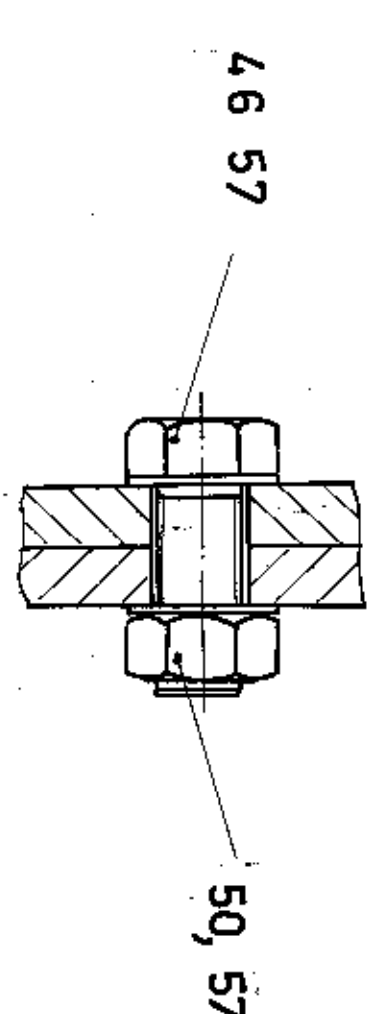
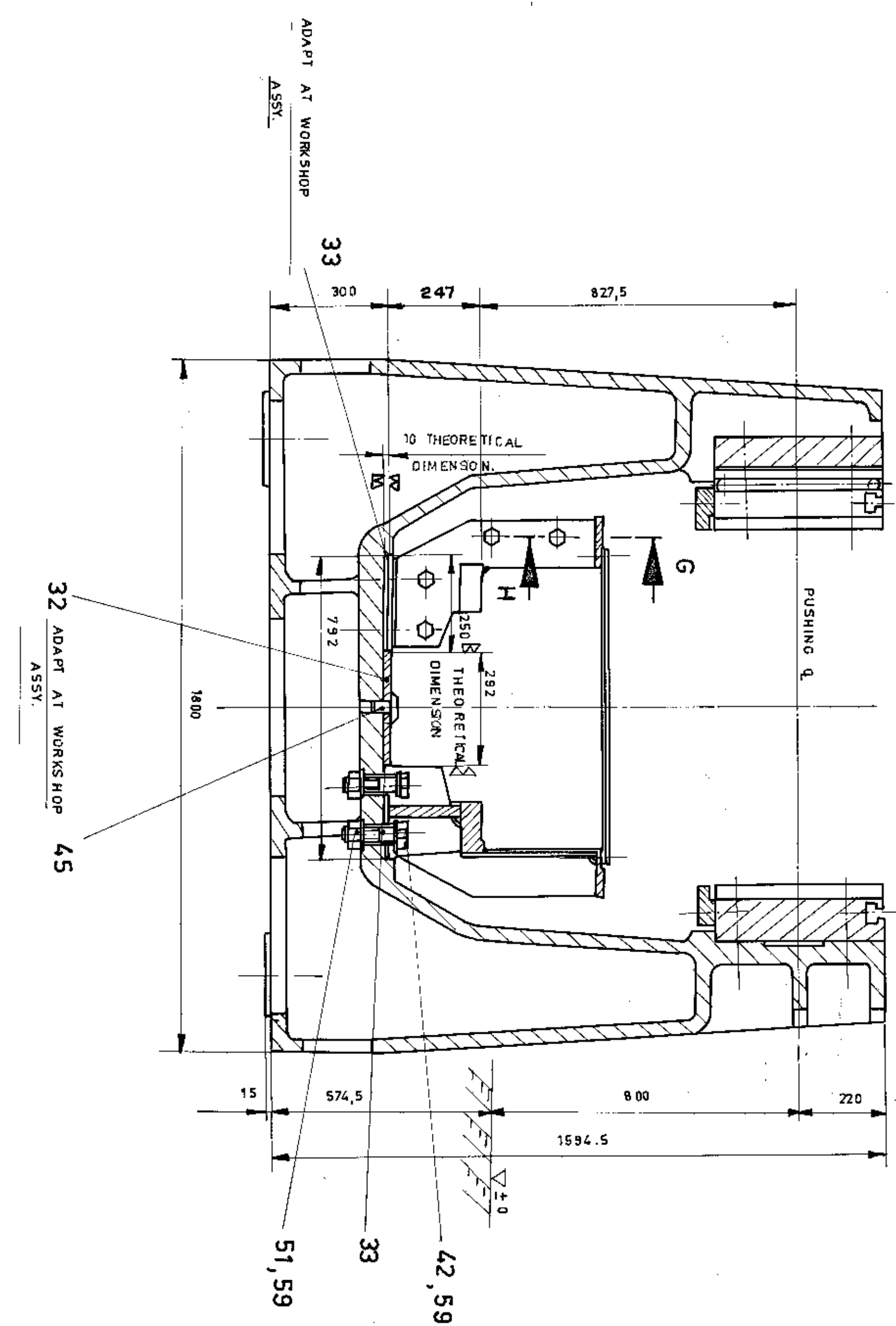


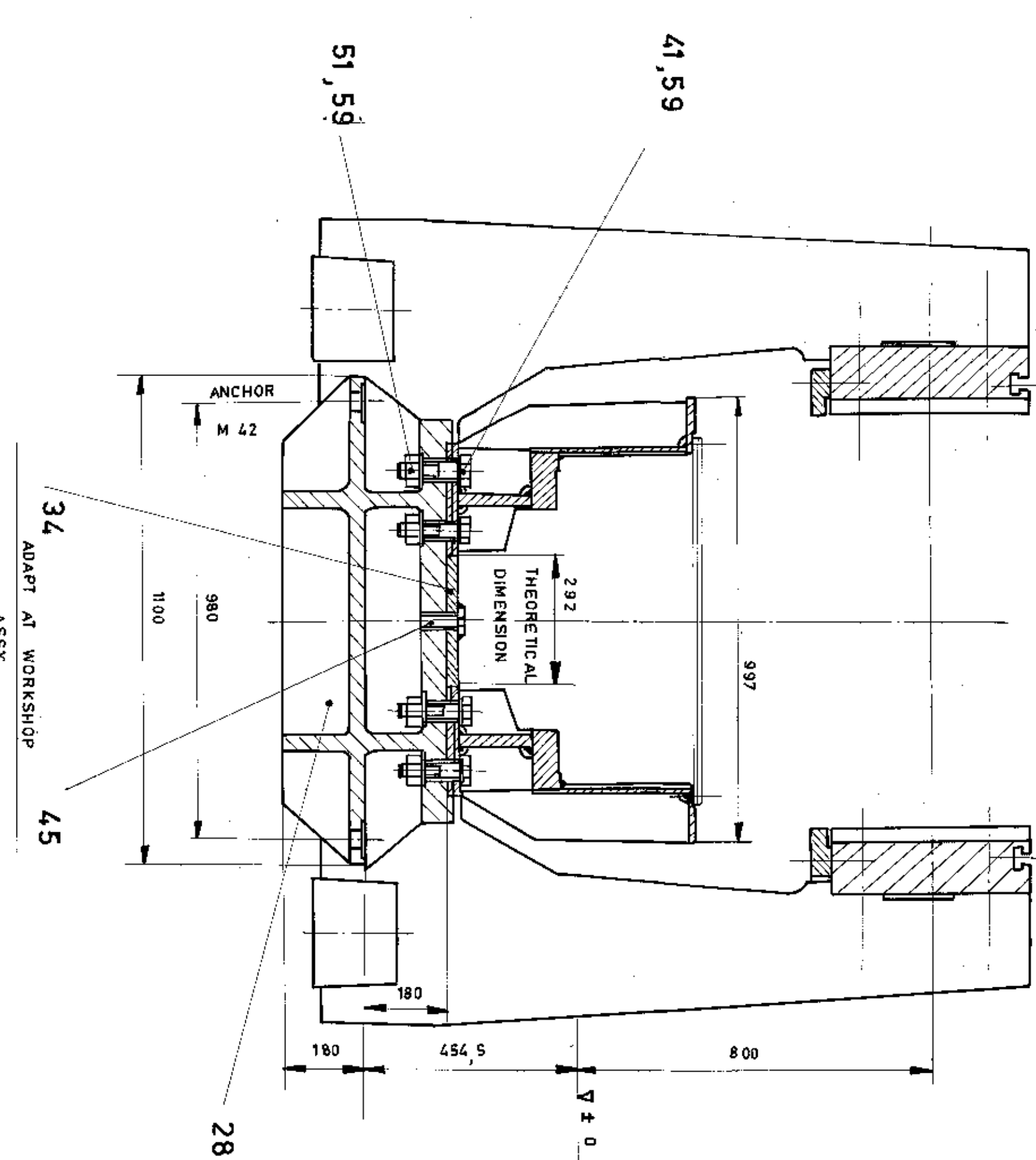
SECTION G-H SCALE 1:25



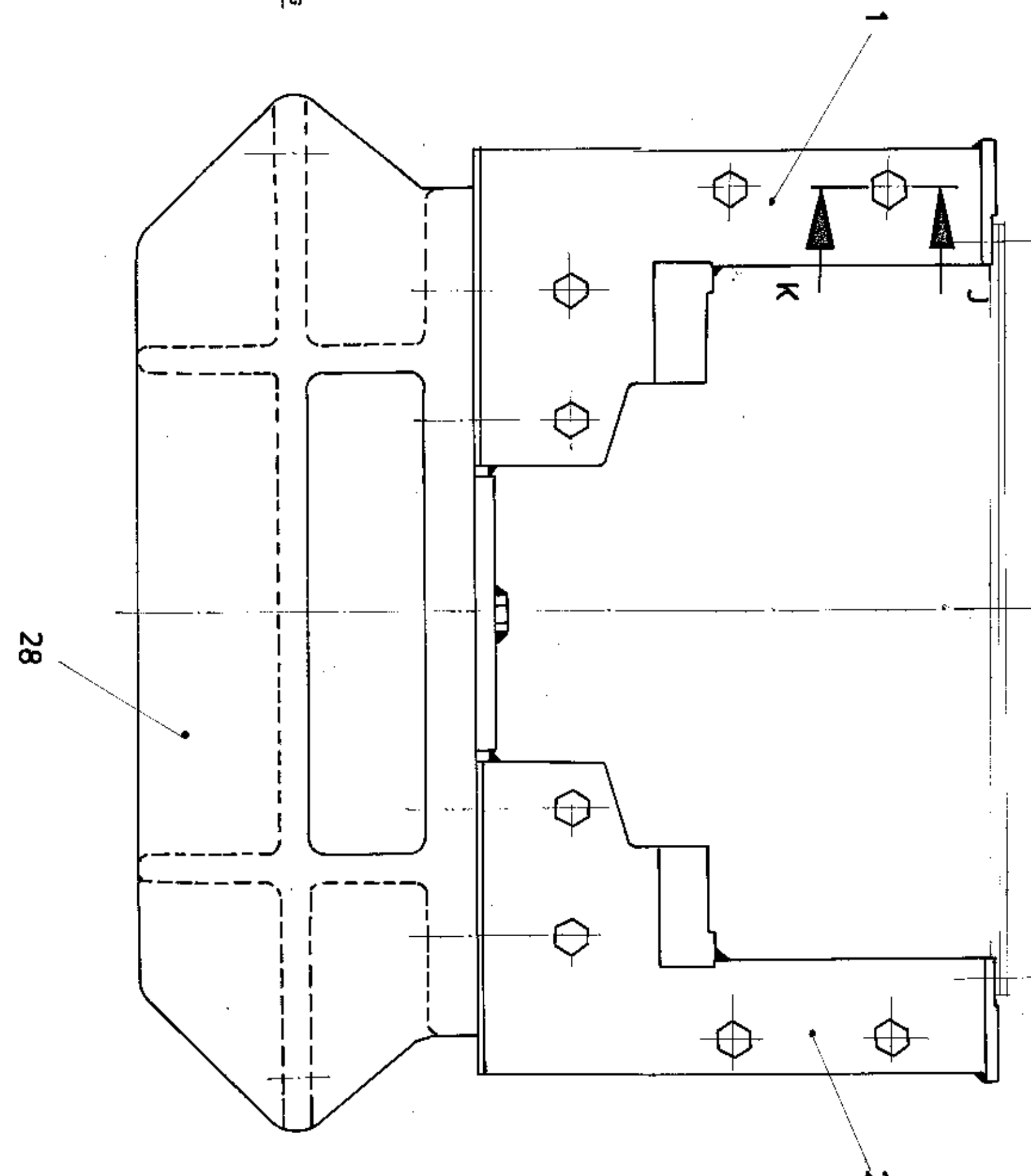
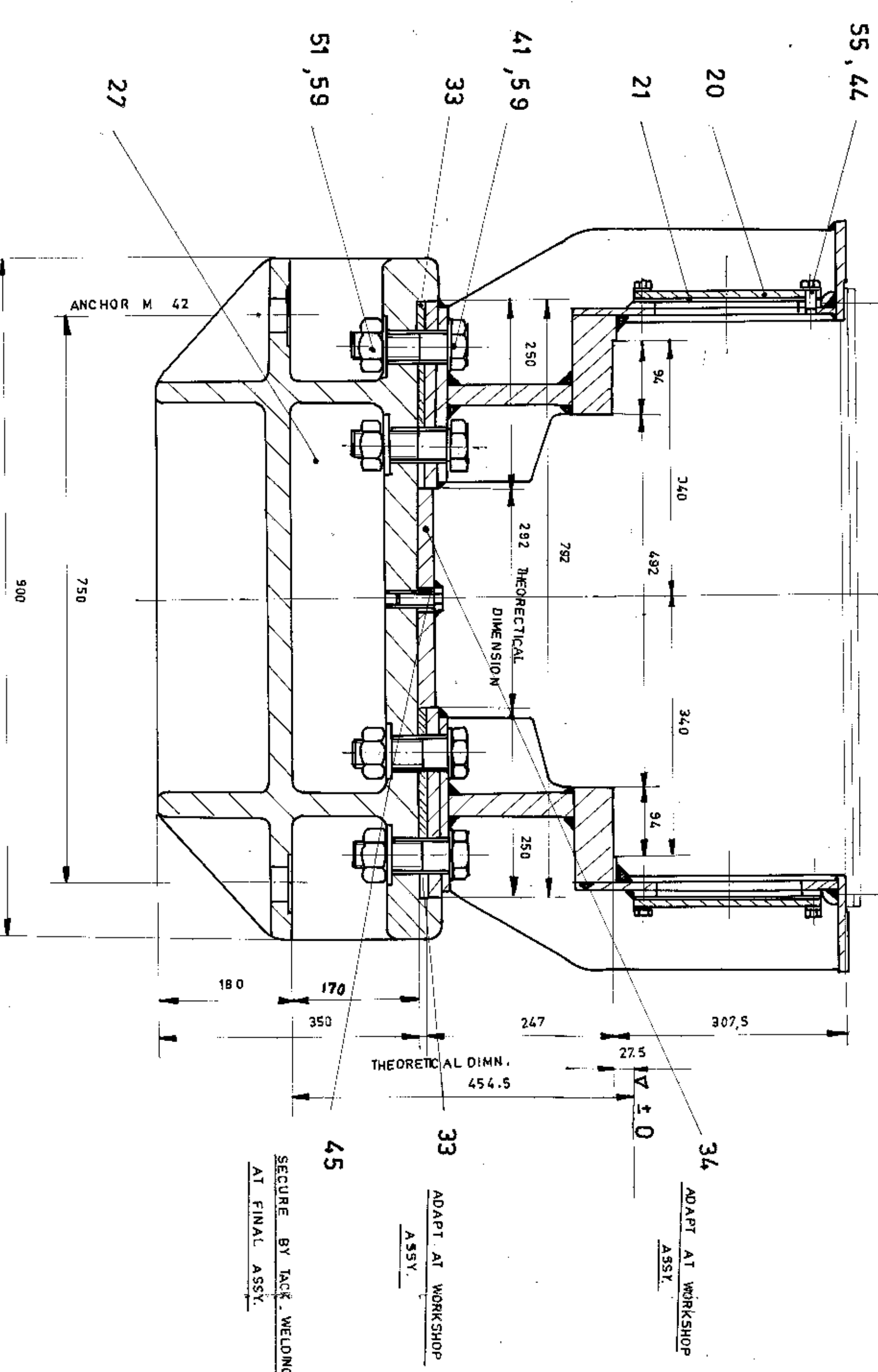
VIEW - 2 M 1:5



