

TECHNICAL SPECIFICATION FOR MECHANICAL PRESS 30 TON.

Sr.No.	Requirement	Vendor Remarks / Confirmation
1	Mechanical Power Press capacity 30 Ton (as per agreed features and terms)	2 nos.
2	Model (Model specified should be a standard catalogue item which has all agreed features)	To be informed by supplier.
3	Catalogue - 2 Copies	To be supplied at the time of initial tender opening.
4	Bed Size (F to B x R to L)	400mm(or More) X 580mm(or More)
5	Top of Bed to Ram bottom (Min./ Max. DIE Height.)	Vendor to specify
6	Drg. of Die. & Punch (R1500-0244) is enclosed with this Specification. Press should be compatible with this die & punch set.	Vendor to agree.
7	Stroke Adjustment	5 - 60 mm (Or more)
8	Floor to top of bed	700 mm to 1000 mm
9	Maximum dimensions of machine (LxBxH)	Vendor to Specify
10	Dia & Depth of Hole in ram for die clamping	Dia.= 44mm, Depth of hole = 50mm
11	Dia of Hole in centre of Bed	180 +/- 10 mm
12	T-slots in Bed for clamping	2 nos. cross T slots suitable for M16 bolts
13	Protection covers for flywheel, belts etc.	To be provided by supplier.
14	No. of strokes / min.	Minimum 60 strokes / min.
15	A.C. Motor Power	Minimum 3 HP - 1440 rpm
16	Motor make	Crompton Greaves / Bharat Bijlee / ABB / Siemens
17	Foot-operated lever	To be provided by supplier.

S. K. K. /
28/01/13

29/01/13
(S B. V. G. D. A. V.)

R. /
30/01/13
(Ratnesh Kr.)

31.1.13

18	Machine should be capable of giving contineous strokes when the foot lever is kept pressed.	To be confirmed by supplier.	
19	Suitable lifting arrangement for Press.	To be provided for lifting and transportation.	
20	Standard Accessories (Part of machine)	Electric Motor, DOL starter, Vee-belts, Flexible pipe, Flywheel guard, Gear Guard, Ball screw Spanner.	
21	Machine frame	Should be robust enough to withstand any deflection or vibration.	
22	Foundation drawing for civil works	To be provided atleast 2 months before despatch of machine.	
23	Machine Weight	To be informed by supplier.	
24	Power Supply	AC 3-Phase, 415V + 10%/-15%, 50 Hz +/-3%.	
25	Paint to prevent rusting and corrosion	Apple Green Colour (ISC. No.- 281 as per IS-5:2007)	
26	Full and complete Warranty & Guarantee for trouble free operation from the date of successful commissioning of the Equipment.	12 months from the date of commisioning.	
27	Pre-despatch inspection will be done by BHEL team at supplier's work for mutually agreed period to ensure specifications compliance and functioning of the machine.	The supplier to give prior notice sufficiently in advance (minimum 1 month from the date of despatch) for carrying out the pre-despatch inspection. Pre-despatch Inspection will involves: A) Specification compliance of machine. B)Functioning of the machine to be checked.	
28	Final acceptance shall be made by BHEL at it's plant following successful erection & commissioning of the machine which includes: A) Unpacking of machine boxes & checking of Supplies as per PO scope. B) Installation & Testing of machine. C) Functioning of the machine to be checked by cutting fitting pieces using die & punch (R1500-0244).	It shall be the responsibility of the supplier to arrange and provide all required items, tools & tackles as required for the commissioning of the machine including foundation bolts etc, sufficient electrical wiring (minimum 20 mtrs.) MCBDB with sockets & Plug and other connection accessories as required alongwith the machine. BHEL will provide power mains only. Any shortcoming in the functioning of the machine due to any reason shall be rectified by the supplier free of cost.	

Subhakar
28/10/13

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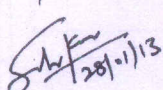
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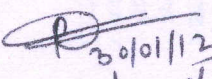
29	Machine supply condition	Machine to be supplied in ready to operate condition.	
30	Packing	The machine shall be packed rigidly to avoid any transit damage.	
31	Spares :	Vendor to Specify recommended Spares for 2 Years trouble Free Operations	
32	Standard Tool Kit suitable for the machine	1 set per machine	
33	O&M Manual including the following details: 1. Assembly drawings of each sub-assembly of machine, part list marked as per assembly drawing. 2. Lubrication circuit diagram with bill of material. 3. Electrical circuit diagram. 4. Procedure of different adjustments in machine.	3 sets per machine	


Qualifying Conditions :

1. The supplier should be a Original Equipement manufacturer.
2. The supplier should have supplied atleast 2 presses for similar or bigger size in last three years. Details of supplies stating year of supply with vendor's address & contact details (Email & Phone no.'s) to be provided.

1.

