

	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL VALVES PLANT 433, INDUSTRIAL COMPLEX GOINDWAL SAHIB DISTT. TARN TARAN- PUNJAB – 143422	No.BHEL:IVP: SC: Wall Blower : AD 2019-20/01 Dated 11.04.2019
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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. Approx annual procurement value for Wall Blower items and other FB product items for FY 2019-20 – Rs 100 lac.

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 machining job of various components of Wall Blowers. Major areas for which subcontractors are required are gear/worm machining, press/die. Various work centers involved in the machining job shall be CNC, VMC etc.

Wall Blowers	Machining vendors are required to machine various components of wall blower such as Rack, Spur Gear, Worm, Primary Shaft, Secondary Shaft, Rack Cover etc. Also heat treatment, cadmium plating, wherever required to be arranged by the vendor. List of components, where machining vendors are required, is attached herewith as Annexure-I. Sample drawings of some components are also attached. (S.No of the list - 13 and 27)
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BHEL is looking for prospective Sub Contractors for above detailed job work for BHEL.

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**

Wall Blower - List of items in which additional vendors are required for Job Work

Annexure - I

S.No	Gr. No	Job/Component Description	Description of Valve/ Product (Used in)
1	G2168	VALVE BODY-10001001	Wall Blower
2	G2168a	3" VALVE BODY	Wall Blower
3	G2169	WALL DESLAR.BODY-10016202	Wall Blower
4	G2171	CLEVIS BRACKET-20006200	Wall Blower
5	G2172	LEVER-20006300	Wall Blower
6	G2175	VALVE STEM-30141200	Wall Blower
7	G2178	VALVE STEM CAP-40019800	Wall Blower
8	G2179	WORM-30011901	Wall Blower
9	G2180	WORM-30011903	Wall Blower
10	G2181	WORM L.H-30011902	Wall Blower
11	G2182	ELEMENT GEAR-30012200	Wall Blower
12	G2183	RAMP CAM-30013700	Wall Blower
13	G2184	RACK-30013800	Wall Blower
14	G2184a	RACK SQ MILL-30013800	Wall Blower
15	G2185	CAM SHAFT COLLAR-30014700	Wall Blower
16	G2186	WORM SHAFT-30015100	Wall Blower
17	G2187	SPUR GEAR SHAFT-30015300	Wall Blower
18	G2189	WORM GEAR SHAFT-30015500	Wall Blower
19	G2193	SPINDLE SLEEVE-30015200	Wall Blower
20	G2194	RACK PINION-30015600	Wall Blower
21	G2195	SWIVEL TUBE D60.3X4.8-30069900	Wall Blower
22	G2195a	EXT. SWIVEL TUBE D60.3X4.8-30208600	Wall Blower
23	G2196	SWIVEL TUBE SHAFT-40023700	Wall Blower
24	G2197	SPUR GEAR 12T-30074000	Wall Blower
25	G2198	MOTOR PINION 30T-40023200	Wall Blower
26	G2199	GEAR 40T-40024600	Wall Blower
27	G2200	SPUR GEAR-40025200	Wall Blower
28	G2201	PINION-40025900	Wall Blower
29	G2202	PRIMARY GEAR-40026200	Wall Blower
30	G2203	COVER-40001600	Wall Blower
31	G2204	GLAND PLATE-40011900	Wall Blower
32	G2205	COVER-40012500	Wall Blower
33	G2206	COVER PLATE-40012400	Wall Blower
34	G2207	COVER PLATE-40154700	Wall Blower
35	G2208	SHAFT COLLAR-40026100	Wall Blower
36	G2210	NOZZLE-40016300	Wall Blower
37	G2211	LOCK NUT M20X1.5-40016600	Wall Blower
38	G2212	NIPPLE M20X1.5-40016700	Wall Blower
39	G2213	CAM ASSY-30013400	Wall Blower
40	G2214	CAM-40017800	Wall Blower
41	G2215	CAM-40017900	Wall Blower
42	G2216	MOTOR SPACER-40018100	Wall Blower
43	G2217	ARM BRACKET-40018200	Wall Blower
44	G2218	WORM GEAR 30T-40018300	Wall Blower
45	G2219	WORM GEAR-40018400	Wall Blower
46	G2220	WORM GEAR LH-40018500	Wall Blower
47	G2221	CUPPED PLUG-40019201	Wall Blower