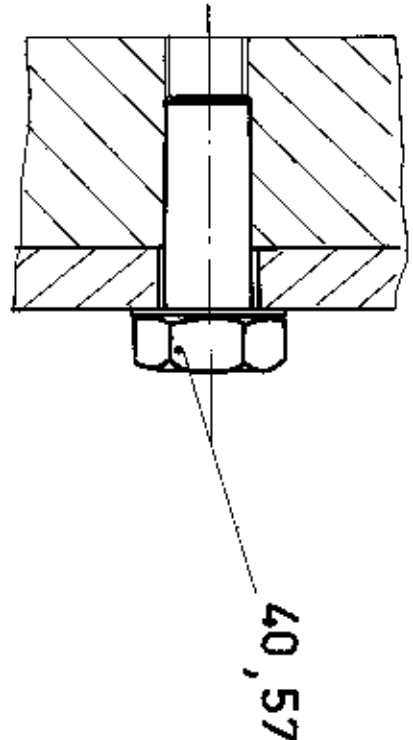
SECTION C-D M 1:10



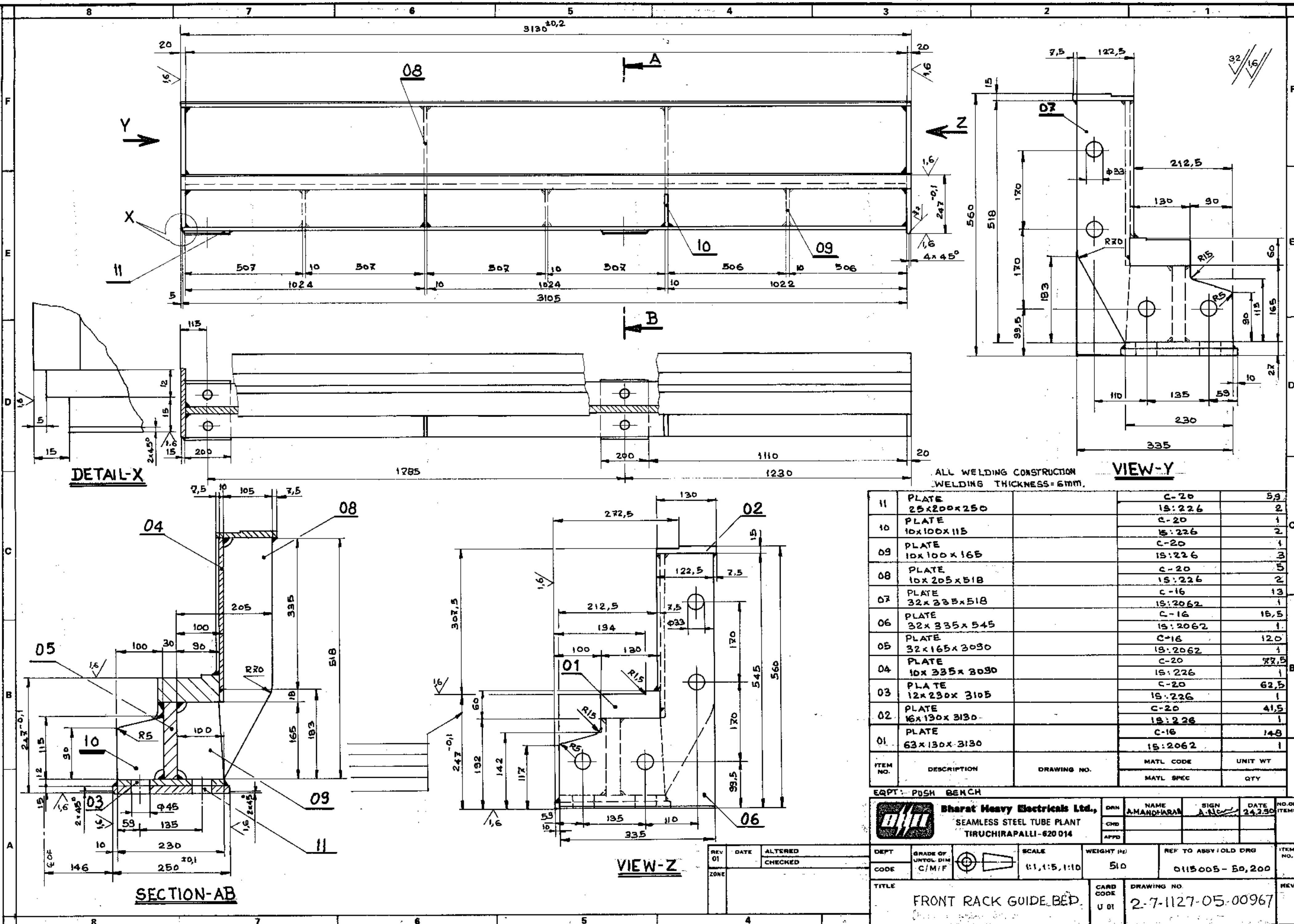
SECTION E.F. M 1:5



SECTION J-K M 1:2.5



FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)



EQPT: PUSH BENCH

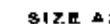


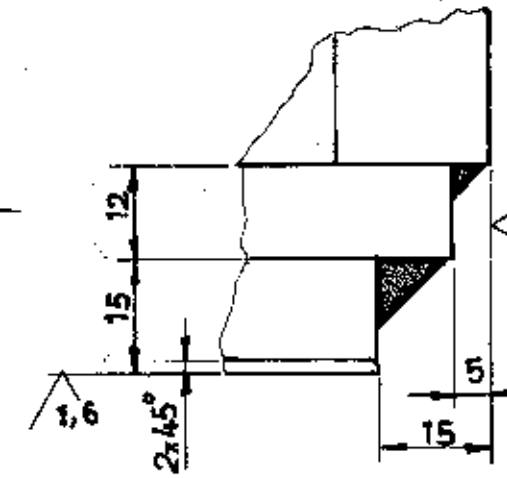
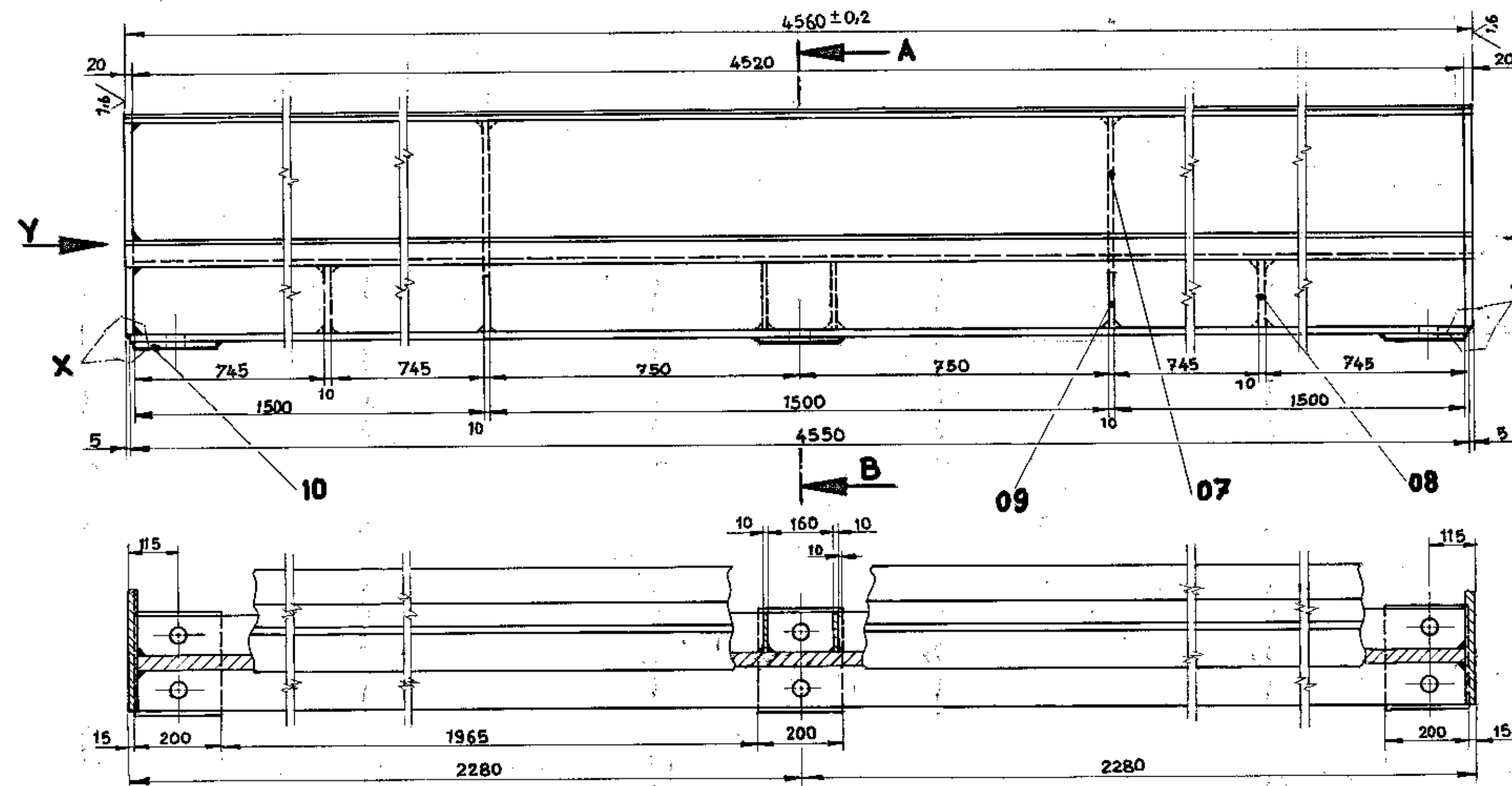
Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI-620 014

DATE	NAME	SIGN	DATE	NO. OF ITEMS
24.2.20	AMANDHARAN			

REV	DATE	ALTERED	DEPT	GRADE OF	SCALE	WEIGHT (kg)	REF TO ASSY / OLD DRG	ITEM NO.
01		CHECKED		C/M/F	1:1, 1:5, 1:10	510	0115005-50,200	

