



434-022

ENQUIRY

(VALVES-INDIGENOUS)

BHARAT HEAVY ELECTRICALS LIMITED
 (A Government of India undertaking)
 HIGH PRESSURE BOILER PLANT
 PURCHASE DEPARTMENT/VALVES
 TIRUCHIRAPPALLI-620 014.

Phone:0431-2520112 /
 0431-2577746
 FAX : 0431-2520383
 Email: kumudam@bheltry.co.in

ENQUIRY NO.

DATE

DUE DATE FOR
QUOTATION**R-SSV-1056****10.10.2013****01.11.2013**

Please quote Enquiry No., and due date in all correspondences

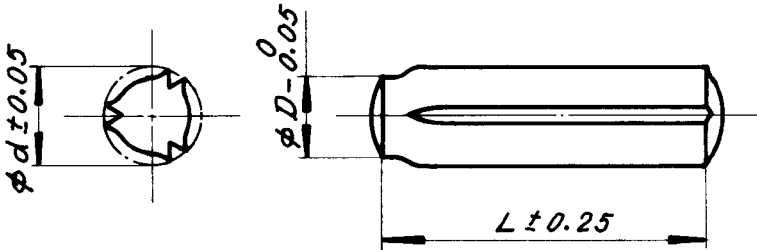
This is only a request for quotation and not an order.

SL.NO.	MATERAIAL CODE	DESCRIPTION	U N I T	QUANTITY	DELIVERY SCHEDULE		
	DRAWING NO	TDC NO.			QUANTITY	DATE	
		<p>Requirement of Fastener items – Nuts, Pins etc. as per list and drgs. Enclosed.</p> <p><u>Date, Time & Venue of tender opening-</u> 1st Nov 2013 at.14.30 hrs. at Valves/Purchase Conference hall, Bldg.24 Third floor, BHEL,Trichy-620 014, Tamilnadu State, India</p> <p><u>List of annexures-</u></p> <ol style="list-style-type: none"> 1) List of items --14 items.(1 sheet) 2) Drawings—14 nos.(14 sheets) 3) Commercial Terms and conditions To be furnished along with offer (2 pages) 4) Unpriced format 5) priced bid format <p>a) The rate of Excise Duty and sales tax,prevalent on the date of quotation should be clearly indicated in the quotation itself. b) Please submit your lowest quotation in duplicate subject to our terms and conditions on or before the due date by 14.00 hrs(IST). c) Late tenders are liable to be rejected. d) Quotation will be opened at 14.30 hrs on the due date in the presence of tenderers who may like to be present.</p>					
<p>The rate of Excise Duty and Sales Tax, Prevalent on the date of quotation, should be clearly indicated in the quotation itself. If these particulars are not provided, the quotation is liable for rejection.</p>					<p>Yours faithfully, For Bharat Heavy Electricals Limited</p> <p>N Kumudam Admn Officer (Valves Purchase)</p>		
<p>Please, submit your lowest quotation in duplicate subject to our terms and conditions overleaf, for the above materials, so as to reach us on or before the due date by 2 P.M. Quotation will be opened at 2.30 p.m. on the due date in the presence of tenderers who may like to present .</p>							
<p>Late tenders are liable to be rejected.</p>							

VAKCPW - ENQ.QTY

s.no.	Material	Material Description	DRG No/Rev No	qty
1	961621650000	SPLIT PIN-2.2x19.1 -SS-7501	4V750110188/01	1000
2	964150150000	SPLIT PIN-2.8x63 -SS303-7002	4V700210058/01	1000
3	964150490000	DRIVE PIN-3.92x50.8 -SS-9456-FLGRV	4V945613120/01	500
4	964151800000	YOKE ROD NUT-1-1/4" -GR4-7006	4V700610110/01	500
5	964155160000	YOKE ROD NUT-2" -GR4-7081	4V708110304/00	500
6	964155670000	SEALING PLUG-9096	4V909613194/03	750
7	964155680000	SEALING PLUG-9098	4V909813158/03	750
8	964155820000	COTTER PIN-7132	4V713210512/00	500
9	964158020000	CASTLE NUT-#10-32UNF-2B -7520	4V752010375/00	200
10	964158060000	CASTLE NUT-3/8"-24UNF-2B -GR4-7501-CAD	4V750110168/01	500
11	964158070000	LOCK NUT-3/8"-24UNF-2B -GR4-7501-ZINC	4V750110173/02	500
12	964158480000	EYE BOLT SPL-3/4"x86.5 -GR70-7501	4V750110164/00	200
13	964162240000	MACHINE SCREW-7000	4V700010012/03	1000
14	964162250000	MACHINE SCREW-7000	4V700010064/02	2000

REV 01	DATE 03.12.77	ALTERED	REV 02	DATE 10.3.97	ALTERED
CHECKED			CHECKED		
SL NO 04 ADDED.			DIMENSIONAL ACCURACY UPDATED.		
DCN: SR: 0184					



SL. NO.	DRG NO.	DRESSER PART NO.	MATL CODE	MATL SPECN.	DIMENSIONS			RECOMMENDED HOLE SIZE	WT/1000 PIECES-Kg
					φd	φD	L		
01	4-V-9641-13120	2030310	96415045	AISI 303 ST. ST.	4.17	3.97	44.5	3.96 ^{+0.05} / ₀	4.3
02	4-V-9405-13120	2030307	-	AISI 303 ST. ST.	4.17	3.97	22.0	3.96 ^{+0.05} / ₀	2.2
03	4-V-9434-13120	2030306	96415048	AISI 303 ST. ST.	4.17	3.97	25.4	3.96 ^{+0.05} / ₀	2.5
04	4-V-9456-13120	3030307	96415049	AISI 303 ST. ST.	4.17	3.97	50.8	3.96 ^{+0.05} / ₀	4.9

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MICROFILMED
00592



BHARAT HEAVY ELECTRICALS LIMITED
BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

DEPT VL	CODE 340	SCALE	WEIGHT (kg)	DRESSER DRG. NO. 203/303 [1329] [REV. EC.184] / [1942] [REV. ET.182]	IT. NO. 050
DRIVE PIN				DRAWN R.L.	DATE 24.9.79
				CHECKED K.B.	DATE 24.9.79
				APPROVED Dug	DATE 3.10.79

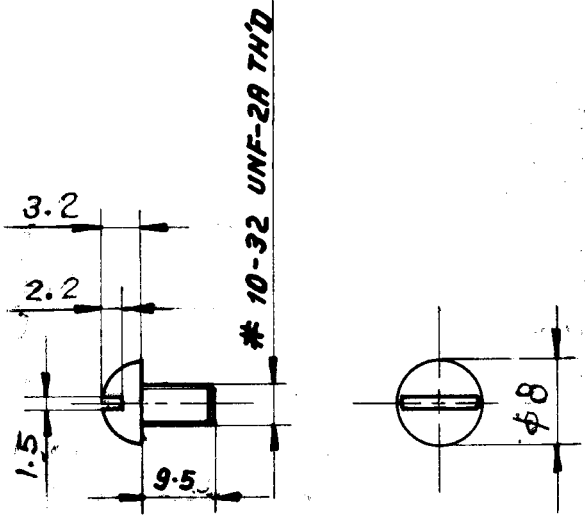
DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE ± 0.25 mm. UNLESS OTHERWISE SHOWN NON-MACHINING TOLERANCE ±

4 DRAWING NO. 4-V-0000-13120 02
15 16 REV 17

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REV 02	DATE 12.12.98	ALTERED <i>[Signature]</i>
CHECKED & APPD <i>[Signature]</i>	CHECKED <i>[Signature]</i>	
NOTES UPDATED. MATL. IS 2062 Fe410WA WAS BMC-20. DCN. NO. SV:0436		NOTES UPDATED DIMENSIONS & TOL. ROUNDED OFF DCN. NO. SV:0526

3.2



NOTES :-

1. SHARP CORNERS TO BE REMOVED
2. 45° CHAMFER FIRST THREAD
3. FINISH - ZINC PLATE

ROLL 0.0523

φ 8 x 25	15 004 197	IS 2062 Fe 410 WA CERTIFY	HEAT TREATMENT	SCRAP SORT	NET WT. (KG)	GROSS WT. (KG)	DRAWING NO.	ITEM NO.
					10	0.01	0.02	116



BHARAT HEAVY ELECTRICALS LIMITED
BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