 28/11/13
 (Surinder Kumar)
 Sr. En., TTX

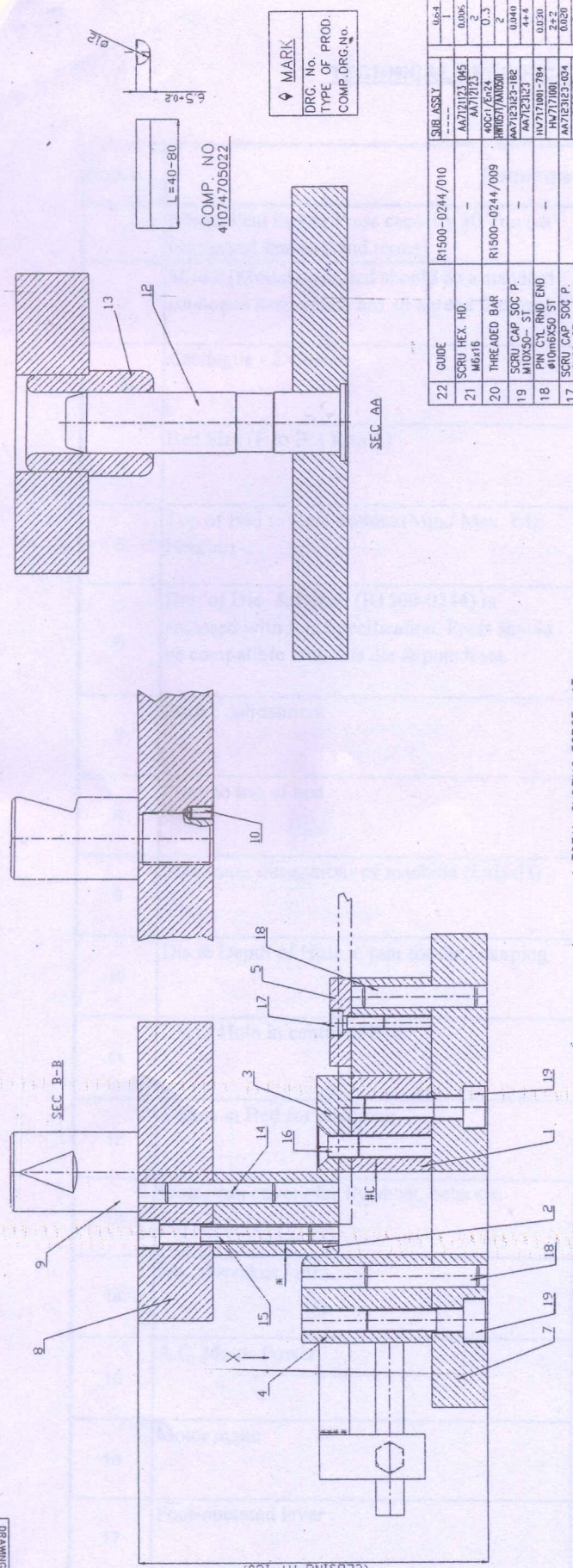

 30/01/13
 (S B Yadav)


 30/01/13
 (Ratnesh Kr.)
 Sr. Engr (WEX-6L3)


 31.1.13
 (Harpreet Pal Singh)
 ENGR/WEX

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

DRAWING No. R1500-0244



- 1 TOTAL CUTTING FORCE ~ 11.
- 2 MAINTAIN CUTTING CLEARANCE $\phi C = 0.36$ mm BETWEEN DIE AND PUNCH (AS SHOWN) AND MAINTAIN SLIDE FIT $+H7/h6$ BETWEEN PUNCH AND GUIDE BLOCKS (IT NO.4).
- 3 DIE TO BE ACCEPTED AFTER TRIAL.
- 4 DIE TO BE CONSERVED AS PER TL 30007.

THIS DRG. SUPERSEDES OLD DRG. UNDER SAME DRG. NO. DATE-10.05.2007 JTE/D/2007/013

ITEM No.	DESCRIPTION	DRAWING No.	MATERIAL SPEC.	UNIT WEIGHT	QTY.
22	GUIDE	R1500-0244/010			
21	SCRU HEX. HD. M8x18		AA712123/045	0.0096	2
20	THREADED BAR	R1500-0244/009	40Cr/524	0.3	2
19	SCRU CAP SOC P. M10x50-ST		AA712123/182	0.040	4+4
18	PIN CYL RND END $\phi 10$ m6x50 ST		AA712123/184	0.030	2+2
17	SCRU CAP SOC P. M6x20-ST		AA712123/024	0.020	2
16	COUNTER SUNK SCRU M8x30		AA712123/028	0.02	2
15	SCRU CAP SOC P. M8x50-ST		AA712123/123	0.024	2
14	PIN CYL RND END $\phi 10$ m6x50 ST		AA712123/184	0.030	2
13	GUIDE BUSH	TL 10013-04	AA110821	0.55	2
12	GUIDE COL #28	TL 10014-03	AA110821	0.98	2
11	LUC M12 GRUB SCREW M8x10	TL 10003-01	AA19356/AA10501	0.002	2
10	SHANK	TL 10005-25	AA712123/103	0.62	1
9	TOP PLATE	R1500-0244/008	AA712123/024	9.0	1
8	BASE PLATE	R1500-0244/007	AA108152082	10.0	1
7	DIE HOLDER	R1500-0244/006	AA108152082	2.2	1
6	GUIDE PLATE	R1500-0244/005	AA108152082	0.8	2
5	GUIDE BLOCK	R1500-0244/004	AA108152082	0.7	2
4	STRIPPER PLATE	R1500-0244/003	AA108152082	0.5	1
3	PUNCH	R1500-0244/002	AA108152082	1.0	1
2	DIE	R1500-0244/001	AA108152082	1.1	1

COMP. DRG. No. R1500-0244
 DESIG. DRG. No. R1500-0244
 DATE 10/05/2007

STATUS: TYPE OF PRODUCT: 500MM ST
 MATERIAL: BREL
 PART: BHARAT HEAVY ELECTRICALS LTD.
 DEPT: HARDWARE
 CODE: 26.7
 SCALE: 1:1
 DATE: 10/05/07
 JTE/D/2007/013

REV. DATE: 10/05/07
 REV. DATE: 10/05/07
 REV. DATE: 10/05/07

REVIEW AGAINST W/D
 RUSIF/10066

DATE: 10.05.2007
 JTE/D/2007/013

THIS DRG. SUPERSEDES OLD DRG. UNDER SAME DRG. NO.