Wall Blower - List of items in which additional vendors are required for Job Work

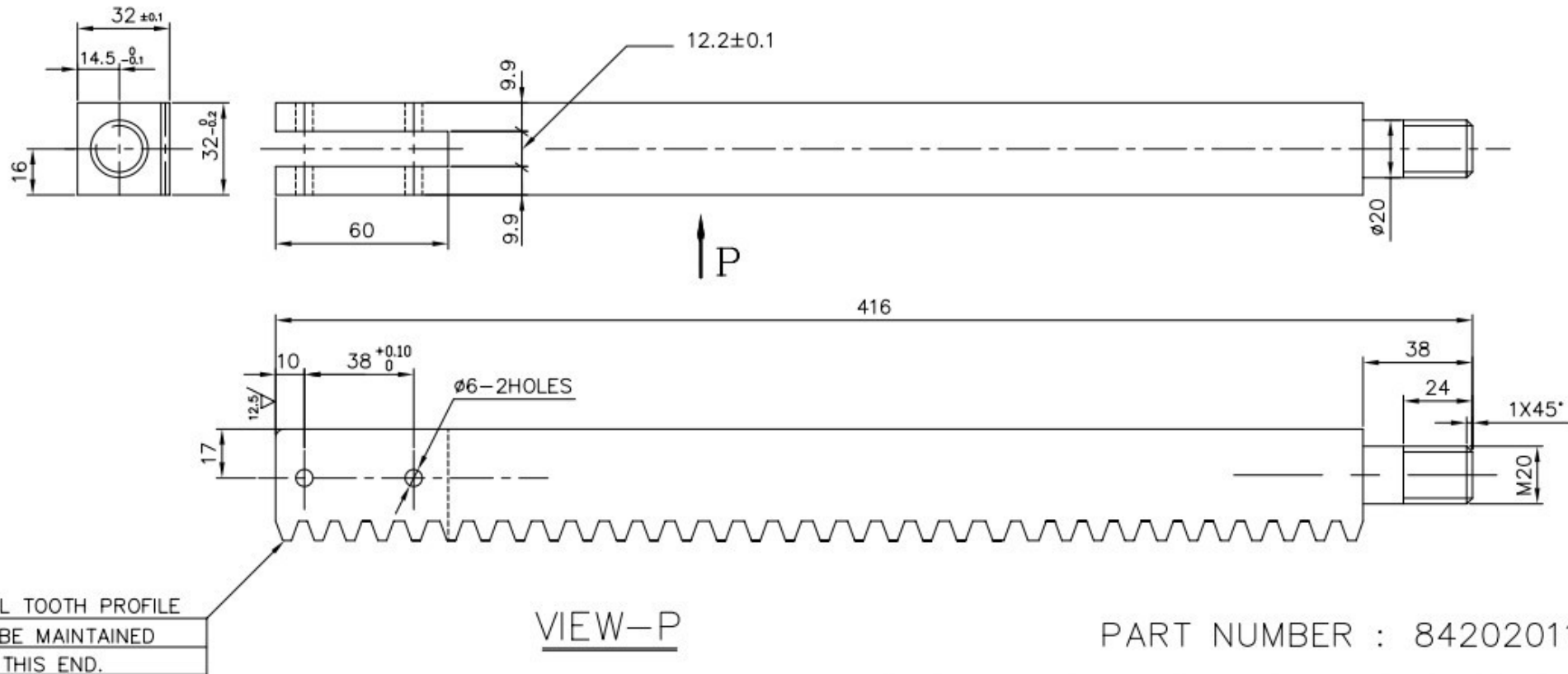
Annexure - I

S.No	Gr. No	Job/Component Description	Description of Valve/ Product (Used in)
48	G2222	CUPPED PLUG-40019202	Wall Blower
49	G2223	SPRING RETAINER-40019300	Wall Blower
50	G2224	GUIDE ROD-40019500	Wall Blower
51	G2225	PACKING GLAND-40019600	Wall Blower
52	G2226	GLAND BUSH D32X45-40019700	Wall Blower
53	G2227	PLUG 3/8INCH NPT-40019900	Wall Blower
54	G2228	AIR VENT (R1/4")	Wall Blower
55	G2229	CLEVIS PIN-40023300	Wall Blower
56	G2230	PIN-40023500	Wall Blower
57	G2231	PIN-40162300	Wall Blower
58	G2232	LOCK PIN-40021200	Wall Blower
59	G2233	SCRU GRB SOC AP10-40024200	Wall Blower
60	G2234	SWITCH MOUNT BRT-40024500	Wall Blower
61	G2235	THRUST WASHER-40025000	Wall Blower
62	G2236	THRUST WASHER-40025100	Wall Blower
63	G2237	RETAINING WASHER-40023900	Wall Blower
64	G2238	FLAT WASHER-40013000	Wall Blower
65	G2243	GEAR SPACER-40026000	Wall Blower
66	G2244	WORM SPACER-40025500	Wall Blower
67	G2245	UPPER ROLLER-40025600	Wall Blower
68	G2246	SEAT INSERT-40056500	Wall Blower
69	G2247	CAM-40079700	Wall Blower
70	G2248	SIN BRZ BUSH-40154800	Wall Blower
71	G2249	RACK GEAR HOUSING + GUIDE ROD FIXING	Wall Blower
72	G2331	RACK COVER W/O PAINT-20024300	Wall Blower
73	G2332	EMERGENCY CRANK-30013600	Wall Blower
74	G2333	COMPANION FLANGE-40028501	Wall Blower
75	G2335	SUPPORT PLATE-40015000	Wall Blower