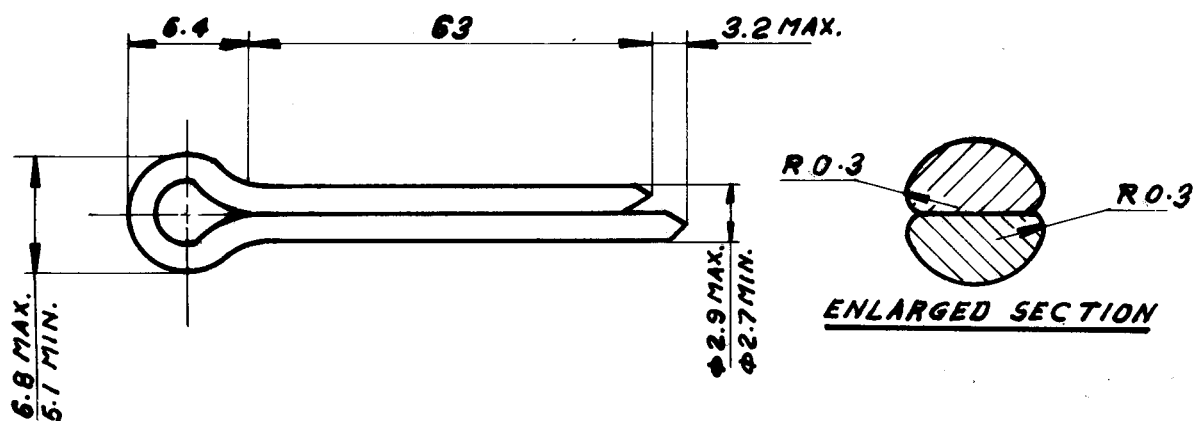
DEPT VL	CODE 340	SCALE 1:1	WEIGHT (kg)	DR-DWG-ND-STI-93-R/CY 126 PART NO. SMIR-31	SL. NO. 2615		
TITLE MACHINE SCREW				DRAWN	NAME H.R	SIGN. <i>[Signature]</i>	DATE 2-7-79
				CHECKED	VL	9	2-7-79
				APPROVED	JA	B	2-7-79

DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE ± 0.25 mm. UNLESS OTHERWISE SHOWN NON-MACHINING TOLERANCE ±

4 DRAWING No. 15 16 REV 17
CARD CODE 4-V-7000-10064 02

REV	DATE	ALTERED
02		CHECKED

DATE: 7/5/77
 CHECKED: W.
 NOTES UPDATED.
 DCN No. SV: 042B



NOTE:-

1. THIS DRG. IS AS PER STD. BPS Q1704-7301 EXCEPT MATL.
2. STAINLESS STEEL WIRE OF HALF-ROUND SECTION WITH RADIUSED CORNERS.
3. CUT THE PIN LENGTH TO SUIT ASSY.

MICROFILMED ON
 ROLL 00523 FRAME 3291

PIN SIZE ϕ 3.2	36 415 015	18-8 ST. ST. CERTIFY	46	0.01	183			
NO. OFF.	DESCRIPTION	MATL. CODE	FINAL MATL.	HEAT TREATMENT	SCRAP NET WT [KG]	GROSS WT [KG]	DRG. NO.	ITEM NO.



BHARAT HEAVY ELECTRICALS LIMITED
 BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

APPL. DRESSER TYPE NOS

DEPT YL	CODE 340	SCALE NTS	WEIGHT (kg.)	DR. DRG. NO. ST2-185A/C2372	SL. NO. 265
PART NO. 0087736					

TITLE COTTER PIN	DRAWN	NAME	SIGN	DATE
	CHECKED	VR	B	9-7-79
	APPROVED	JA	A	9-7-79

DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE \pm 0.25 mm. UNLESS OTHERWISE SHOWN NON-MACHINING TOLERANCE \pm	CARD CODE	4 DRAWING No.	15	16 REV 17
		4.V.7002-10058		

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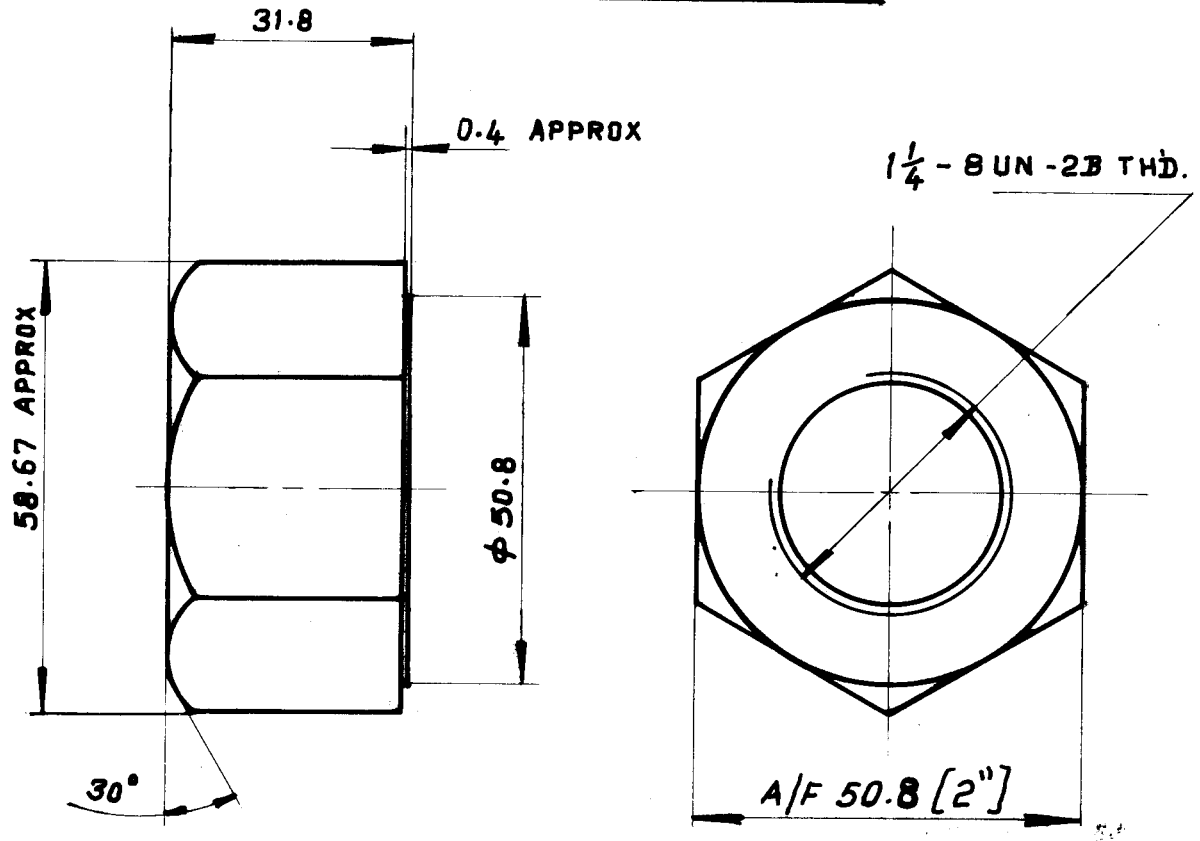
1775 QWB.1775 QWD, 1775 WA
 1785 WA. 1705 RWD



REV 01	DATE 3-7-81	ALTERED Y. PERUMAL	REV 02	DATE	ALTERED
		CHECKED <i>Y.P.</i>			CHECKED

1. MATL. ASTM A194 GR. 4 WAS ASTM A194 GR. 2H
 2. RAW MATL. SIZE $\phi 63 \times 50$ WAS A/F 50.8 X 45
 3. MATL. CODE ADDED
 4. GROSS WEIGHT 1.22 WAS 0.80

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NOTE:-

1. BEARING SURFACES SHALL BE FLAT AND AT RIGHT ANGLES TO THE AXIS OF THE THREAD HOLE WITHIN 0.300 T.I.R
2. OIL QUENCHED NUTS TO MEET ASTM SPEC. A194 GR 4 BRINELL HARDNESS 248-352
3. BREAK ALL SHARP CORNERS AND REMOVE BURRS.

