRUCTIONS SHALL BE FOLLOWED IN ALL RESPECTS

REDRAWN WITH REV.4 ON 01.09.14

COMP. CODE:93 111 974 0000

			A182 F22,CL.3 PRO. ATTEST	NT	20				
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
 BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI 620014.					DRN	NAME V.BAIRAVAN	SIGN	DATE 01.09.14	NO.OF VAR
					CHD	S.SATHEES		01.09.14	
					APPD	K.RAJASEKARAN		01.09.14	
DEPT VL		SCALE	WEIGHT (KG).		REFERENCE INFORMATIONS				NO. OF ITEMS
CODE 320		N T S	1.49						
TITLE					CARD CODE	DRAWING NO.			REV
DISC ASSY					U 01	4-V-G041-18028			5
65/1500 CLASS									