76	G2336	GUSSET PLATE-40015100	Wall Blower
77	G2337	ALIGNMENT PLATE-40015200	Wall Blower
78	G2338	SLEEVE TUBE	Wall Blower
79	G2344	BASE PLATE-40159600	Wall Blower
80	G2493	Orifice Plate	Wall Blower
81	G2495	NIPPLE 1 1/2" NPT / NIPPLE G 1 1/2"	Wall Blower
82	G2499	T-PIECE 3/8IN NPT-40065500	Wall Blower
83	G2503	Swivel tube from SS	Wall Blower
84	G2618	SWIVEL TUBE SUPPORT-40261000	Wall Blower
85	G2443	SPECIAL KEY-40114100	
86	G2339	VALVE BODY D40X60-40142200	Air Valve
87	G2340	VALVE BODY COVER-40142300	Air Valve
88	G2341	VALVE DISC & STEM-40022200	Air Valve
89	G2512	CONNECTOR 3/8INC-40051902	Air Valve
90	G2427a	THREADED PIECE D32;L=25 -G/C	THREADED PIECE D32;L=25
91	G2427	THREADED PIECE D63;25L -G/C	THREADED PIECE D63;25L
92	G2174	VALVE STEM ASSY-30068702	Wall Blower
93	G2176	VALVE STEM	Wall Blower
94	G2177	VALVE BLANK	Wall Blower

Wall Blower - List of items in which additional vendors are required for Job Work**Annexure - I**

S.No	Gr. No	Job/Component Description	Description of Valve/ Product (Used in)
95	G2336a	GUSSET PLATE-40402200	SLEEVE ASSEMBLY
96	G2342	BOTTOM COVER W/O PAINT-20025700	Wall Blower
97	G2343	PIN-40159700	Wall Blower
98	G2498	SLEEVE TUBE W/O NIPPLE	Wall Blower
99	G2500	U-clamps	Skid Assembly
100	G2592	MOTOR ADAPTER-30116100	Wall Blower

DRAWING NO. 3-20-201-00138

$$\frac{6.3}{\nabla} \quad \left(\frac{12.5}{\nabla} \right)$$


FULL TOOTH PROFILE
TO BE MAINTAINED
AT THIS END.