MICROFILMED ON
 ROLL ~~100523~~ FRAME ~~1213~~

No OFF	DESCRIPTION	MATL. CODE	ASTM A194 GR. 4 PRODUCT ATTEST FINAL MATL.	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM NO
	$\phi 63 \times 50$	15039227			20	0.40	1.22		232

APPL. DRESSER TYPE NOS

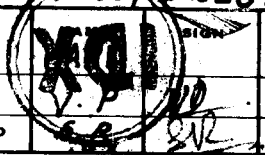
05-249/A

BHARAT HEAVY ELECTRICALS LIMITED
 BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

DEPT	CODE	SCALE 1:1	WEIGHT (kg)	DRESSER DRG No ST1-117F/EC962 PART No 5588 886/51 No 2619	
TITLE				DATE	
YOKE ROD NUT				9-1-80	
				DRAWN	4-4-80
				CHECKED	
				APPROVED	

DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE ± 0.25 mm. UNLESS OTHERWISE SHOWN NON-MACHINING TOLERANCE \pm

CARD CODE	4 DRAWING No.	15	16 REV 17
	4-V-7006-10110		

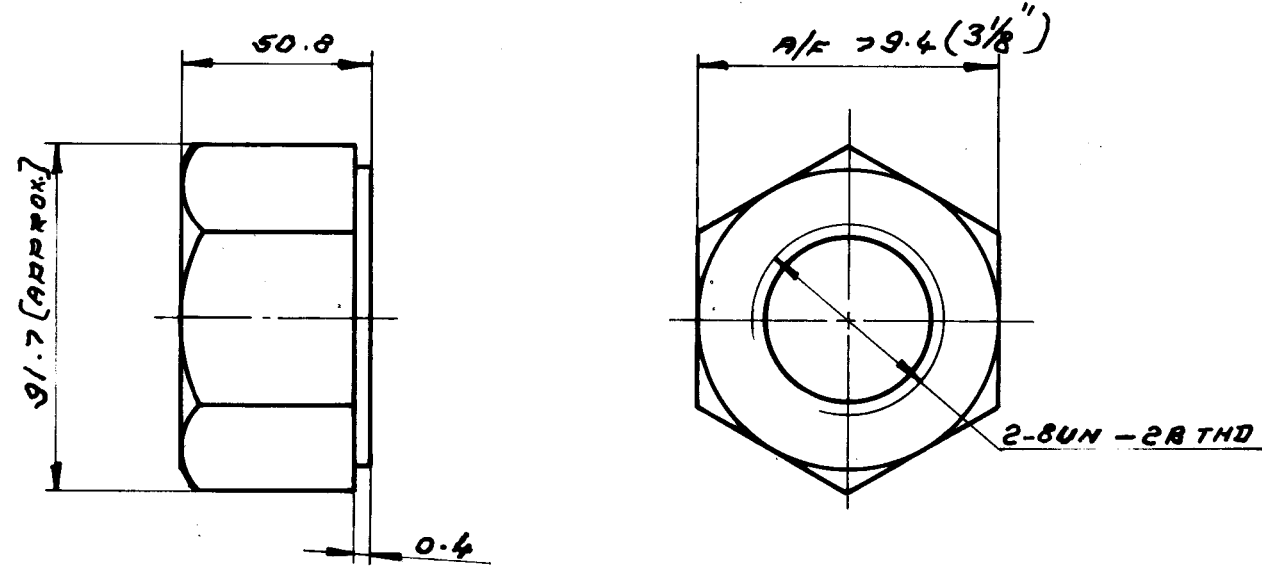


FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)

REV 02	DATE	ALTERED
CHECKED		CHECKED

3.2

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NOTE:

1. BEARING SURFACES SHALL BE FLAT AND AT RIGHT ANGLES TO THE AXIS OF THE THREAD HOLE WITHIN 0.304 T.I.R.
2. OIL QUENCHED NUTS TO MEET ASTM SPEC. A194 Gr. 4 BRINELL HARDNESS 248 - 352.
3. SHARP CORNERS TO BE REMOVED.

MF 758023

No OFF	DESCRIPTION	MATL. CODE	FINAL MATL.	HEAT TREATMENT	SCRAP SORT	NET Wt. (kg)	Gross Wt. (kg)	DRG No.	ITEM No.
	Φ100X60	(FORGED BRASS) ASTM A194 FROM Φ80) 15039 344 OR 96415 516	Gr. 4 PRODUCT ATTEST		20	1.37	3.69		231

Bharat Heavy Electricals Ltd.,
 BOILER PLANT UNIT
 TIRUCHIRAPALLI-620 014

DRN	NAME	SIGN	DATE
CHD	V. PERUMAL	V. Perumal	10-2-84
APPD	S. RASHID	S.R.	22-1-84

DEPT.	GRADE OF UNTOL. DIM	SCALE	WEIGHT (kg)	DR. DRG. No: ST/117-117-89
CODE	C/M/F	1:2		PART No: 5355
				SL. No: 6237

TITLE	CARD CODE	DRAWING NO.	REV
YOKE ROD NUT	U 01	4-V-7081-10304	

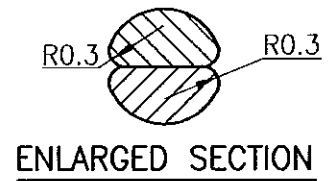
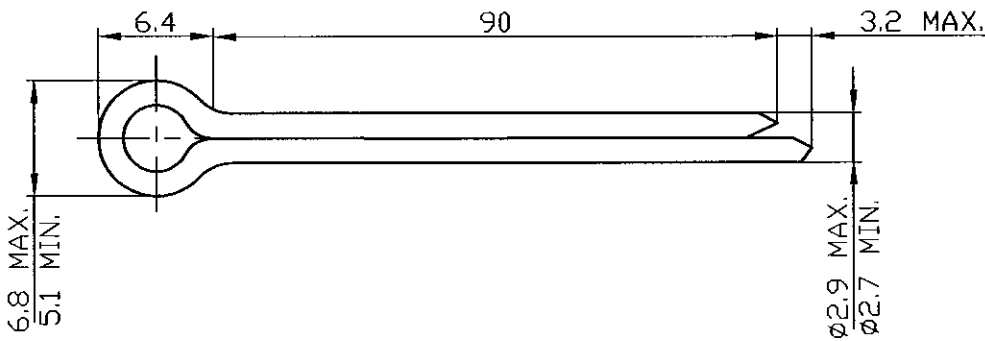


TP-DG-4-V-7081-10304

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS


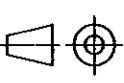
ALL DIMENSIONS ARE IN MILLIMETRES.
DURING MANUFACTURE REFER RELEVANT QCP/QP

REV	DATE	ALTERED
		CHD & APPD



NOTE:

1. STAINLESS STEEL WIRE OF HALF-ROUND SECTION WITH RADIUS CORNERS.
2. CUT THE PIN LENGTH TO SUIT ASSY.

	PIN SIZE $\phi 3.2$	96415582	18-8 ST.ST. CERTIFY	-	46	0.02	-	-	181
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
 365-122	BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI 620014.			DRN	L.RENGA SWAMY	SIGN	DATE	NO. OF VAR	
				CHD	V.PERUMAL PILLAI		10.07.03		
				APPD	E.ATHIANNAVI		10.07.03		
DEPT VL		 SCALE NTS	WEIGHT (KG).	REFERENCE INFORMATION				NO. OF ITEMS	
CODE 340				DR.DRG.No.:222/EX365 PART No.:2220219/SL.No:10504					
TITLE				CARD CODE	DRAWING NO.			REV	
COTTER PIN				U 01	4-V-7132-10512				

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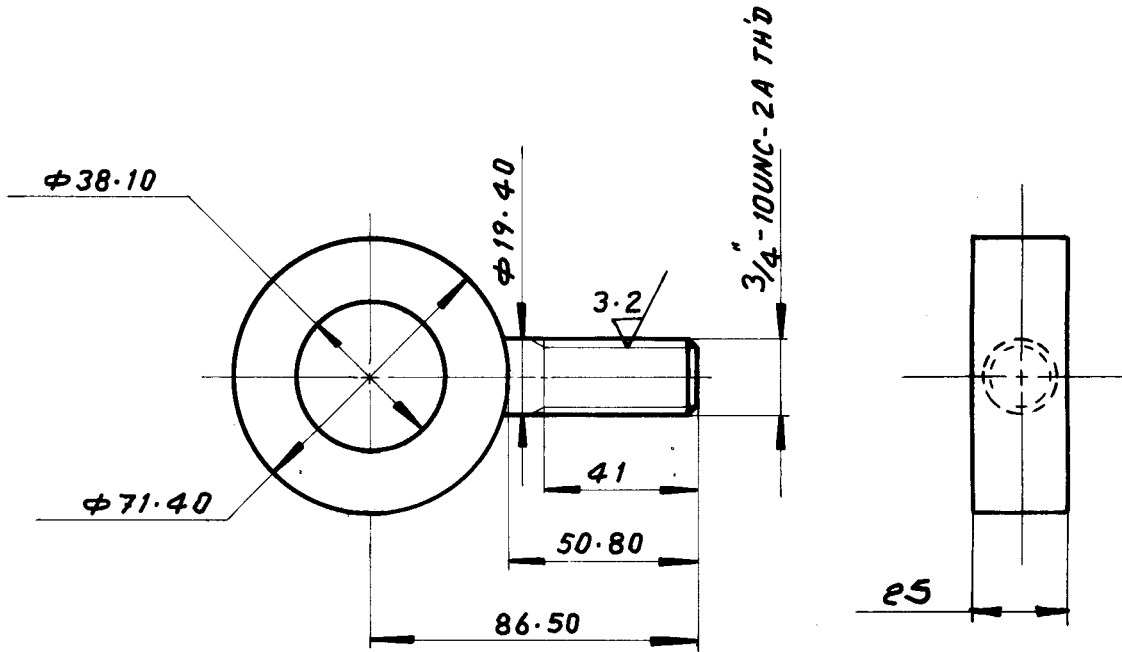
FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)