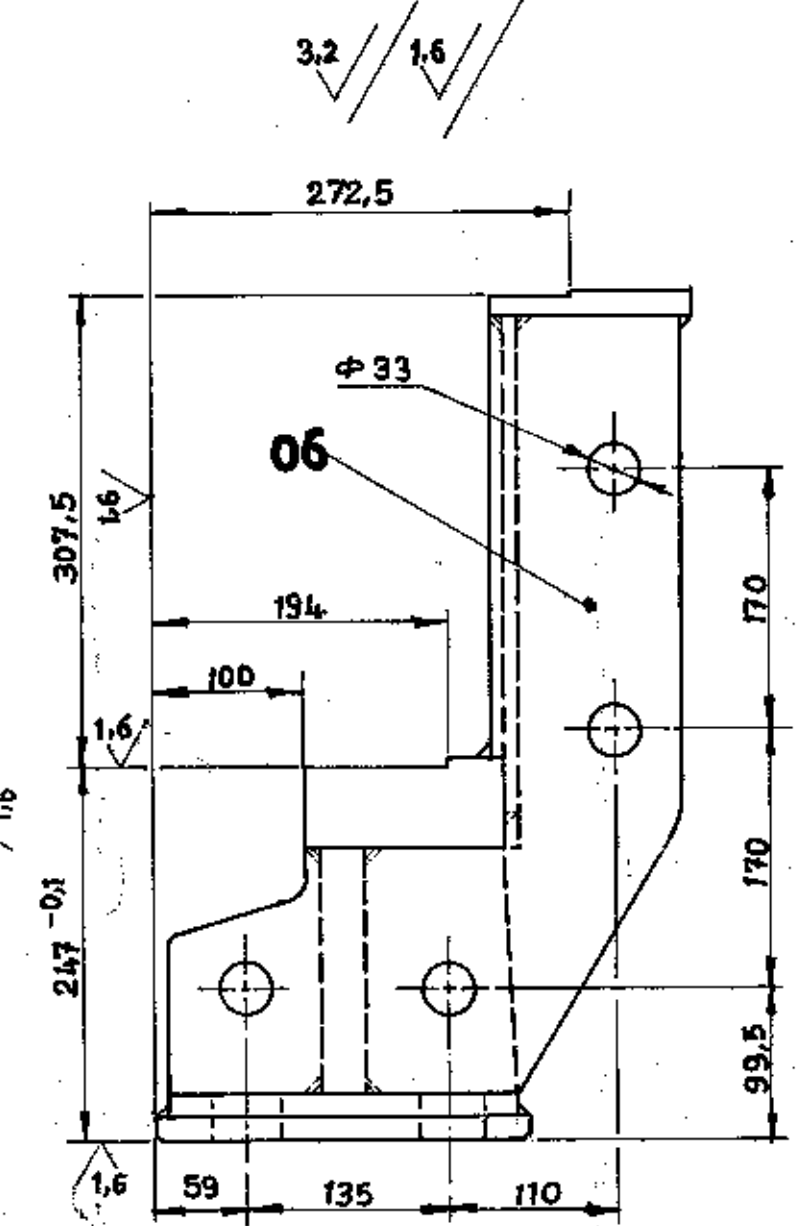
TITLE	CARD CODE	DRAWING NO.	REV
FRONT RACK GUIDE BED.	U 01	2-7-1127-05-00967	





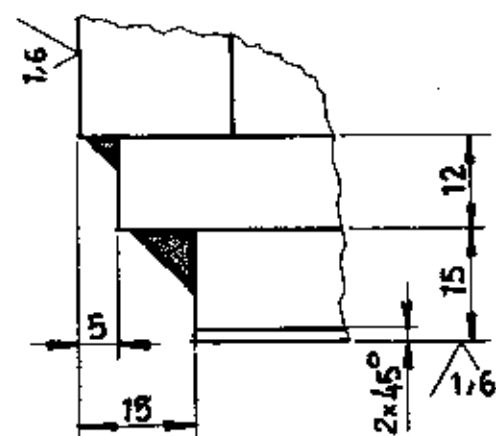
DETAIL-W

SCALE - 1:1



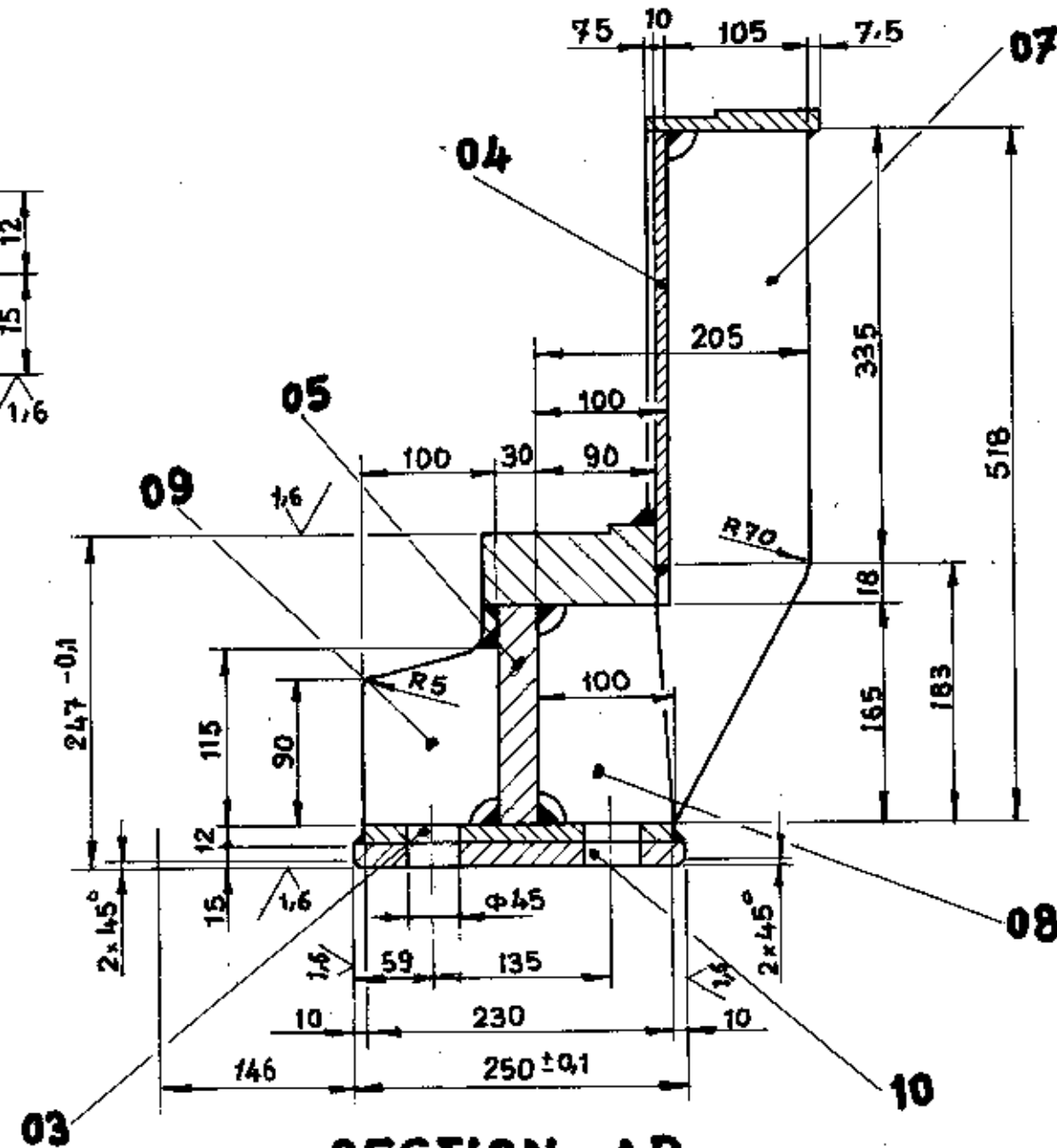
VIEW-Z

SCALE 1:5



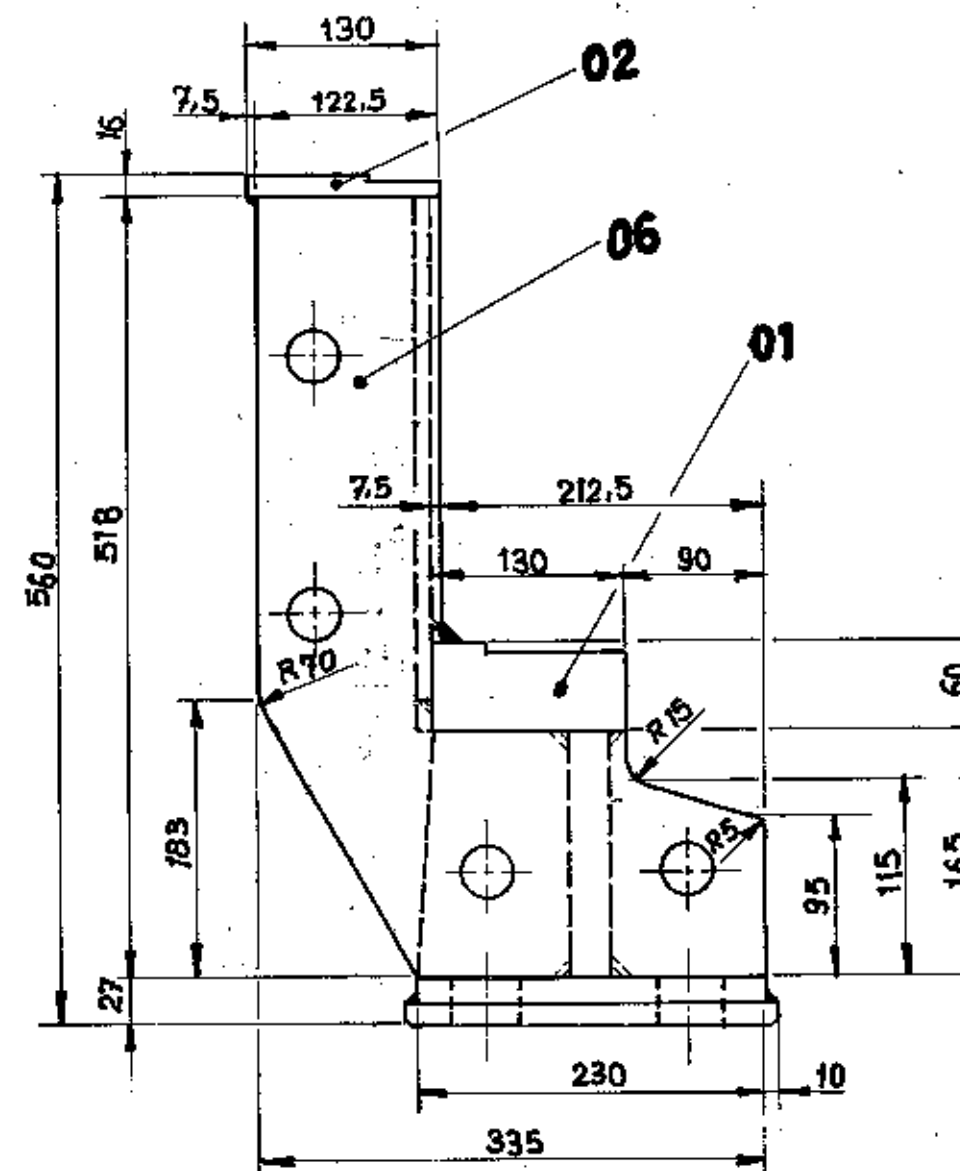
DETAIL-X

SCALE 1:1



SECTION-AB

SCALE - 1:5



VIEW-Y

SCALE 1:5

ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. CODE	UNIT WT.
10	PLATE - 250x200x25t.		C - 16	5.7
			IS - 2062	3
09	PLATE - 115x100x10t.		C - 20	1.0
			IS - 226	2
08	PLATE - 165x100x10t.		C - 20	1
			IS - 226	4
07	PLATE - 518x205x10t.		C - 20	5
			IS - 226	2
06	PLATE - 518x335x32t.		C - 16	13
			IS - 2062	2
05	PLATE - 4520x165x32t.		C - 16	176
			IS - 2062	1
04	PLATE - 4520x335x10t.		C - 20	114
			IS - 226	1
03	PLATE - 4550x230x12t.		C - 20	99
			IS - 226	1
02	PLATE - 4560x130x16t.		C - 20	69
			IS - 226	1
01	PLATE - 4560x130x63t.			210
				1
ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. SPEC.	QTY.