NOTES: –

1. FOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURES.

MODULE	3
PRESSURE ANGLE	20°
WHOLE DEPTH	6.75

REV	DATE	ALTERED	K.S.
11	26.06.06	CHD & APPD	S.N.
DRG. UPDATED AND REDRAWN.			
DCN: 800547 Dt.02.01.06			

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01	ROUND Ø50MM	15 339 142	SA 105				3.680		01
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No.	ITEM No.
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT									
 BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI-620014. 365-121				DRN	NAME S.NAPPI	SIGN S.N.	DATE 26.06.06	NO.OF VAR.	
				CHD	K.SRIDHARAN	K.S.	26.06.06		
				APPD	S.NATARAJAN	S.N.	26.06.06		
DEPT	VL		SCALE	WEIGHT (KG).	REFERENCE INFORMATION				NO. OF ITEMS
CODE	330		NTS	3.680					
TITLE				CARD CODE	DRAWING NO.				REV
RACK				U 01	3-20-201-00138				11

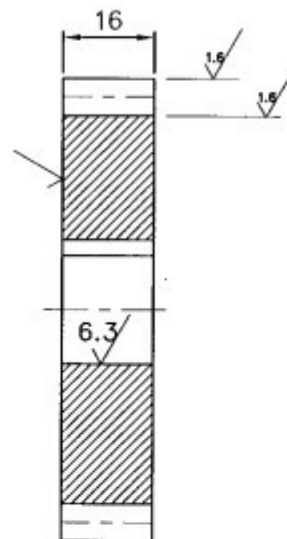
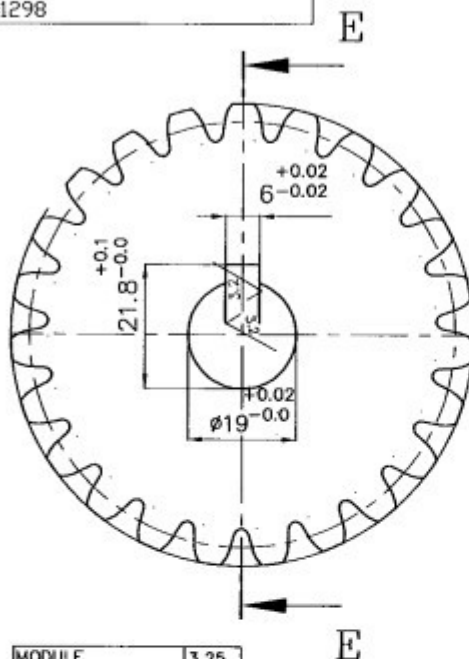
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FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP/QP

ALL DIMENSIONS ARE IN MILLIMETRES.

REV	DATE	ALTERED
04	11.06.01	CHD & APPD
DRG. UPDATED AND REDRAWN.		
DCN:SB:1298		

✓/12.6/ 6.3/ 3.2/ 1.6/



SECTION EE

MODULE	3.25
NO OF TEETH	23
PITCH DIAMETER	74.75
PRESSURE ANGLE	20°
WHOLE DEPTH OF TEETH	7.31
OUTSIDE DIMETER	81.25
TOOTH CLEARANCE	0.813
CETRE DISTACE	102.38

TOLERANCE ON GEAR BLANK
TIP DIAMETER 81.25 $\begin{smallmatrix} 0.00 \\ -0.05 \end{smallmatrix}$

RADIAL AND AXIAL RUN OUT OF
REFERENCE SURFACES = 0.0170

TOLERANCE OF GEAR:

TEETH RUN OUT = 0.063

TIR W.R.T.BORG

WIDTH ACROSS THREE TEETH = 25.03 $\begin{smallmatrix} -0.09 \\ -0.16 \end{smallmatrix}$

ALL OTHER TOLERANCE ARE TO BE
AS PER APPLICABLE QP/QCP

NOTES:-

1. FOR QUALITY REQUIREMENTS REFER APPLICABLE LATEST QUALITY PROCEDURE.

PART CODE : 842020114500

01	FORGING D 100X20	920377780000	IS 1875 CL IV			1.250			01
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
				NAME V. ARUMUGAM SIGN DATE NO. OF VAR					
BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT, TIRUCHIRAPALLI 620014.				CHD K. SRIDHARAN					
APPD S. NATARAJAN									
DEPT SB		SCALE NTS		WEIGHT (KG). 1.250		REFERENCE INFORMATION T-13566			NO. OF ITEMS
CODE 330									
TITLE SPUR GEAR				CARD CODE U 01	DRAWING NO. 4-20-201-00252				REV 04

Size A4