TP-DG-4-V-7501-10164
CORPORATE DRG ID

REV 01	DATE	ALTERED
02		CHECKED

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25 ✓ / 3.2 ✓



NOTES:-

1. 45° CHAMFER FIRST THREAD.
2. SHARP CORNERS TO BE REMOVED
3. UNSPECIFIED MACHINING TOLERANCES ± 0.25 mm.

MICROFILMED ON
ROLL 150518 FRAME 222

504	135 x 85 - t = 25	15 042 714	C 10	0.70
		SA 515 GR. 70 NORMALISED		2.20
ITEM NO.	DESCRIPTION	MATL CODE	A	NET WT. (kg)
		MATL SPEC	C	GROSS WT. (kg)



Bharat Heavy Electricals Ltd.,
BOILER PLANT UNIT
TIRUCHIRAPALLI-620 014

DRN	NAME E.ATHIANNAVI.	SIGN <i>E. Athianavi</i>	DATE 26.2.81
CHD	K. B	K. R. S.	
APPD	S. R.	<i>S. R.</i>	

DEPT.	TOL. FOR UNTOL. DIM. IS ± 0.4		SCALE 1:2	WEIGHT (kg)	DRESSER DRG. NO. 430481 (236) REV. CK 289	ITEM NO. 504
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TITLE EYE BOLT	CARD CODE U 01	DRAWING NO. 4-V-7501-10164	REV
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TP-DG-4-V-7501-10164
CORPORATE DRG ID

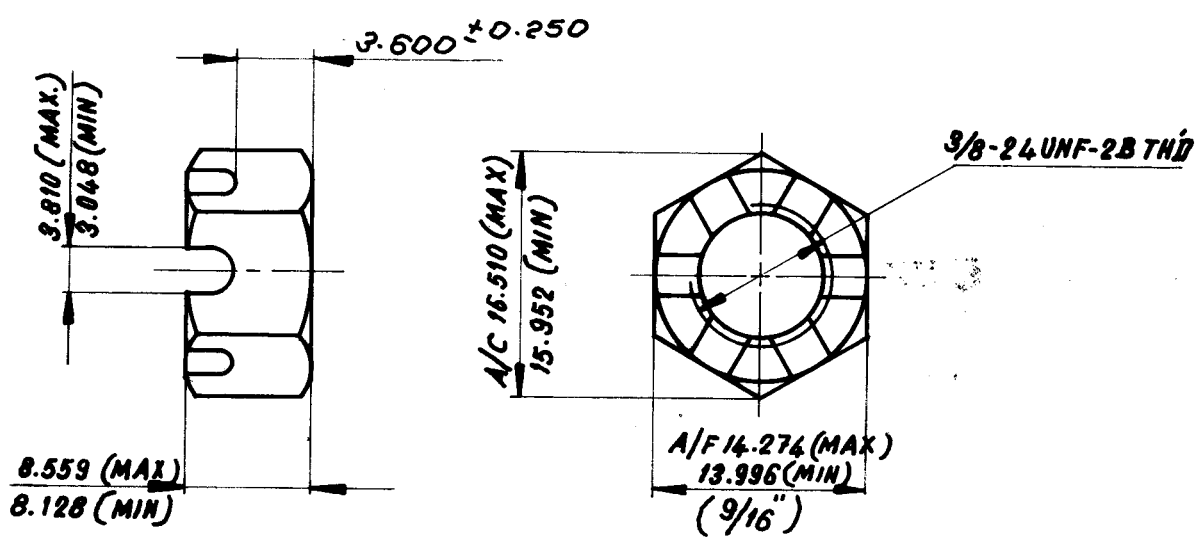
FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)

P-DG 4-V-7501-10168
CORPORATE DRG ID

PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. THIS DRAWING IS TO BE USED DIRECTLY OR INDIRECTLY IN CONNECTION WITH THE BUSINESS OF THE COMPANY

REV	DATE	ALTERED	REV	DATE	ALTERED
01	01-04-81	CHECKED	02		CHECKED
V. Perumal					
L. N. Raju					
OMAC CODE ADDED.					

3.2



NOTES:-

1. SHARP CORNERS TO BE REMOVED.
2. 45° CHAMFER FIRST THREAD.
3. CADMIUM PLATED DICHROMATE-BIPPED.
4. TREATED NUTS TO MEET ASTM. SPEC. A194. GY. 4 BRINELL HARDNESS 248 - 352 BHN

MICROFILMED ON
ROLL 50522 FRAME 11

φ 25 x 15	15 039 221	ASTM A194 GY. 4	QUENCHED & TEMPERED	20	0.01	0.06	507		
NO. OFF	DESCRIPTION	MATL. CODE	FINAL MATL.	HEAT TREATMENT	SCRAP WT. (KG)	NET WT. (KG)	GROSS WT. (KG)	DRG. NO.	ITEM NO.



Bharat Heavy Electricals Ltd.,
BOILER PLANT UNIT
TIRUCHIRAPALLI-620 014

DRN	NAME	IGN.	DATE
CHD	M. RAJA	M. Raja	11-03-81
APPD	V. PERUMAL	V. Perumal	11-3-81
	S. RASHID	S. Rashid	11/3/81

DEPT. YL	GRADE OF UNTOL. DIM φ/M/F	SCALE 2:1	WEIGHT (kg)	DR. DRG. NO. VA 814 / CE 606
CODE 340				PART NO. 1A814C / SL.No. 577

TITLE	CARD CODE	DRAWING NO.	REV
NUT	U 01	4-V-7501-10168	01



P-DG 4-V-7501-10168

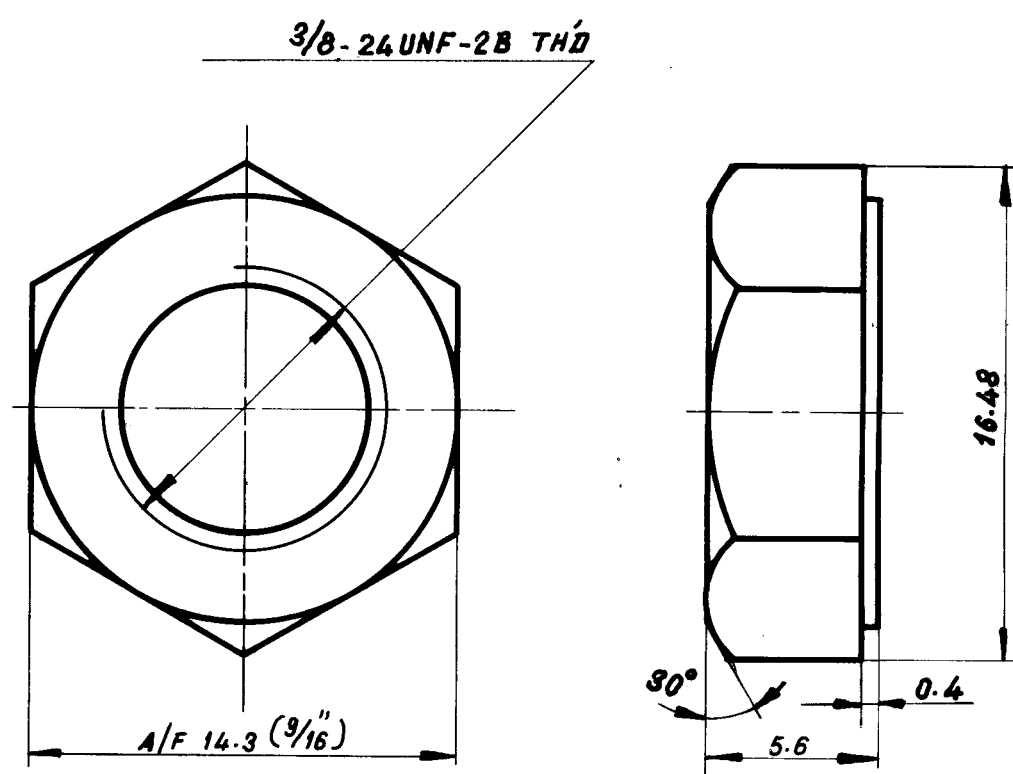
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REV 01	DATE 13.7.80	ALTERED V. PERUMAL	CHECKED <i>[Signature]</i>
REV 02	DATE 20.6.97	ALTERED <i>[Signature]</i>	CHECKED/APPD: <i>[Signature]</i>