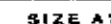
EQPT: PUSH BENCH

Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI-620 014

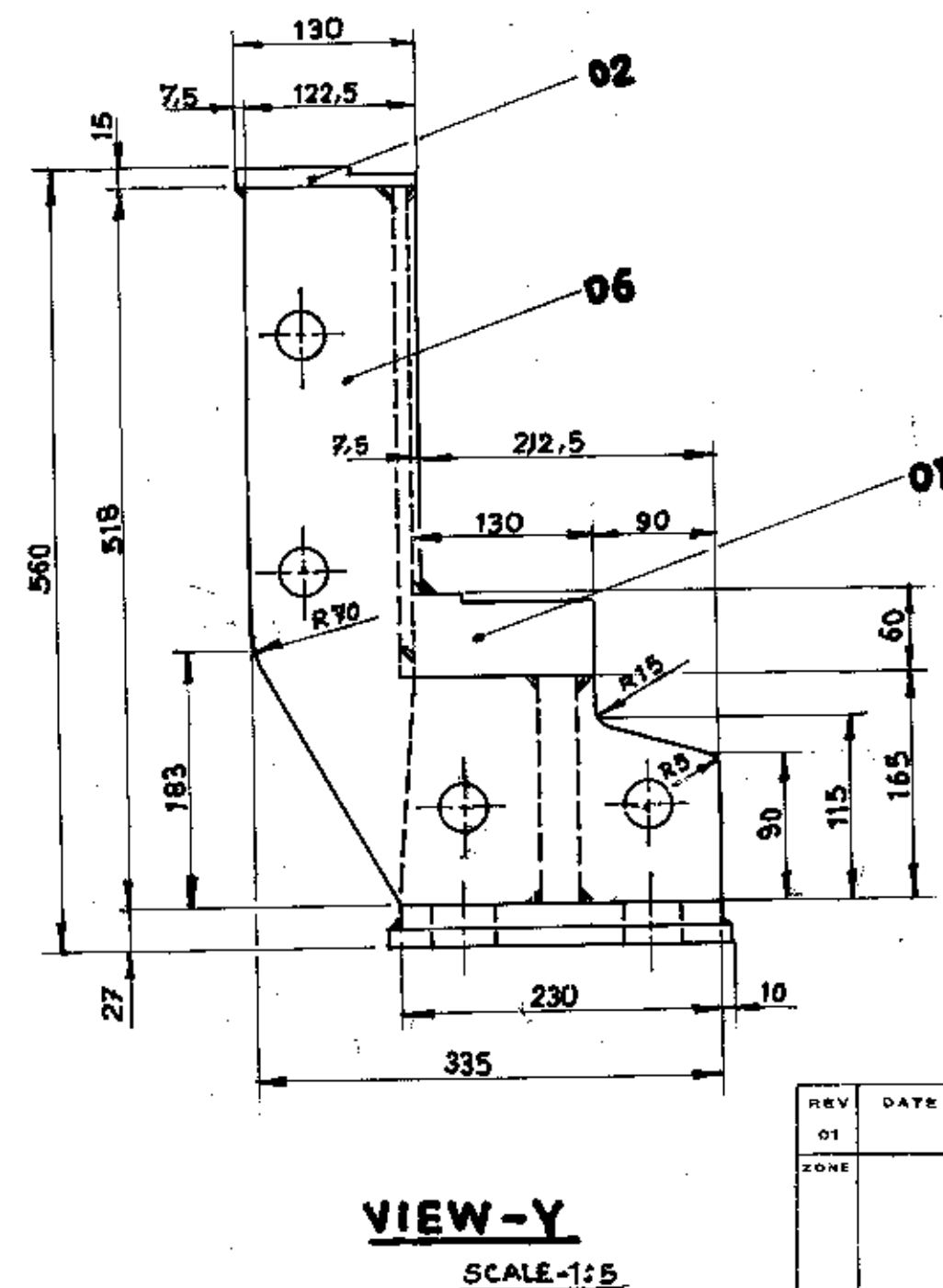
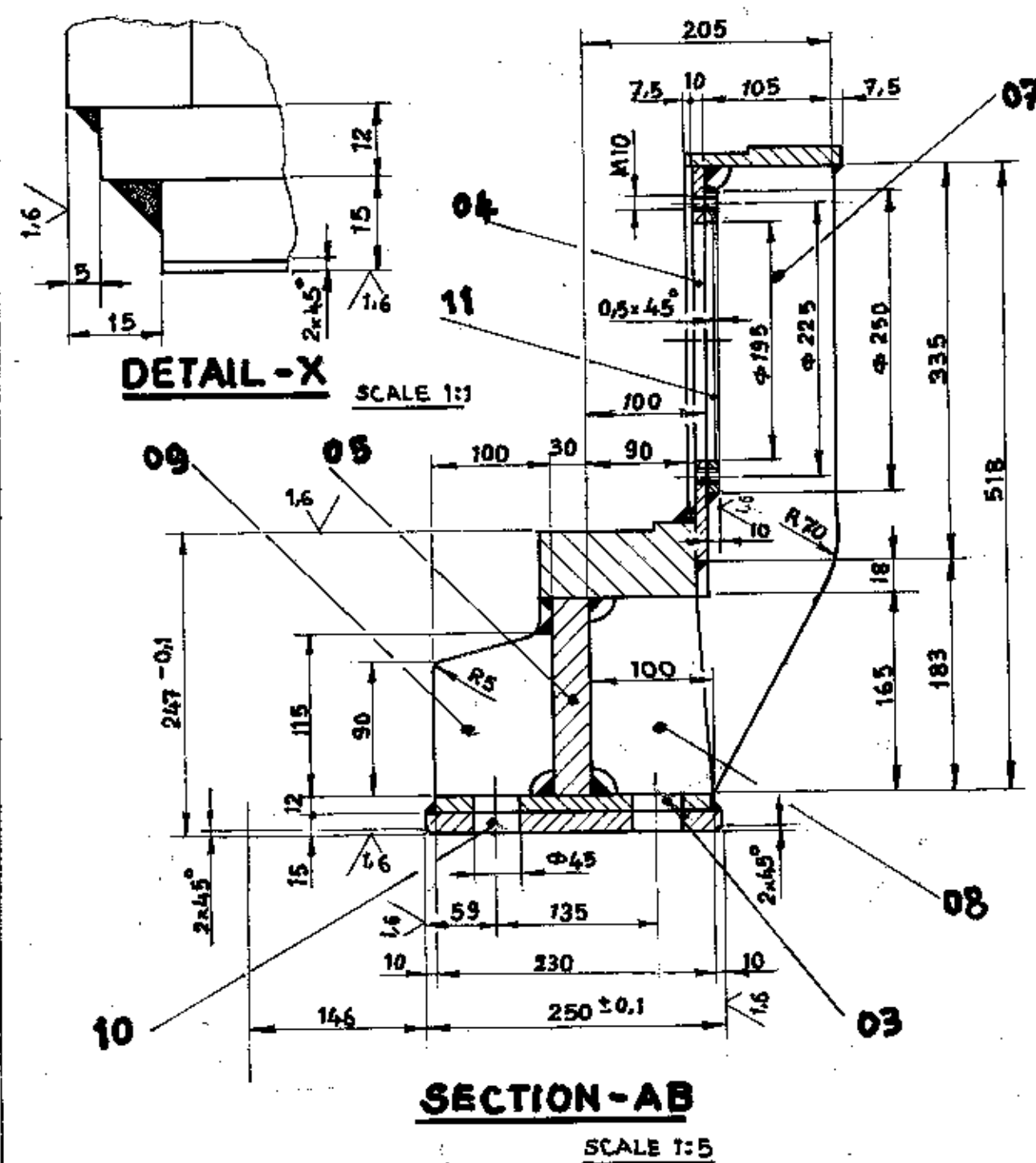
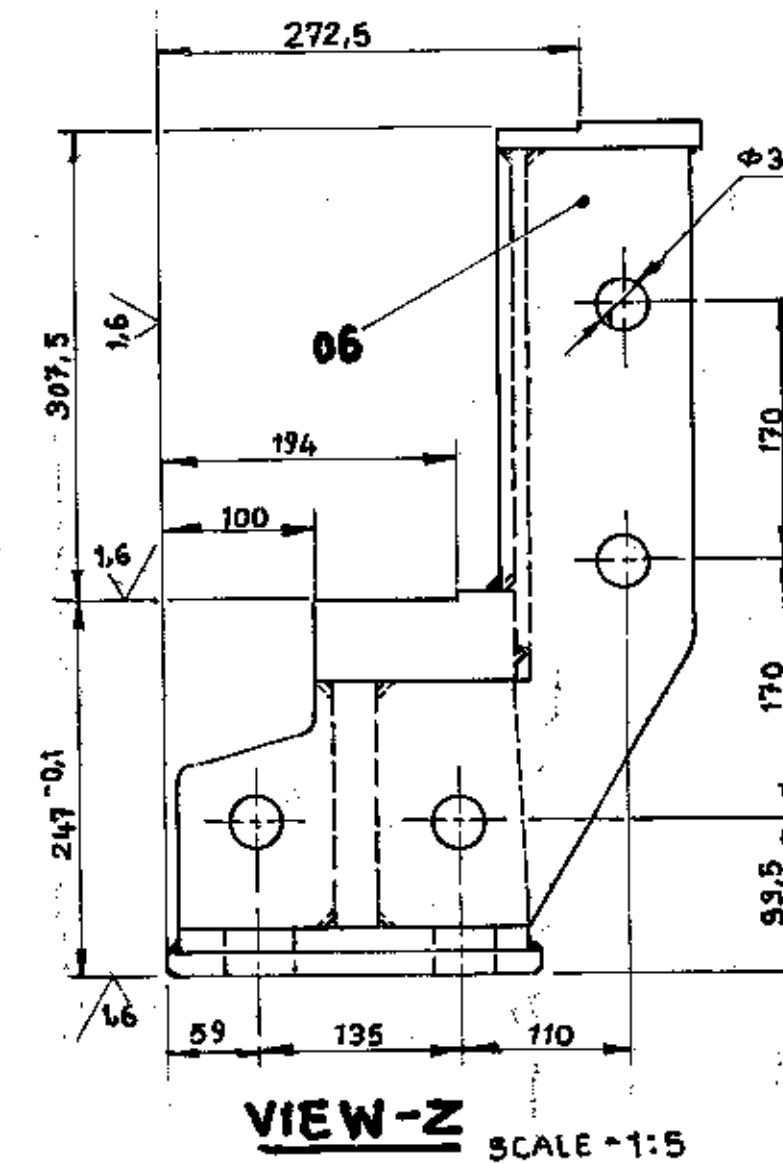
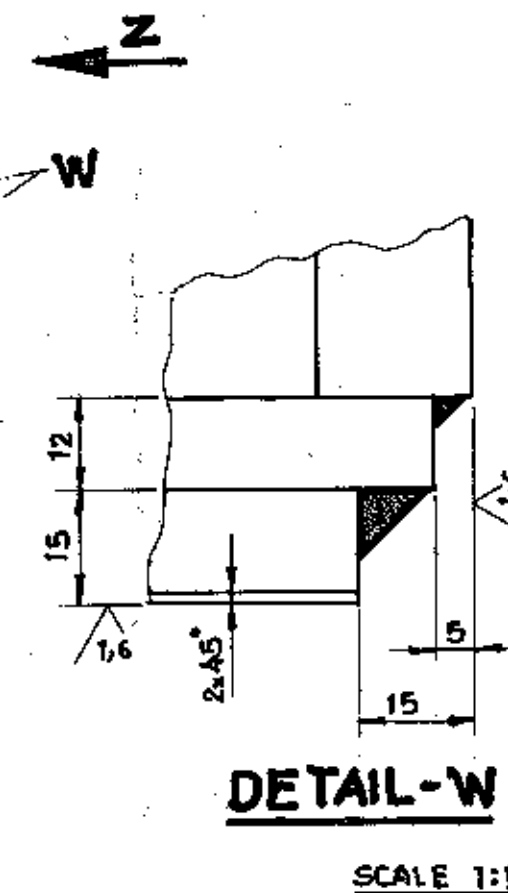
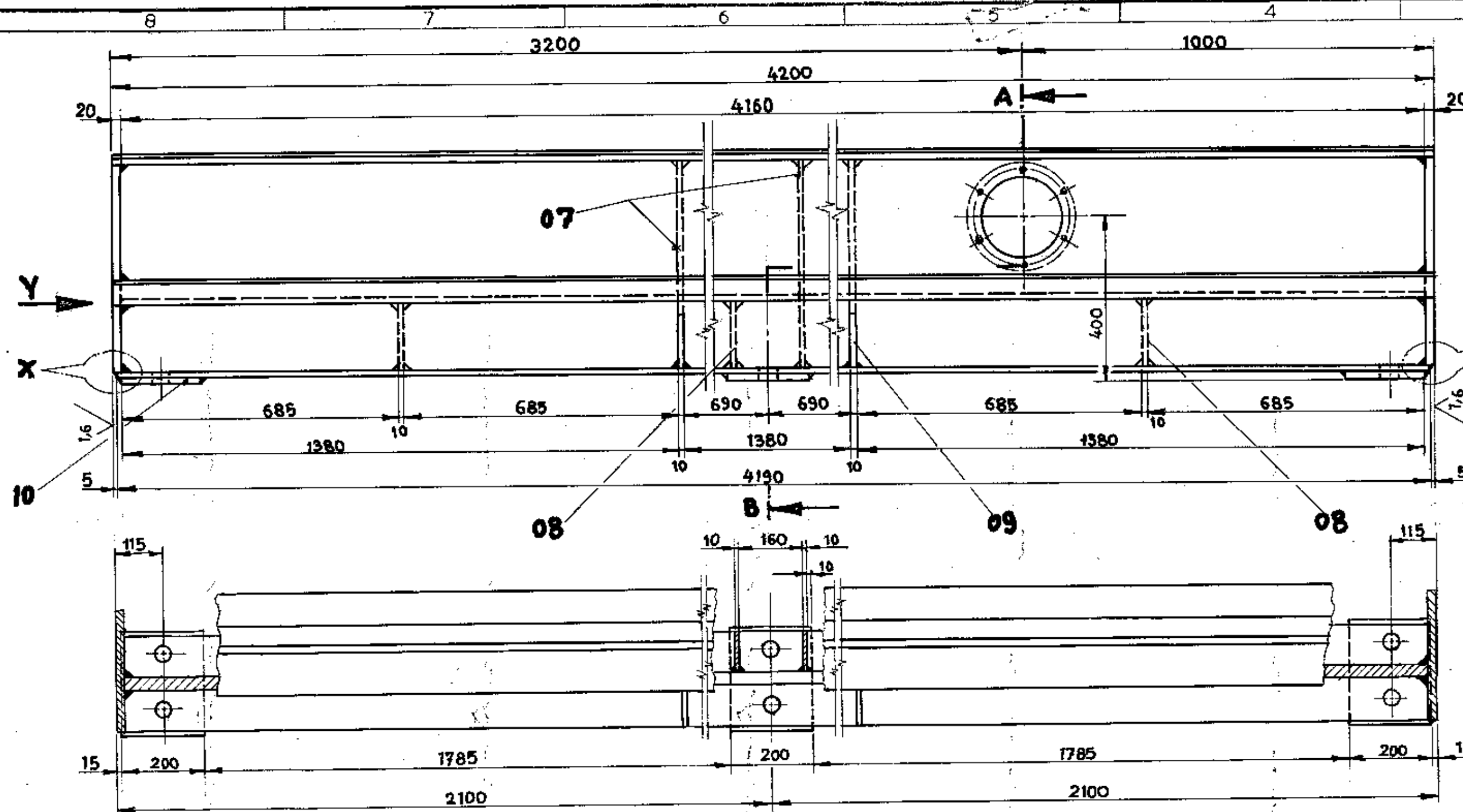
DRN	NAME	SIGN	DATE	NO. OF ITEMS
CHD	Charmaligan M. Dalinga		24-2-20	
APPD.				