1. MATL. ASTM A194 Gr. 4 WAS ASTM A194 Gr. 2
2. RAW MATL. SIZE ϕ 25 X 20 WAS A/F 14.3 X 15
3. MATL. CODE 15039221 ADDED
4. GROSS WL. 0.08 WAS 0.02

NOTES UPDATED.
 DCN. NO. SV: 0436

3.2 / ∇



NOTES:-

1. SHARP CORNERS TO BE REMOVED.
2. 45° CHAMFER FIRST THREAD.
3. UNSPECIFIED MACHINING TOLERANCES \pm 0.25 mm.
4. TREATED NUTS TO MEET ASTM SPEC. A 194 Gr 4 BRINELL HARDNESS 248-352
5. FINISH - ZINC PLATE.

MICROFILMED ON
 ROLL 00523 FRAME 21A

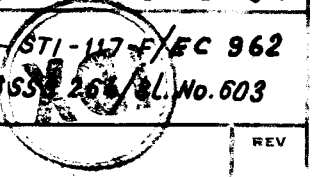
ϕ 25 x 20	15039221	ASTM A194 Gr. 4 CERTIFY	—	20	0.007	0.08	—	512	
NO. OFF	DESCRIPTION	MATL. CODE	FINAL MATL.	HEAT TREATMENT	SCRAP SORT	NET WT. (kg)	GROSS WT. (kg)	DRG. No.	ITEM No.



Bharat Heavy Electricals Ltd.,
 BOILER PLANT UNIT
 TIRUCHIRAPALLI-620 014

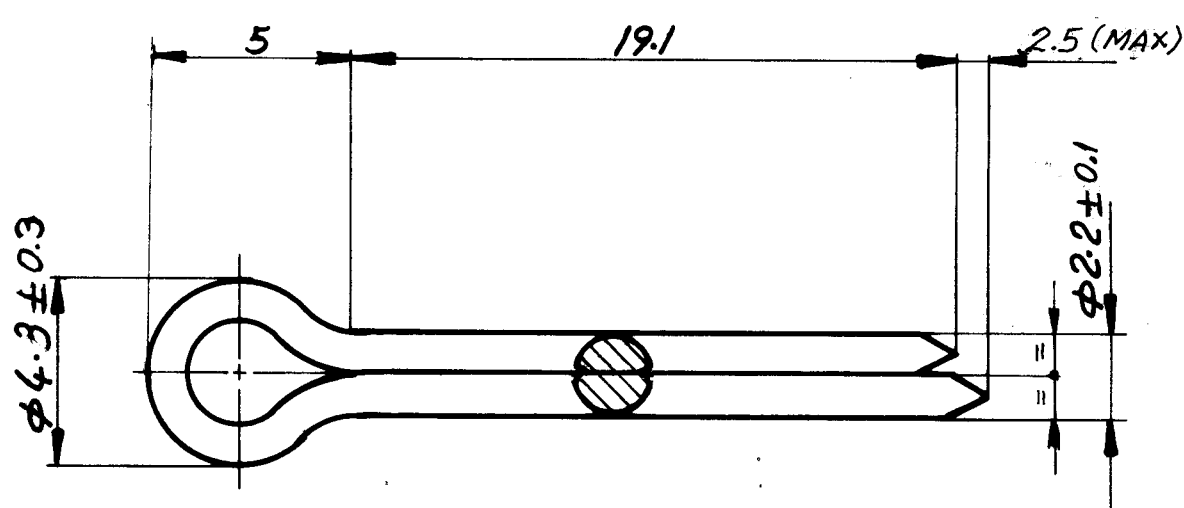
DRN	M. RAJA	M. Rajan	18-03-1981
CHD	V. PERUMAL	V. Perumal	18-03-1981
APPD	S. RASHID	<i>[Signature]</i>	18-03-1981

DEPT. VL	GRADE OF UNTO. DIM ϕ /M/F	SCALE NTS	WEIGHT (kg)	DR. DRG. No. - STI-117-F/EC 962
CODE 340				PART No. - SSS 26/SL No. 603
TITLE NUT			CARD CODE U 01	DRAWING NO. 4-V-7501-10173 02



FOR TOLERANCES OF DIMENSIONS REFER TO THE RELEVANT ISIRI SPECIFICATIONS

REV	DATE	ALTERED	REV	DATE	ALTERED
01	28/07/75	10188	02		
CHECKED			CHECKED		
NOTES UPDATED.					
DCN. No. SV: 0438					




NOTES:-

1. MATERIAL:- 18-8 ST. STEEL.
2. THIS COMPONENT CORRESPONDS TO IS:549. NOM. SIZE 2.3, EXCERPT MATL.
3. ST. STEEL WIRE OF HALF ROUND SECTION WITH RADIUSED CORNERS.
4. CUT THE PIN LENGTH TO SUIT ASSY.

CODE:- 96162165

MICROFILMED ON
 ROLL OVER 23 FRAME JOB

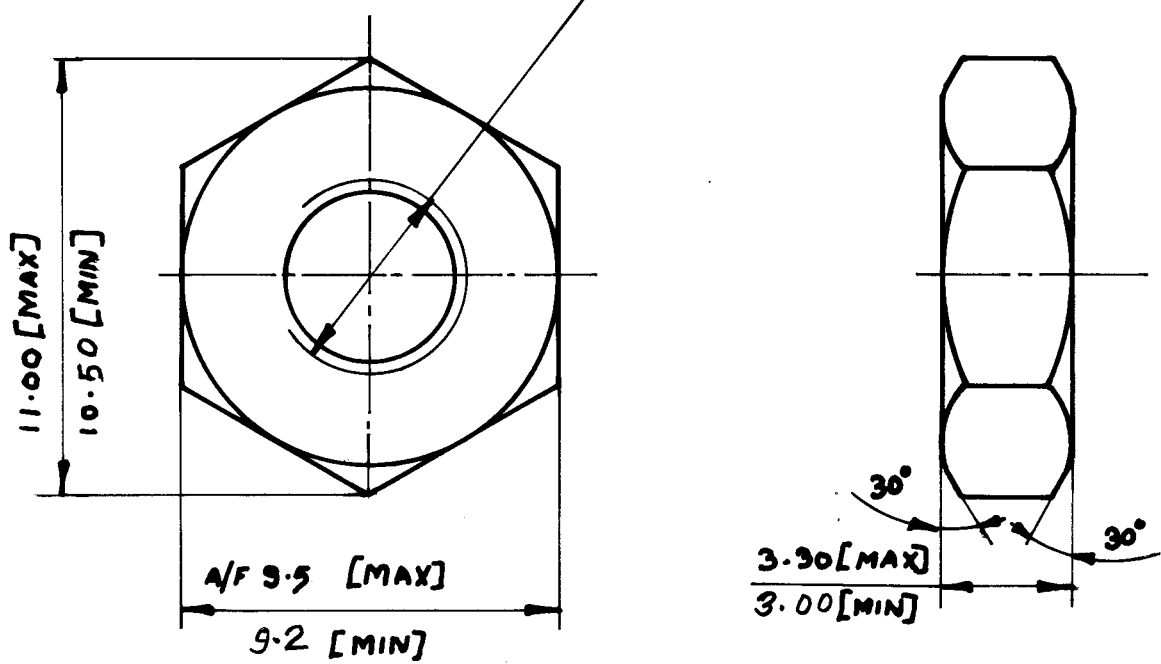
 Bharat Heavy Electricals Ltd., BOILER PLANT UNIT TIRUCHIRAPALLI-620 014	DRN	NAME	SIGN	DATE
	CHD	K.B	K. K. K.	4-3-81
	APPD	J.A	A	4-3-81
DEPT. VL	GRADE OR UNTOQ DIM	SCALE	WEIGHT (kg)	DRESSER DRG No:- SEP-185-A PARTNO:- 12-185A-56606Z (REV:-CZ 372)
CODE 340	C/M/F	5:1	0.71/1000 PIECES	
TITLE	CARD CODE	DRAWING NO.	ITEM NO.	
COTTER PIN	U 01	4-V-7501-10188/01	527	

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P-DG 40V-7501-10188 CORPORATE DRG ID
 P-DG 40V-7501-10188 CORPORATE DRG ID

3.2
▽

10-32 UNF-2B TH'D



NOTES :

1. SHARP CORNERS TO BE REMOVED
2. 45° CHAMFER FIRST THREAD

		φ 12 X 10	15 339 363	SA 105	NORMALISED	10	0.002	0.005		510	
NO. OF PIECES	NAME - DIMENSIONS	MATL CODE	FINAL MATERIAL	HEAT TREATMEN	SCRAP SORT	NET Wt (kg)	GROSS Wt (kg)	DRAWING NO.	ITEM NO.		
REMARKS					TOTAL NET Wt (kg)						
SCALE	DRAWN	A. VELUSAMY		TRANS. COPY NO.	ALTERATIONS	DATE	SIGNATURE	ALTERATION INDEX			
	CHECKED	V. Perum Pillai									
	APPROVED	[Signature]									
	STDS. OFFICER	[Signature]									
	DATE	20-3-89									
DRESSER DRG. NO. 221/EX384		PART NO. 2210120 / SL. NO. 8925, 8926									
TYPE		GROUP		OLD DRG.		NEW DRG.					
TITLE		NUT		DRAWING NO. 4-V-7520-10375							

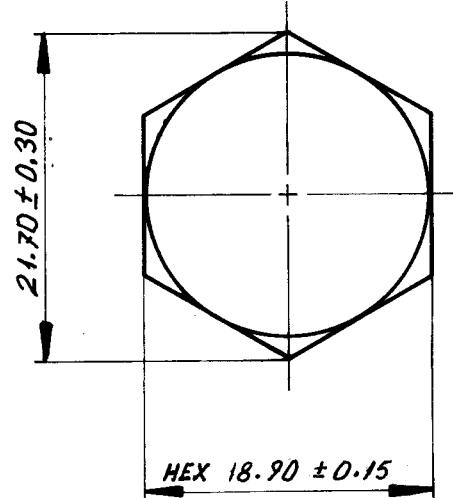
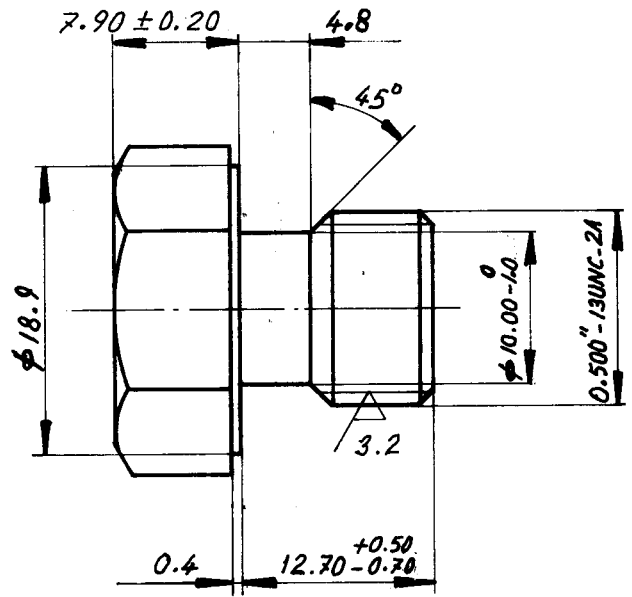
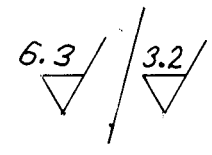


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REV	DATE	ALTERED	REV	DATE	ALTERED
01	4.8.81	K.N. Ramani	02	5.10.81	K.N. Ramani
		CHECKED <i>[Signature]</i>			CHECKED <i>[Signature]</i>

REV	DATE	ALT:
03	10.3.97	M.H.
CHD. & APPD. <i>[Signature]</i>		
NOTES UPDATED.		
DCN:SR: 0184		

1. RAW MATL. ASTM A 194 Gr.4 WAS BMCQ-45 AND ITS DETAILS CHANGED
2. HARDNESS: 24-38 HRC WAS 190-240 BHN.

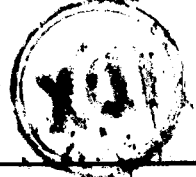


NOTE:-

1. 45° CHAMFER FIRST THREAD.
2. HARDNESS:- 24-38 HRC
3. PHOSPHATE COAT AS PER APPLICABLE QUALITY PROCEDURE.

MICROFILMED ON

005214 4/12



01	BAR φ32x26	15039222	Q&T	ASTM-A194-Gr.4	10	0-01	0-16	93075594	158
NO OFF	DESCRIPTION	MATL. CODE	HEAT TREATMENT	MATL. SPECN (CERTIFY)	SCRAP SORT	NET WEIGHT	GRDS (HECKD)	COMP. CODE	ITEM NO



BHARAT HEAVY ELECTRICALS LIMITED
BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

05-249/A

DEPT	CODE	SCALE	WEIGHT (kg)	REF. TO ASSY. DRG.	IT.No.
VL	340	2:1	0.01		

TITLE	DRAWN	NAME	SIGN	DATE
	CHECKED	K.B	K. [Signature]	23/04/80
	APPROVED	D.K	[Signature]	16/5/80

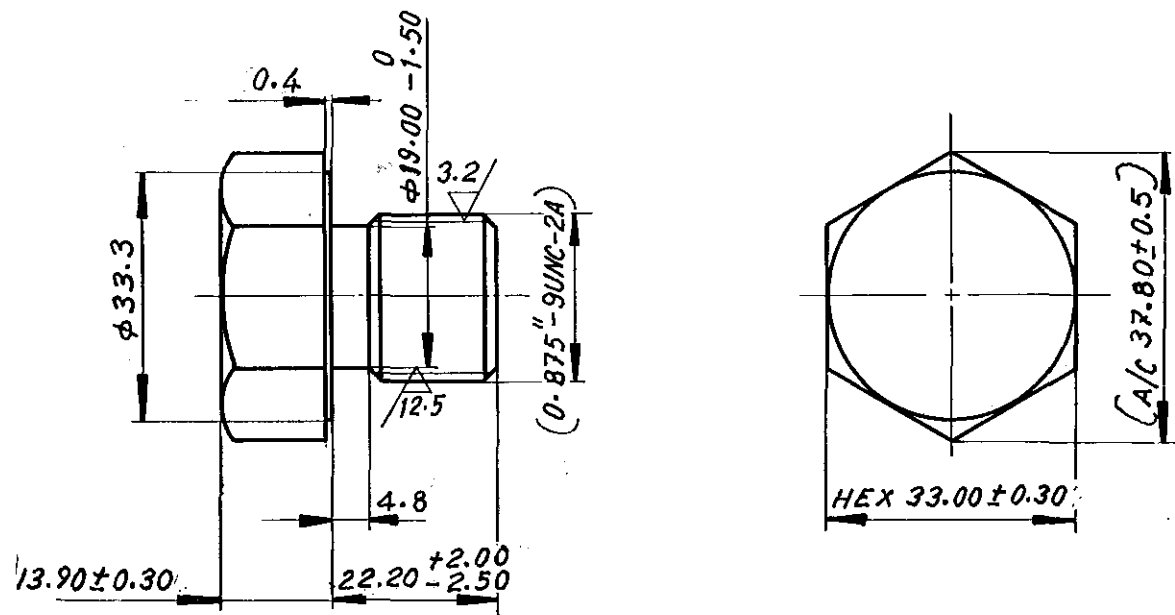
SEALING PLUG

DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE ± 0.25 mm UNLESS OTHERWISE SHOWN. NON-MACHINING TOLERANCE ±

CARD CODE	4 DRAWING NO.	15	16 REV 17
	4.V.9096.13194		03

REV 01	DATE 4.8.81	ALTERED K.N. Ramu	CHECKED	REV 02	DATE 5.10.81	ALTERED K.N. Ramu	CHECKED	REV 03	DATE 10.3.97	ALT: M	END APPR
1. RAW MATL. BMCQ-45 WAS IS: 1367 CLASS 6-6 2. NOTES: 2 & 3 ADDED.				1. RAW MATL. ASTM A194-Gr.4 WAS BMCQ-45 AND ITS DETAILS CHANGED 2. HARDNESS 24-38 HRC WAS 190-240 BHN.				NOTES UPDATED. DCN: SR: 0184			

6.3 / 12.5 / 3.2



NOTE:-

- 45° CHAMFER FIRST AND LAST THREAD.
- HARDNESS : 24-38 HRC.
- PHOSPHATE COAT AS PER LATEST APPLICABLE QUALITY PROCEDURE.