REV	DATE	ALTERED
01		CHECKED
20NR		

DEPT	GRADE OF UNTOLO DIM C/M/F	SCALE	WEIGHT (Kg)	REF TO ASSY/OLD DNG	ITEM NO.
		1:10 (1:5, 1:1)	730.0	0115.005-50.400	
TITLE	CARD CODE UOI	DRAWING NO.			
FRONT RACK GUIDE BED		2-7-1127-05:00969			



FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)



11	PLATE - $\Phi 250 \times 10t$		C - 20	1
			IS - 226	1
10	PLATE - $250 \times 200 \times 25t$		C - 16	6
			IS - 2062	3
09	PLATE - $115 \times 100 \times 10t$		C - 20	1
			IS - 226	2
08	PLATE - $165 \times 100 \times 10t$		C - 20	1
			IS - 226	3
07	PLATE - $518 \times 205 \times 10t$		C - 20	5
			IS - 226	3
06	PLATE - $518 \times 335 \times 32t$		C - 16	13
			IS - 2062	2
05	PLATE - $4160 \times 165 \times 32t$		C - 16	162
			IS - 2062	1
04	PLATE - $4160 \times 335 \times 10t$		C - 20	104
			IS - 226	1
03	PLATE - $4190 \times 230 \times 12t$		C - 20	91
			IS - 226	1
02	PLATE - $4200 \times 130 \times 16t$		C - 20	57
			IS - 226	1
01	PLATE - $4200 \times 130 \times 63t$		CL - 3	195
			IS - 277	1
ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. CODE	UNIT WT.
			MATL. SPEC.	QTY.

EQPT: PUSH BENCH



Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI-620 014

NAME: Dharmalingam
SIGN: [Signature]
DATE: 22-2-2019
DRN: [Blank]
CHD: [Blank]
APPD: [Blank]

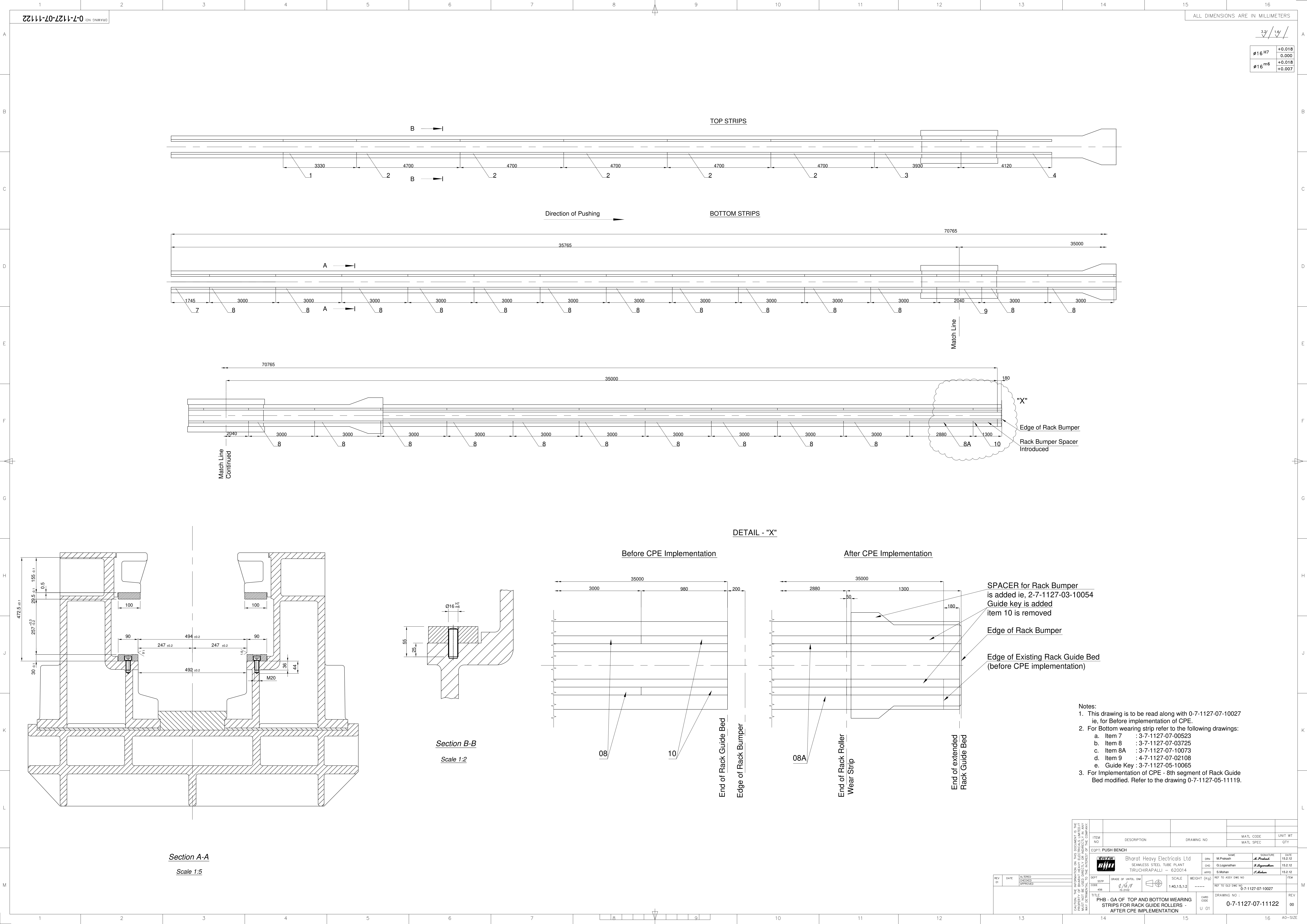
REV	DATE	ALTERED
01		CHECKED
ZONE		

DEPT	GRADE OF UNTOOLDIM	SCALE	WEIGHT (KG)	REF TO ASSY/OLD DRS	ITEM NO.
CODE	C/M/F	1:10 (1:5:1:1)	675	0115 005 - 50,600	
TITLE					

RACK GUIDE BED
(FRONT RACK GUIDE BED)

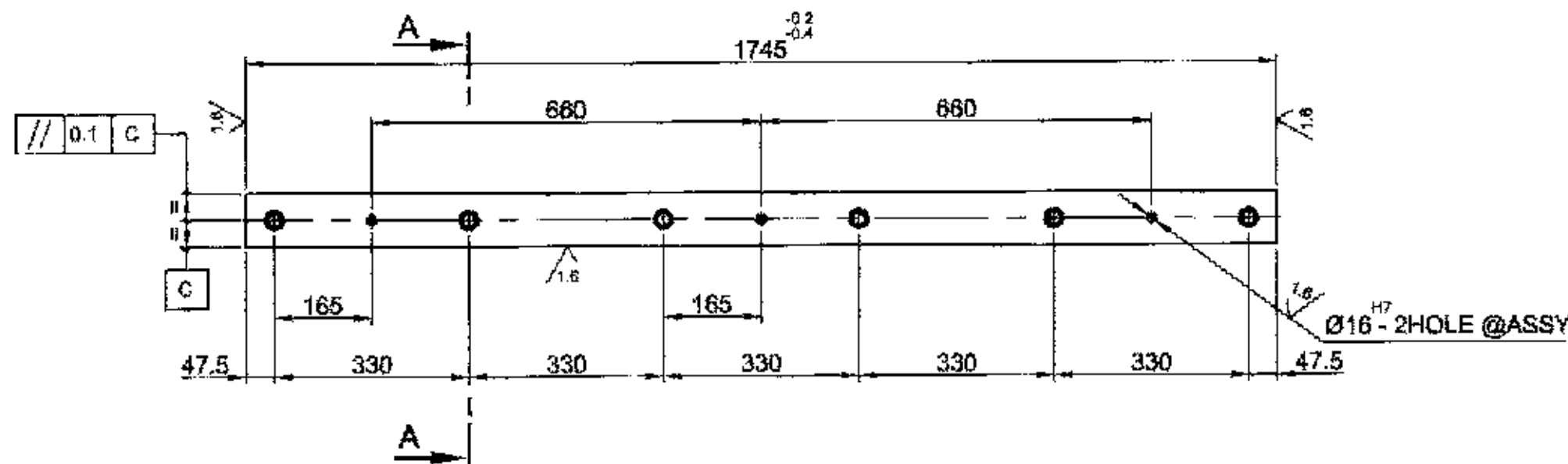
DRAWING NO. 2-7-1127-05-00974

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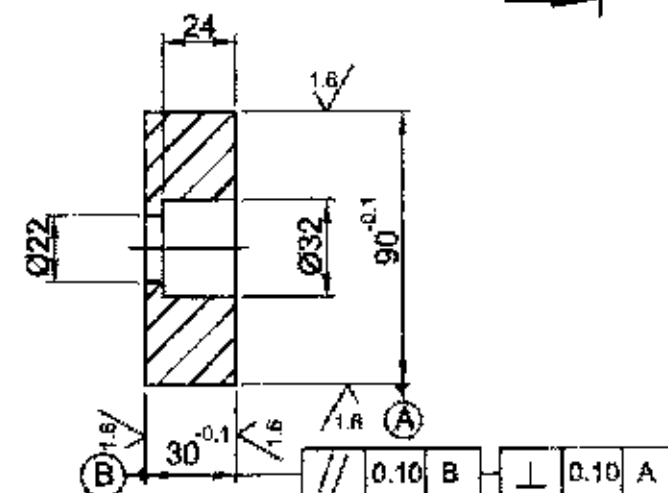


ALL DIMENSIONS ARE IN MILLIMETRES

3.2/1.6/



$\varnothing 16$ H7	+0.018
	0



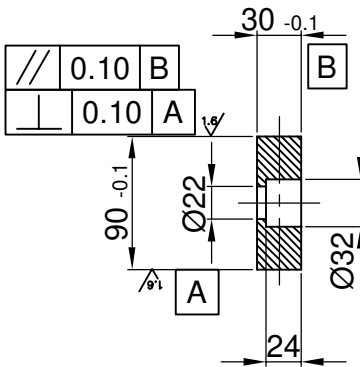
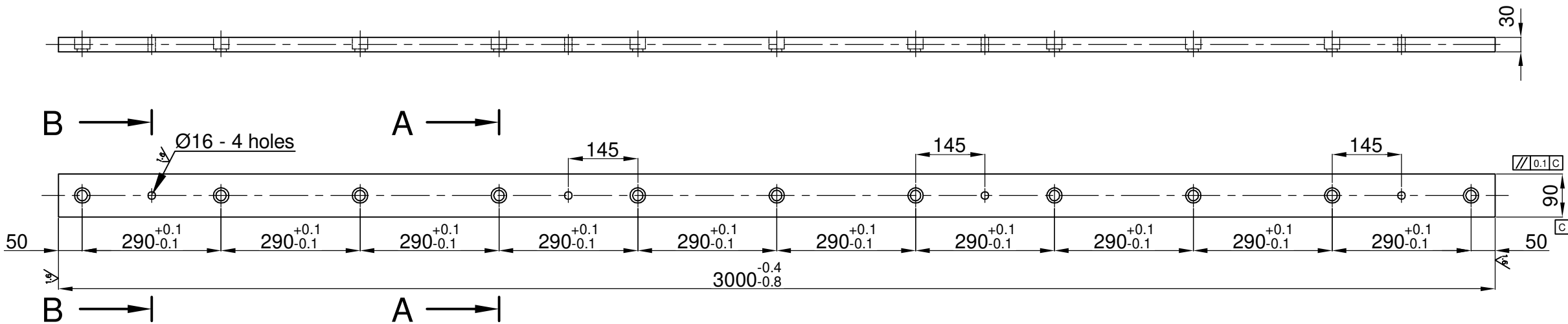
SECTION-AA

NOTES:

1. THE TOLERANCE ON HOLE PITCH DIMENSION SHOULD BE ± 0.1 mm AND THE TOLERANCE ON OVER ALL LENGTH SHOULD BE MAINTAINED AS PER DRAWING
2. CHAMFER SHARP CORNERS TO $0.5 \times 45^\circ$
3. USE ROLLED STEEL OR EQUIVALENT
4. NORMALISE BEFORE MACHINING TO 680 N/mm^2
5. FINISHING TO BE DONE BY GRINDING ON ALL THE SIDES

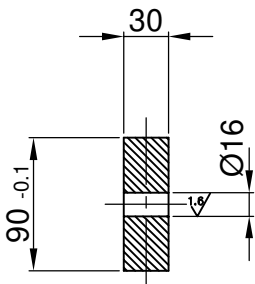
REV 04	DATE	ALTERED CHECKED APPROVED	REV 03	DATE	ALTERED CHECKED APPROVED
REV 02	DATE 05.10.02	ALTERED CHECKED APPROVED	REV 01	DATE 03.10.83	ALTERED CHECKED APPROVED
SURFACE FINISH CHANGED; TOL ON LENGTH ADDED; HEAT TREATMENT REVISED TO NORMALISE FROM HARDEN AND TEMPER			ZONE	MATL.CHANGED. HARDNESS ADDED.	