RECORDED ON
CO522 509

01	BAR ϕ 40 x 43	15039340	Q&T	ASTM A194-Gr 4	10	0.16	0.42	93076030	158
No. OFF	DESCRIPTION	MATL. CODE	HEAT TREATMENT	MATL. SPECN. (CERTIFY)	SCRAP SORT	NET WT. (kg)	GROSS WT. (kg)	COMP. CODE	ITEM NO.



BHARAT HEAVY ELECTRICALS LIMITED
BOILER PLANT UNIT, TIRUCHIRAPALLI-620014

DEPT VL	CODE 340	SCALE 1:1	WEIGHT (kg) 0.16	DRESSER DRG. No. 251437. (454)	IT. NO. 158	
TITLE			DRAWN	NAME E. ATHI ANNAYI	SIGN	DATE 16.5.80
SEALING PLUG			CHECKED	K. B.	K. B.	16.5.80
			APPROVED	D. K.	D. K.	16/5/80

DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN. MACHINING TOLERANCE \pm 0.25 mm. UNLESS OTHERWISE SHOWN NON-MACHINING TOLERANCE \pm	CARD CODE	DRAWING NO. 4-V-9098-13158	15	16 REV 17	03
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BHARAT HEAVY ELECTRICALS LIMITED
High Pressure Boiler Plant
Tiruchirapalli 620 014

PURCHASE VALVES

INDIGENOUS ENQUIRY

TERMS AND CONDITIONS

1. QUOTATIONS :

- a. Each tender should be sent in double cover, should be sealed and super scribed with correct Tender No., item of supply and due date of opening. The outer cover should only bear the address of this office and should not have any indication that a tender is within. Two or more quotations should not be sent in one cover but the quotation against each tender should be sent separately to avoid confusion. Tender should not be addressed to any individual's name but only by designation.
- b. Tenders should be free from CORRECTION AND ERASURES. Corrections if any must be attested.

All amounts shall be Indicated in both words as well as figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
- c. Price should be F.O.R. dispatching station inclusive of risk in transit and remain valid for one year from the due date.
- d. If any Sales Tax is payable as extra to the quoted price, it should be specifically stated in quotation along with CST & T.N.G.S.T No. failing which the purchaser will not be liable for payment of Sales Tax.

Our TIN No. 33243560005 dated 01-01-2007 & C.S.T. No. 259383 Dt. 11.06.1991. ECC No.AAACB4146 PXM012.
- e. Once Tenders opened, no revision of prices will be entertained.
- f. Manufacturer's name, Trade Mark or Patent No. if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation wherever necessary.
- g. Products with I.S.I. certification marks will be preferred.
- h. The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever.

2. SAMPLES :

Wherever possible samples should be submitted separately whether specifically requested or not so as to reach the purchaser on or before its due date of the enquiry. They should be clearly marked with the enquiry No. and the date on the outside cover to facilitate identification.

3. The supplier shall arrange for securely protecting and packing the stores to avoid lose or damages during transit..

4. **TERMS OF PAYMENT :**

Payment will be made after 45 days after acceptance of materials at our stores / site. Where required by the purchaser, the successful tenderer must send the operation and maintenance manuals, test certificates, drawings, etc., for the materials should be sent immediately after dispatch of the materials and a statement to that effect should be made in the Invoice. Failure to comply with this provision will result in delay in payment of the bills. Goods will be dispatched either by V.P.P. or by thro' document are presented through bank will not be accepted unless agreed to by the Purchaser.

The Original Excise Duty Gate Pass or certified extract Form Excise Duty Ledger should be accompanied with the material. A Photostat copy of the above Gate Pass for each delivery challan should be submitted along with the original bills routed through bank or submitted directly to BHEL Department.

5 **SECURITY DEPOSIT : NOT APPLICABLE**

6 **LIQUIDATED DAMAGES :**

Time is the essence of the Contract. Therefore, the delivery of the goods specified in the purchase order should be made with in the time prescribed.

Where the seller supplies or despatches the goods beyond the delivery period specified the purchaser would have no obligation to accept the goods.

If accepted liquidated damages at the rate of 0.50 % of the value of goods delayed for each week of delay or part thereof will be levied without prejudice to any other relief of compensation due to the purchaser under any other condition of this contract.

7. **RISK PURCHASE :**

Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss, which the purchaser may sustain by reason for such risk purchases in addition to penalty at the rate mentioned in clause 6 above.

8 **PREFERENTIAL DELIVERY :**

It should be noted, if a contract is placed on a higher tender as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price

F.O.R. destination, including all elements of freights, sales tax, duties and other incidents, incidental in case of failure to complete supplies. In terms of such contract within the date of delivery specified In the tender and incorporated in the contract.

9 **MODVAT / CREDIT :**

If any Excise Duty is payable, the chapter head/sub-head reference and the rate of the duty should be quoted. If the tender is availing MODVAT credit for his input materials, the effect of proforma invoice should be passed on to the purchaser, Tenderer under MODVAT shall be preferred.

10 **GENERAL :**

The Purchaser reserves the right to split up the tender and place order for individual items with different tenders and also increase or decrease the quantity.

Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by Purchaser will not be applicable to the contract.

(File : Enq-Terms & Conditions – Indigenous Enq.)



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant

Tiruchirappalli 620 014

PURCHASE VALVES

TERMS AND CONDITIONS IMPORT ENQUIRY

I OFFER

Offer in ENGLISH LANGUAGE and in TRIPLICATE in a SEALED COVER SUPERSCRIBING the Enquiry Number and the due date shall be submitted addressed to

THE DY. MANAGER
PURCHASE VALVES
BHARAT HEAVY ELECTRICALS LIMITED
HIGH PRESSURE BOILER PLANT
TIRUCHIRAPPALLI - 620 014
TAMIL NADU, INDIA

Offers should be firm for net FOB Nearest AIR / SEA Port price and C & F Madras Port price, indicating the shipping specifications and the earliest delivery in respect of offers from overseas suppliers. Offers from indigenous sources shall be firm for FOR / TIRUCHIRAPPALLI.

II : DOCUMENTS

- (i) Offers should be accompanied by detailed technical literature, Catalogue and detailed dimensional drawings in ENGLISH and in TRIPLICATE, or otherwise, the offers will not be considered.
- (ii) In case overseas suppliers route their offer through their accredited selling agents, a letter of authority should be furnished mentioning the name and address of their selling agents who are authorised to bid, negotiate and conclude a Contract on their behalf.

III AGENCY COMMISSION:

- (i) In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the proforma invoice and this will be paid by us in India, in Indian Rupees, on satisfactory completion of the Contract.
- (ii) If Overseas Principal has any tie up with any third party in respect of Agency Commission it should be declared while submitting the offers.
- (iii) Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished along with order, if not made available earlier.
- (iv) For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of order will be taken.

IV SPARES:

The tenderer should quote separately for spares that are required for two years trouble free operation. The spares offer should accompany the offer of main equipment; otherwise the quotation will be overlooked.

V VALIDITY:

The offers for main equipment and spares shall be kept open for acceptance for One year from the date of opening of the tender.

VI TEST CERTIFICATES, OPERATING AND MAINTENANCE MANUALS:

The tenderer shall clearly mention in their offer, that the Test Certificate and Operating and Maintenance Manuals, etc., as called for in the technical specification, in the required number of copies will be provided at no extra cost. If any amount is payable as extra, the same shall be indicated separately in the offer.

VII TERMS OF PAYMENT:

In the event of an order, the purchaser will arrange for an irrevocable letter of credit against presentation of documents. Under no circumstances the Purchaser will establish confirmed and irrevocable letter of credit.

VIII GENERAL:

- (i) Preference will be given to suitable indigenous or ex-stock imported offers failing which imported offers from incoming consignment against the indigenous supplies "Stock and sale licence" will be accepted. If "stock and sale licence" is not available with the indigenous suppliers, the same shall be indicated in their offer.
- (ii) **Bank Guarantee** : The supplier in the event of an order, should furnish a Bank Guarantee from an approved Bank at no extra cost in a proforma which will be Supplied to the Supplier, along with the order, for an amount equivalent to 10% of the value of the contract. The Bank Guarantee should remain in full force and effect during the period that would be taken for successful completion of the contract and shall continue to be enforceable till 12 months from the date of receipt of consignment at purchaser's site or 18months from the date of last shipment at the Port of Delivery whichever is earlier.

IX LD / PENALTY AND INTEREST ON ADVANCES FOR DELAY IN DELIVERY:

"If the supplier fails to deliver the Raw Materials / equipment / components within the period specified in the contract the Purchaser shall deduct Liquidated Damages a sum equivalent to 0.5% of the price for each week of delay upto a maximum of 15% of the price of the delayed / undelivered goods, in addition to the recovery of interest at normal cash credit rate plus 2% for the unadjusted portion of the advances. If the delay in delivery of a part contributes to delay in execution of total system, LD and interest on advances will be recovered on the total contract price / total advance paid"



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant

Tiruchirapalli 620 014

PURCHASE VALVES

(To be filled and submitted along with Offer)

BHEL Commercial Terms and Conditions for INDIGENIOUS SUPPLIES FOR RC TWO BID SYSTEM

To be furnished along with offer

Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.		Vendor's Confirmation / Comments
Tender opening	<p>Tender opening consists of two part systems viz:</p> <ol style="list-style-type: none"> 1. Techno Commercial Bid & 2. Price Bid. <p>Techno Commercial Bid will be opened First.</p> <p>After scrutiny and evaluation of Techno Commercial offers, the Price bid will be opened with due intimation to vendors.</p> <p>Each tender should be sent in double cover, should be sealed and super scribed with correct Tender No., item of supply and due date of opening.</p> <p>The outer cover should only bear the address of this office and should not have any indication that a tender is within.</p> <p>Two or more quotations should not be sent in one cover but the quotation against each tender should be sent separately to avoid confusion.</p> <p>Tender should not be addressed to any individual's name but only by designation.</p>	
Prices :	Prices shall be quoted item/s wise & FIRM PRICE basis only as per the BHEL Enquiry.	
Delivery Terms :	FOR / BHEL / TRICHY basis inclusive of P & F, insurance and other charges if any.	
Validity of offer :	Minimum for a period of one year from the date of Tender opening / Finalization of tender.	
Delivery period :	Indicate the early delivery period in the offer	

Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.		Vendor's Confirmation / Comments
Excise Duty :	Indicate the Excise duty and Cess in the offer clearly if applicable.	
Tax Details :	Indicate the CST - details in the offer clearly if applicable.	
Tax Details :	Indicate the VAT - details in the offer clearly if applicable.	
Liquidated damages :	LD @ 0.5 % per week subject to a maximum of 10% of the order value shall be levied for delayed supplies.	
Payment terms :	100% payment will be made after 45 days on acceptance of materials at our Stores.	
Inspection :	Final inspection by BHEL Inspector at BHEL, Trichy.	
Risk Purchase clause	Risk Purchase shall be applicable as per BHEL Terms and Conditions. The Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore.	
Risk Purchase clause :	The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases	
Guarantee :	The equipment shall be guaranteed for a period of 12 months from the date of commissioning.	
Documents:	The vendor shall provide necessary Invoice, Delivery challan, drawings, Test Certificates and Operating Maintenance Manuals and etc., as called for in the Technical Specification, in the required number of copies at no extra cost.	
Offers :	Offers should be submitted only in a sealed cover super-scribing clearly the Enquiry reference and due date.	
NOTE :-	It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.	

Signature & Office Seal of the vendor



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant

Tiruchirapalli 620 014

PURCHASE VALVES

(To be filled and submitted along with Offer)

BHEL Commercial Terms and Conditions for IMPORT SUPPLIERS		Vendor's Confirmation / Comments
Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.		To be furnished along with offer
Prices shall be quoted item wise only as per the BHEL'S Enquiry.		
Tender opening Route :	Tender opening consists of two part systems viz: 1. Techno Commercial Bid & 2. Price Bid. Techno Commercial Bid will be opened First. After scrutiny and evaluation of Techno Commercial offers, the Price bid will be opened with due intimation to vendors.	
Prices shall be quoted on " FIRM PRICE " basis only. The prices should be only on FOB/FCA basis inclusive of Packing & Forwarding charges if any.		
Validity of offer shall be for a minimum period of ONE YEAR from the date of finalization of order.		
Delivery period from the date of Letter of Intent shall be clearly mentioned in the offer.		
Liquidated damages @ 0.5 % per week subject to a maximum of 10% of the order value will be levied for delayed supplies..		
Following Risk Purchase clause shall be applicable: The Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available , the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.		

BHEL Commercial Terms and Conditions for IMPORT SUPPLIERS	Vendor's Confirmation / Comments
<p>Payment terms for Foreign vendor (Principal):</p> <p>100% value of the goods will be paid through an irrevocable Letter of Credit / On Collection basis established by our bankers. Performance Bank Guarantee for 10% of total Purchase order value shall be submitted. All bank charges outside India are to vendor's account only.</p>	
<p>Payment terms for Indian Agent:</p> <p>Indian Agency commission, if any, shall be clearly specified in the offer and the same will be paid in Indian Rupees against acceptance / commissioning of the equipment.</p>	
<p>Submission of Performance Bank Guarantee (PBG):</p> <p>Vendor should provide a performance bank guarantee(PBG) for 10% of the total Purchase order value valid for a period of 12 months from the date of commissioning (or) 18 months from the date of dispatch whichever is later with an additional claim period of 2 months. This PBG shall form part one of the documents for effecting the 100% payment.</p>	
<p>Part Shipment or Trans Shipment is not permissible</p>	
<p>In case of any short shipment in the main equipment / spares, where separate rates are not available in the contract, the customs duty levied on such supplies , shall be borne by the supplier / Indian agent.</p>	
<p>Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis.</p>	
<p>Equipment will be inspected and proved at vendor's works prior to dispatch. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy.</p>	
<p>The equipment shall be guaranteed for a period of 12 months from the date of commissioning.</p>	
<p>The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.</p>	
<p>Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference and due date.</p>	
<p>NOTE:-</p> <p>a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.</p> <p>b) The prices are to be offered only on FOB/FCA basis, inclusive of Packing & Forwarding charges if any.</p> <p>c) Your specific acceptance to BHEL <u>Payment terms, LD, Risk Purchase Clause & Submission of PBG</u> for 10% of the order value are essential for consideration of your offer. Otherwise your offer is liable for rejection.</p>	

Signature & Office Seal of the vendor

UNPRICED BID FORMAT-INDEGENIOUS

			Annexure 4B1		
BHEL Enquiry No. & Date			Vendor's Offer Ref No. & Date		
Enq SI No.	Material Code	Description	Unit	Qty	Quoted/ Not Quoted
10					
20					
30					
40					
50					
60					
70					
80					
90					
100					
110					
120					
130					
140					
Total Ex-works Value in Rs					
Add Packing & Forwarding Charges if extra					
Excise Duty					
CST/VAT					
Add Freight Charges if extra					
Add Transit Insurance Charges if extra					
FOR Site Value in Rs					
Discount If Applicable					
Validity of offer					
Consignment Package Details					
Approximate Net / Gross Weight in Kgs					
Dimension of Consignment					
					Signature & Seal of Vendor
NOTE:					
The Price Bid should be submitted strictly in line with the above FORMAT					
Prices should be only on FOR Site(as mentioned in enquiry) basis					

MODEL PRICED BID FORMAT FOR INDIGENOUS

BHEL Enquiry No. & Date			Vendor's Offer Ref No. & Date			
Enq SI No.	Material Code	Description	Unit	Qty	Unit Price in INR	Value in INR
10						
20						
30						
40						
50						
.						
.						
.						
Total Ex-works Value in Rs						
Add Packing & Forwarding Charges if extra						
Excise Duty						
CST/VAT						
Add Freight Charges if extra						
Add Transit Insurance Charges if extra						
FOR Site Value in Rs						
Discount If Applicable						
Validity of offer						
Consignment Package Details						
Approximate Net / Gross Weight in Kgs						
Dimension of Consignment						
					Signature & Seal of Vendor	
NOTE:						
The Price Bid should be submitted strictly in line with the above FORMAT						
Prices should be only on FOR Site(as mentioned in enquiry) basis						