					45CB IS:1875	
ITEM NO	DESCRIPTION	DRAWING NO			MATL CODE	UNIT WT
					MATL SPEC	QTY
EQPT: PUSH BENCH						
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN DND APPD	NAME B.ASHOKKUMAR SSN KUMAR S.SHANMUGASUNDARAM	SIGNATURE DATE 21/3/02 21/03/02
DEPT MPG CODE	GRADE OF UNTO DIM 6/11/1		SCALE 1:10 (1:2.5)	WEIGHT(kg) 36	REF TO ASSY DND NO REF TO OLD DND NO 0115005-71002	ITEM NO
TITLE WEARING STRIP-BOTTOM 1				CARD CODE U 01	DRAWING NO : 3-7-1127-07-00523	REV 02



Section - AA

Scale 1:5



Section - BB

Scale 1:5

Notes:

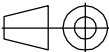
1. The tolerance on hole pitch dimension and overall length should be maintained as per drawing.
2. Chamfer sharp corners to 0.5x45°
3. Use rolled steel
4. Normalize before machining to 680N/mm2
5. Finishing to be done by grinding on all the sides

REV 02	DATE 5.10.02	ALTERED	<i>B. Ashok Kumar</i>
		CHECKED	<i>SSN Kumar</i>
		APPROVED	<i>SS Sundaram</i>
Surface finish changed; tol. on length added; heat treatment revised to normalize from harden and temper			

REV 03	DATE 11.2.12	ALTERED	<i>M. Prakash</i>
		CHECKED	<i>G. Loganathan</i>
		APPROVED	<i>S. Mohan</i>
1. Converted to AutoCAD drg. 2. Description changed.			

REV 01	DATE 14.9.2K	ALTERED	<i>B. Ashok Kumar</i>
		CHECKED	<i>SSN Kumar</i>
		APPROVED	<i>SS Sundaram</i>
1. Material Changed 2. Hardness Added			

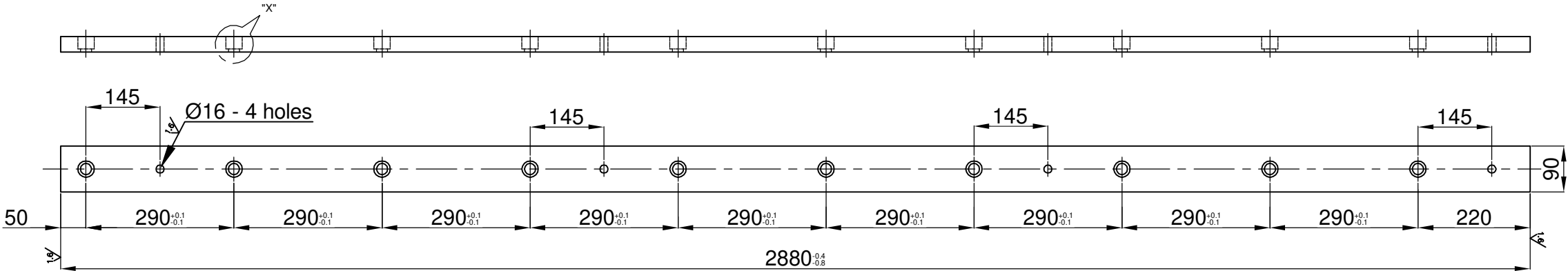
CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

1	WEAR STRIP 3000x90x30		63.585			
			45C8 IS: 1875	2		
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT		
			MATL SPEC	QTY		
EQPT: PUSH BENCH						
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI — 620014	DRN	NAME B.Ashok kumar	SIGNATURE <i>B. AshokKumar</i>	DATE 02.11.02	
		CHD	SSN Kumar	<i>SSN Kumar</i>	14.12.02	
		APPD	SS Sundaram	<i>SS Sundaram</i>	14.12.02	
DEPT SSTP	GRADE OF UNTOL. DIM		SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO 0-7-1127-07-10027,0-7-1127-07-11122	ITEM 8
CODE 456	 IS: 2102		1:10,1:5	1335.285	REF TO OLD DWG NO RW 28016/2	
TITLE PHB - WEAR STRIP BOTTOM 2 TO 12 & 14 TO 23			CARD CODE U 01	DRAWING NO : 3-7-1127-07-03725		REV 03

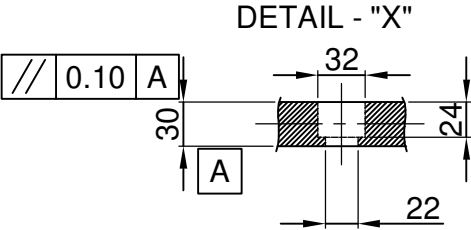
3-7-1127-07-10073

ALL DIMENSIONS ARE IN MILLIMETRES

3.2/1.6/

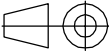


- NOTES:
- Length of existing 24th Bottom Wear Strip reduced from 3000mm to 2880mm to accommodate the SPACER of the Rack Bumper.
 - Chamfer sharp edges to 1x45°.



REV	DATE	ALTERED
01		CHECKED
		APPROVED

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1	WEAR STRIP 2880x90x30		45C8 IS: 1875		61.042	
					2	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT	
			MATL SPEC		QTY	
EQPT: PUSH BENCH						
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME M.Prakash	SIGNATURE <i>M. Prakash</i>	DATE 04.02.12	
		CHD	G.Loganathan	<i>G. Loganathan</i>	04.02.12	
		APPD	S.Mohan	<i>S. Mohan</i>	04.02.12	
DEPT SSTP	GRADE OF UNTOL. DIM		SCALE 1:10,1:5	WEIGHT (Kg) 122.083	REF TO ASSY DWG NO 0-7-1127-07-11122	ITEM 8A
CODE 456	$\phi / M / F$ IS: 2102				REF TO OLD DWG NO 3-7-1127-07-03725	
TITLE PHB - WEARING STRIP BOTTOM 24				CARD CODE U 01	DRAWING NO : 3-7-1127-07-10073	REV 00



A3-SIZE

3-7-1127-08-03133

DRAWING NO.:

ALL DIMENSIONS ARE IN MILLIMETRES

492

484

87

R10

75

15

139

R50

02

01

SECTION A-B

SCALE 1:2

A

4

B

3000

ALL WELDED CONSTRUCTIONS.
FILLET SIZE 3mm.

02	PL 4x484x150		E250A IS:2062	1.823
				1
01	PL 4x3000x654		E250A IS:2062	61.652
				1
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY

EQPT: PUSH BENCH



Bharat Heavy Electricals Ltd
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI – 620014

DRN	NAME K. MANOHARAN	SIGNATURE <i>K. Manoharan</i>	DATE 24.2.90
CHD			
APPD			

DEPT SSTP	GRADE OF UNTOL. DIM $\phi/M/\#$ IS: 2102		SCALE 1:10,1:2	WEIGHT (Kg) 63.475	REF TO ASSY DWG NO	ITEM
CODE 456					REF TO OLD DWG NO 0115005-72037	
TITLE PHB - OIL TROUGH				CARD CODE U 01	DRAWING NO : 3-7-1127-08-03133	REV 01

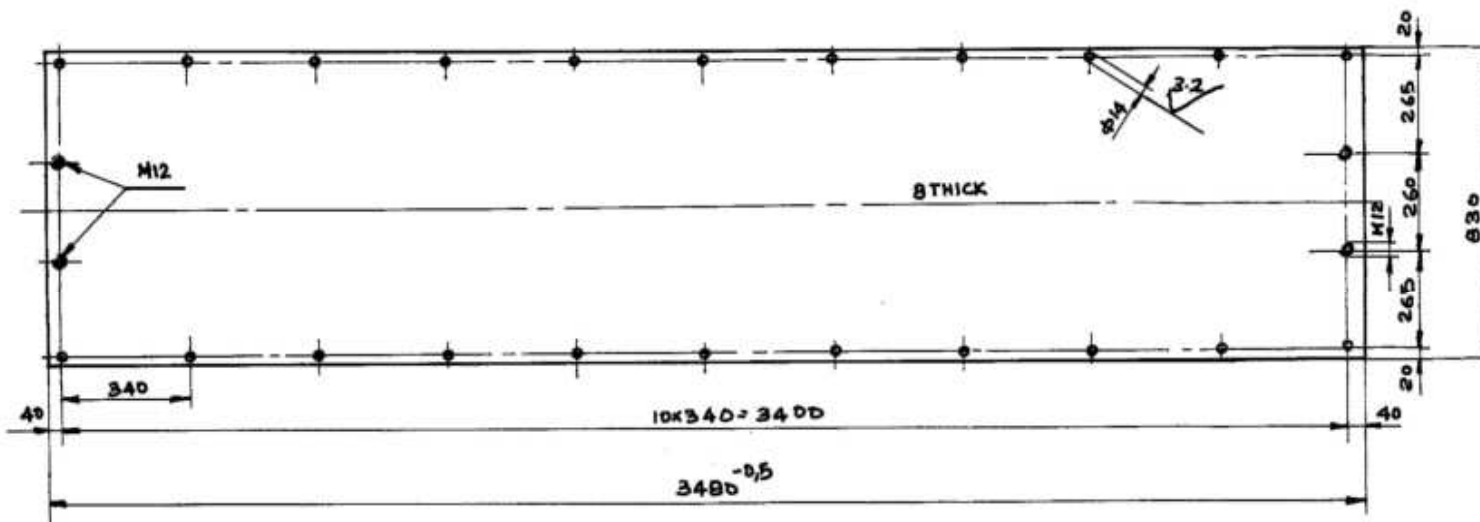
REV 01	DATE 21.11.11	ALTERED CHECKED APPROVED	<i>M. Prakash</i> <i>S. Loganathan</i> <i>P. Mohan</i>
CONVERTED TO AUTO CAD			

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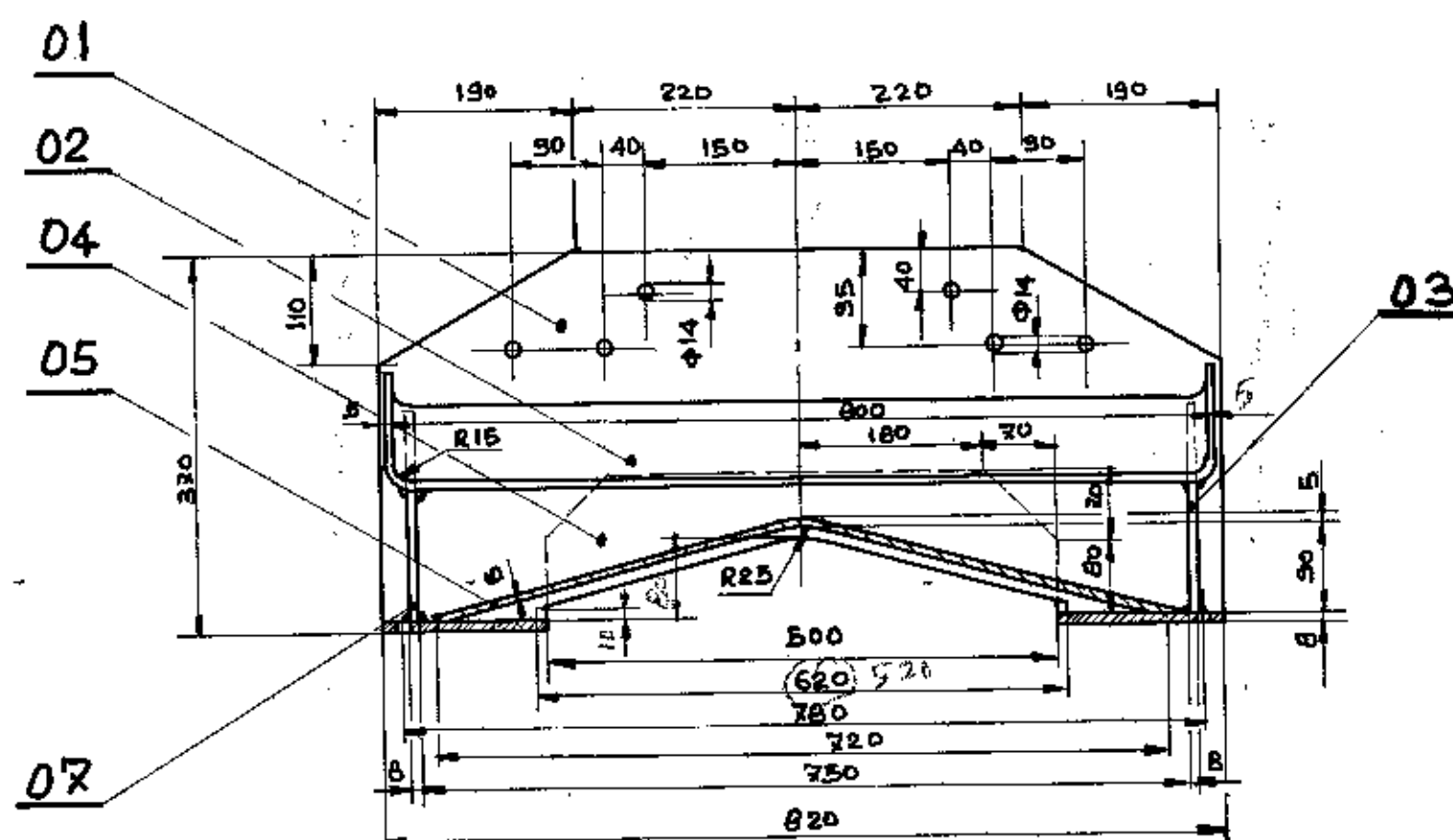
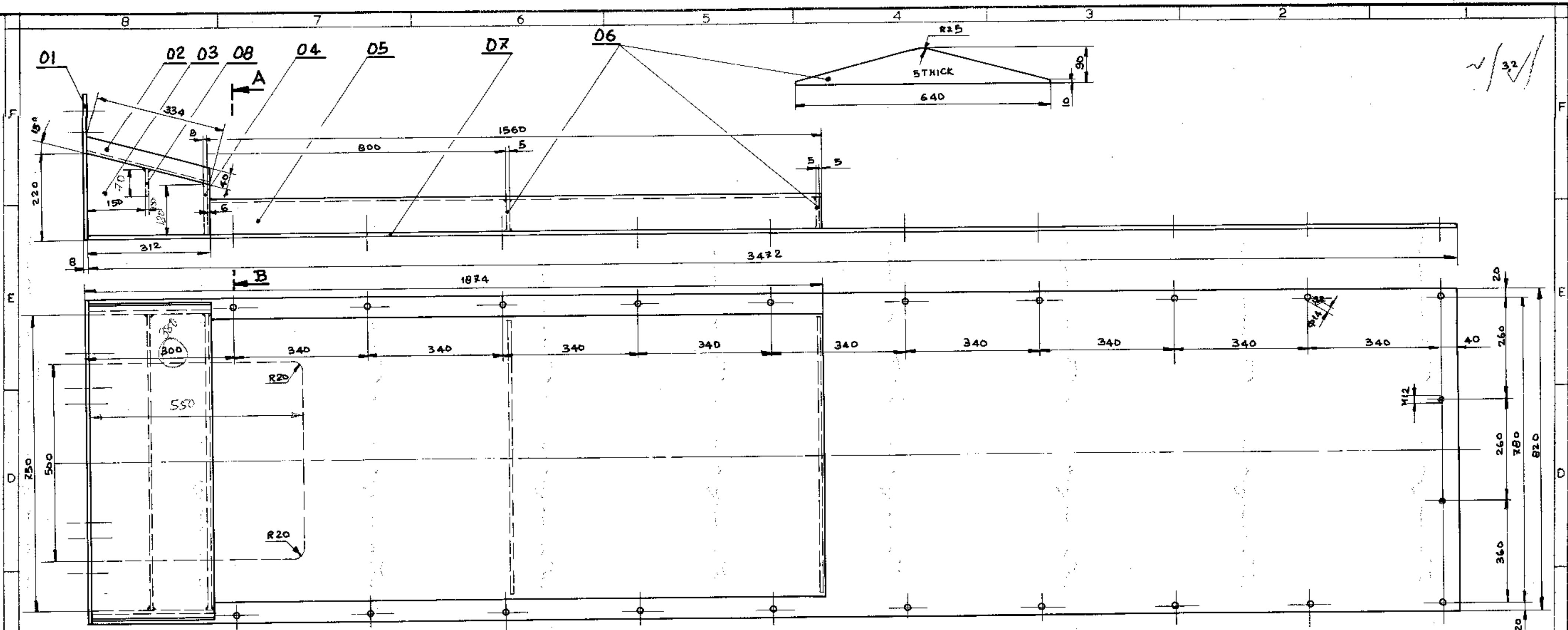


A3-SIZE

N/32/1



ITEM NO.	DESCRIPTION	DRAWING NO.	PLATE Bx 830x3480 A151 304 MATL CODE MATL SPEC UNIT WT. QTY.					
EOPT: PUSH BENCH								
Bharat Heavy Electricals Ltd., SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014		DRN	NAME	SIGN	DATE	NO. OF ITEMS		
		CHK	A. ARACKIYAN	A. ARACKIYAN	26.2.90			
		APPD			26.2.90			
REV.	DATE	ALTERED	DEPT.	GRADE OF UNTOOLDIM	SCALE	WEIGHT (Kg)	REP TO ASSY/OLD DRG.	ITEM NO.
01	22-6-20	CHECKED		C/M/F	1:10	150	RW 280 23/16 1-7-1127-11-00667	20
APPD:- MTL SPECN AISI 304 WAS C-20 13:226			TITLE		CARD CODE	DRAWING NO.	REV.	
			COVER (COVER OF FRONT RACK GUIDE BED)		U 01	3-7-1127-11-03111	01	



SECTION-AB

All welded construction.
Weld thickness = 3mm.
All welding should be leak
proof.

ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. CODE	UNIT WT.
08	RIB 8x70x750		C-20	3.3
07	PLATE 8x820x3472		IS:226	162
06	RIB 5x50x640		C-20	1.1
05	PLATE 5x740x1560		IS:226	46.0
04	RIB 8x130x750		C-20	6.4
03	PLATE 8x220x312		IS:226	3.9
02	RIB 5x320x870		C-20	10
01	PLATE 8x370x820		IS:226	17.8
ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. SPEC.	QTY.

EQPT: PUSH BENCH



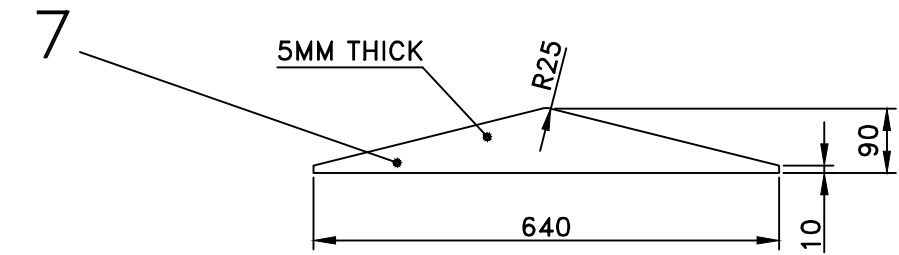
Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI-620 014

DRN	NAME	SIGN	DATE	NO. OF ITEMS
CHD	A. MAHARAJAN	A. MAHARAJAN	26.2.30	
APPD				

REV	DATE	ALTERED
01		CHECKED

DEPT	GRADE OF UNFOLD DIM	SCALE	WEIGHT (KG)	REF TO ASSY/OLD DRG	ITEM NO.
CODE	C/M/F	1:5	256	RW 28023/1 1-7-1127-05-00667	05

TITLE	CARD CODE UOI	DRAWING NO.	REV.
COVER (COVER OF FRONT RACK GUIDE BED ASSY)		2-7-1127-05-00945	

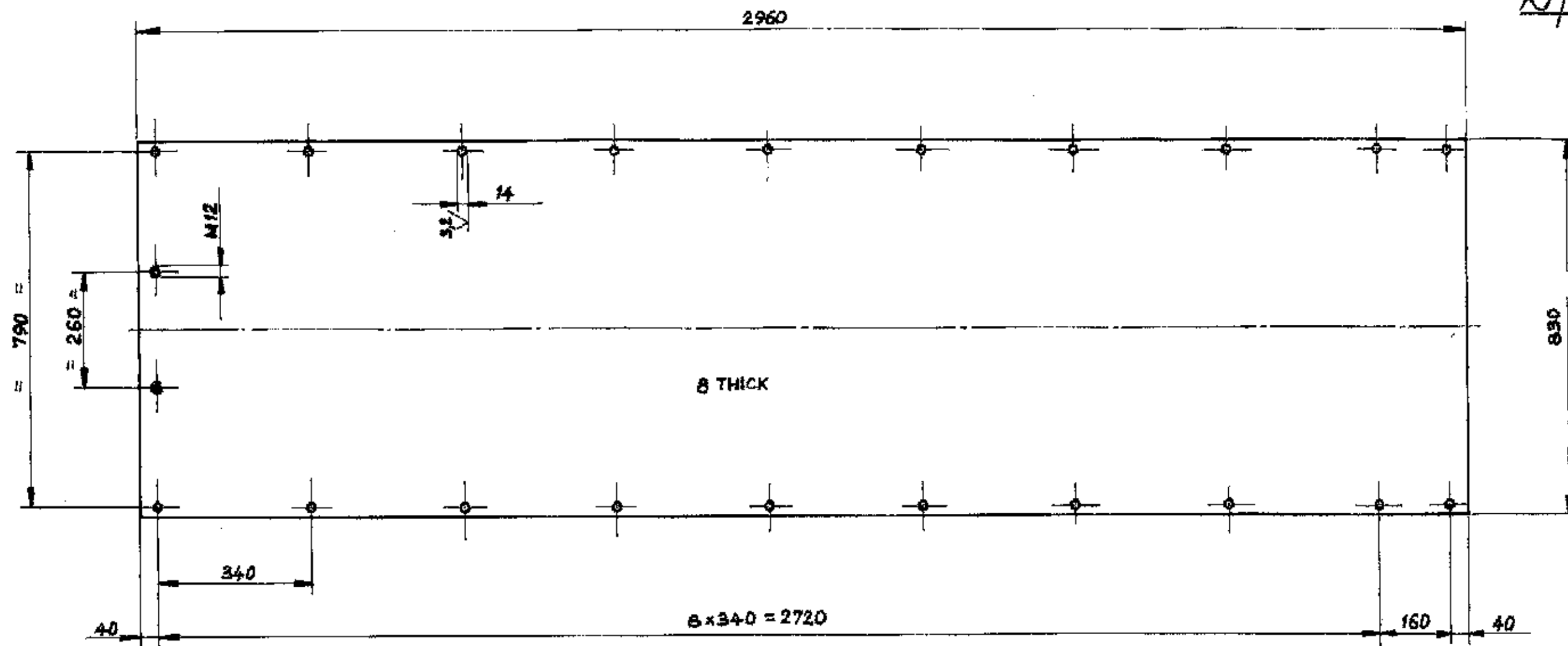


1. ALL WELDED CONSTRUCTION.
2. WELD THICKNESS = 3 MM.

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L

~ 3.2/1

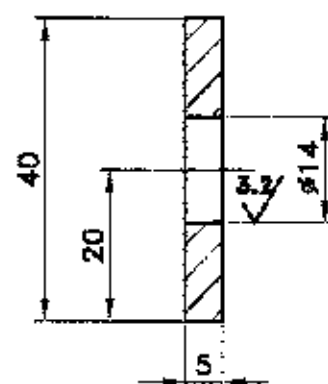
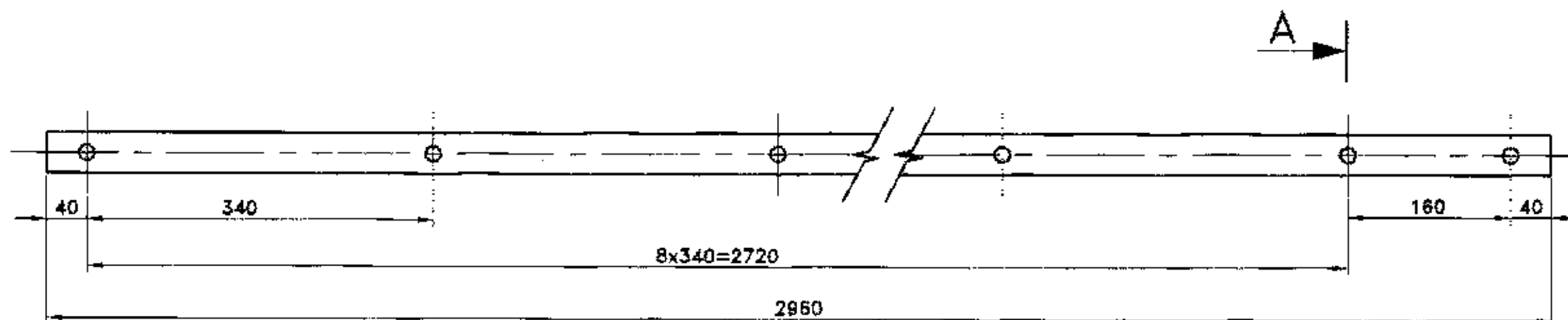


ITEM NO.		DESCRIPTION		DRAWING NO.		MATERIAL CODE		UNIT WT	
						AISI 304		QTY	
EQPT :- PUSH BENCH									
 Bharat Heavy Electricals Ltd., SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014		DRN	NAME	SIGN	DATE	NO. OF ITEMS			
		CHK	A. ARACKI	A. Aracki	18-08-95				
		APPD	S. S. Srinivas	S. S. Srinivas	18-08-95				
DEPT	GRADE OF DIM	SCALE	WEIGHT	REF TO ASSY OLD DRS		ITEM NO.			
CODE	C/M/F	1:10	157	1-7-1127-11-00667 01 15 005-74.001		01			
TITLE		CARD CODE	DRAWING NO.		REV				
COVER PLATE (COVER OF FRONT RACK GUIDE BED ASSY)		U 01	3-7-1127-11-03135		1				

DATE	ALTD:- K. R. Ramesh	REV	DATE	ALTERED
02/22/95	CHKD:- A. L. R. R. R.	01	18/10/95	CHECKED:- A. L. R. R. R.
APPD:- J. Srinivas		ZONE	APPD:- J. Srinivas	
MTL SPEC. AISI 304 WAS FE 410WA IS: 2062		MATL-SPEC. FE 410WA IS: 2062 WAS C20 IS: 226		

ALL DIMENSIONS ARE IN MILLIMETRES

~ / 32 /



SECTION-AA

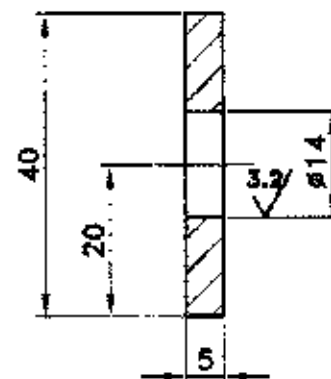
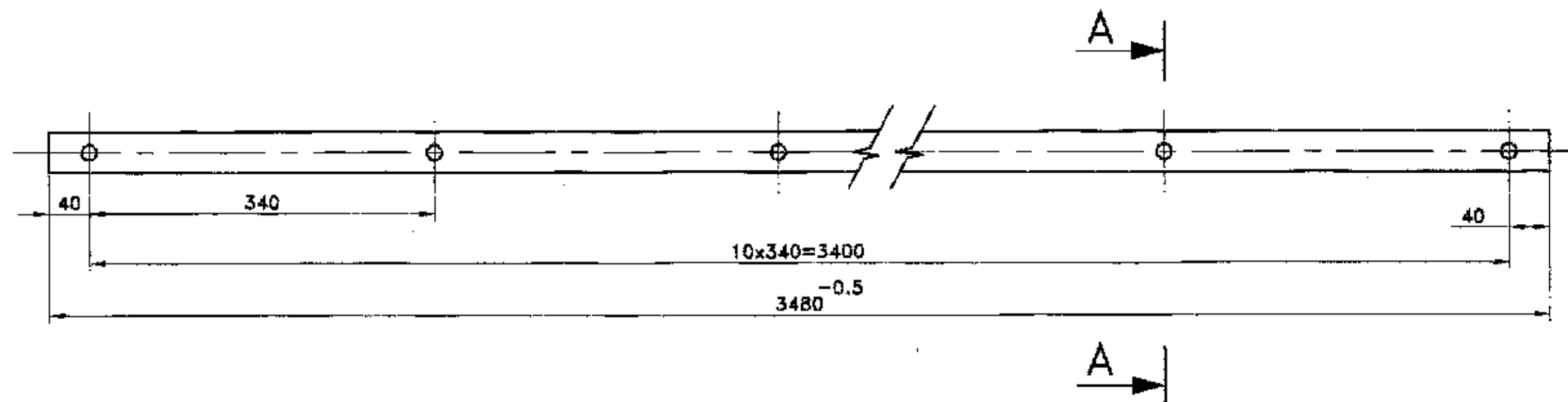
HARDNESS 70-75 SHORE A

ITEM NO		DESCRIPTION		DRAWING NO		NEOPRENE RUBBER		UNIT WT	
						MATL CODE		QTY	
						MATL SPEC			
EQPT: PUSH BENCH									
Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014				GRN	NAME K.Ramakrishnan		SIGNATURE <i>K. Ramakrishnan</i>	DATE 26.5.2000	
				CHD	A.Arockiam		SIGNATURE <i>A. Arockiam</i>	DATE 26.5.2000	
				APPD	S.Shanmuga sundaram		SIGNATURE <i>S. Shanmuga sundaram</i>	DATE 26.5.2000	
REV	DATE	ALTERED :		DEPT	GRADE OF UNTOL DIM	SCALE	WEIGHT(kg)	REF TO ASSY DWG NO	
01		CHECKED :		CODE	6/16/17	1:5	0.750	1-7-1127-11-00667	
		APPROVED :						REF TO OLD DWG NO	
TITLE				GASKET		CARD CODE		DRAWING NO :	
				(COVER OF FRONT RACK GUIDE BED ASSY)		U 01		3-7-1127-11-04394	
								REV	
								00	



ALL DIMENSIONS ARE IN MILLIMETRES

~ / 3.2 /



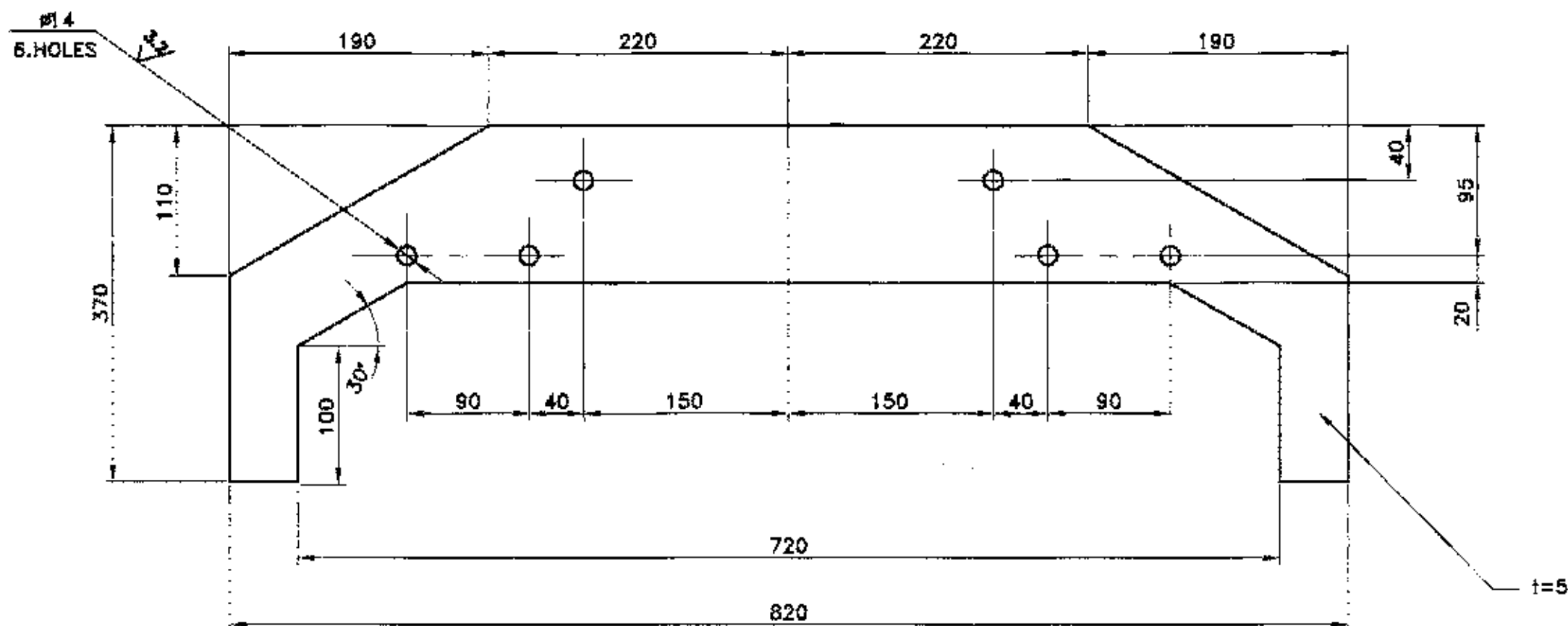
SECTION-AA

HARDNESS 70-75 SHORE A

ITEM NO	DESCRIPTION	DRAWING NO	NEOPRENE RUBBER	
			MATL CODE	UNIT WT
			MATL SPEC	QTY
EQPT: PUSH BENCH				
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME	SIGNATURE
		CHD	K.Ramakrishnan	K. Ramakrishnan
		APPD	A.Arockiam	A. Arockiam
			S.Shanmuga sundaram	S. Shanmuga sundaram
DATE	REV	GRADE OF UNTOOL DM	SCALE	WEIGHT(kg)
		2/10/11	1:5	0.870
TITLE		DRAWING NO :		REV
GASKET		3-7-1127-11-04395		00
(COVER OF FRONT RACK GUIDE BED ASSY)		CARD CODE		
		U 01		

REV	DATE	ALTERED :
01		CHECKED :
ZONE		APPROVED

ALL DIMENSIONS ARE IN MILLIMETRES



HARDNESS 70-75 SHORE A

ITEM NO		DESCRIPTION		DRAWING NO		NEOPRENE RUBBER		UNIT WT	
						MATL CODE		QTY	
						MATL SPEC			
EQPT: PUSH BENCH									
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014				NAME K. Ramakrishnan SIGNATURE K. Ramakrishnan DATE 26.02.2008		NAME A. Aracklam SIGNATURE A. Aracklam DATE 26.02.2008		NAME S. Shanmuga sundaram SIGNATURE S. Shanmuga sundaram DATE 26.02.2008	
REV 01		DATE		DEPT		GRADE OF UNTOOL CMM		SCALE	
						NTS		WEIGHT(kg)	
								0.500	
ZONE				CODE				REF TO ASSY DWG NO	
								1-7-1127-11-00667	
								REF TO OLD DWG NO	
								DRAWING NO :	
								3-7-1127-11-04396	
								REV	
								00	

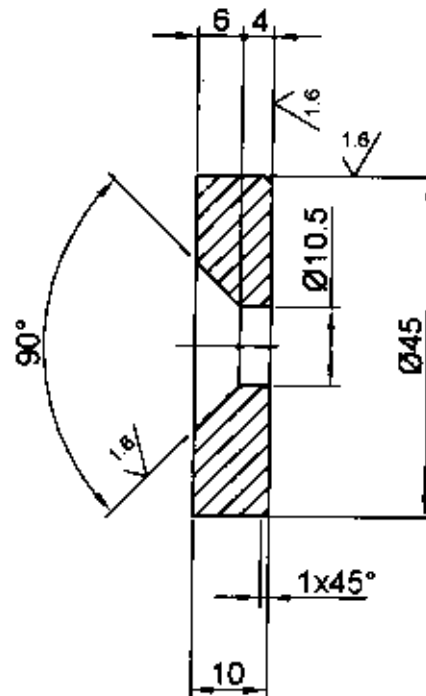
ALL DIMENSIONS ARE IN MM

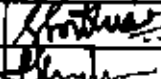
CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE INTEREST OF THE COMPANY

REV	DATE	ALTERED
01	19.07.95	CHECKED APPROVED

MTL SPCN Fe 410 WA IS:2062
WAS C20 IS:226

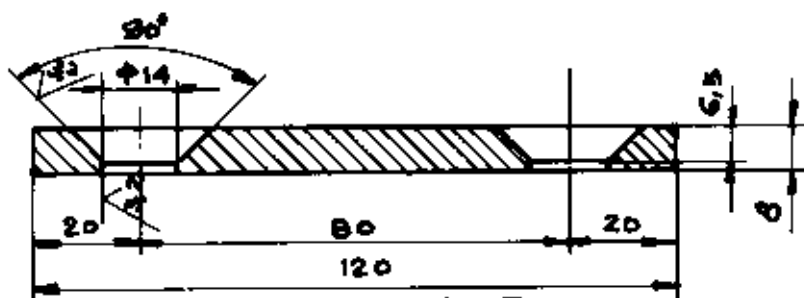
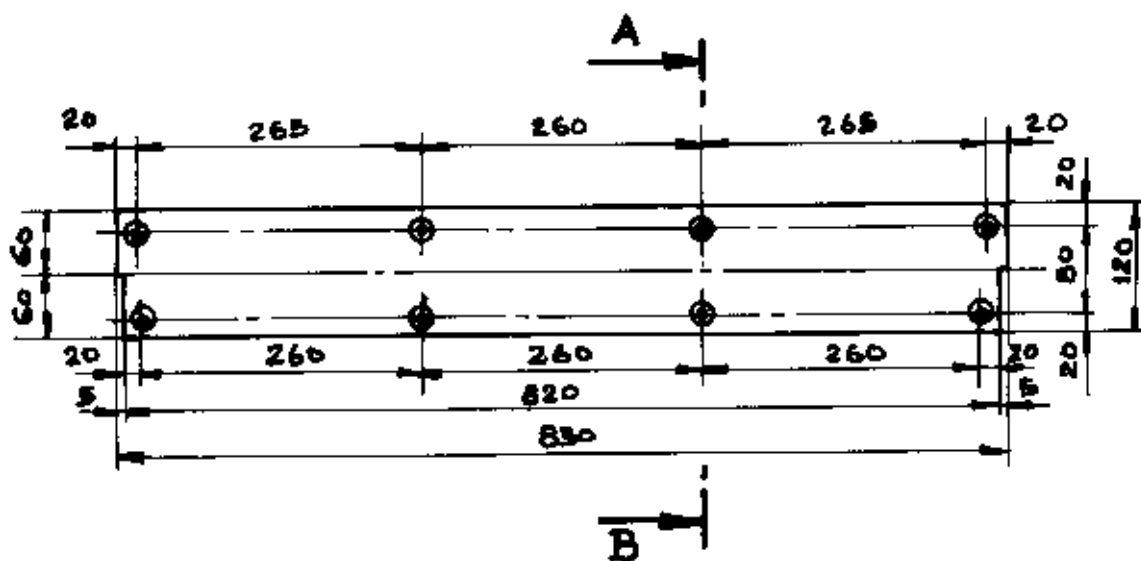
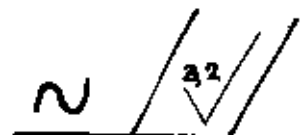
3.2/1.6/



		Fe410WA IS:2062			
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT	
			MATL SPEC	QTY	
EQPT: PUSH BENCH					
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN B.ASHOKKUMAR	NAME B.ASHOKKUMAR
				CHD SSN.KUMAR	SIGNATURE 
				APPD S.SHANMUGASUNDARAM	DATE 01.03.02
DEPT	GRADE OF UNTOL DIM C/M/F		SCALE 1:1	WEIGHT (Kg) 0.12	REF TO ASSY DRG 0-7-1127-01-00204
CODE					REF TO OLD DRG RW 28014/5
TITLE WASHER RACK BEARING ASSY				CARD CODE U 01	DRAWING NO : 4-7-1127-01-02106
				RE	19

CAUTION THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

REV 01	DATE 22.2.90	ALTERED K. R. R.
CHECKED A. R. R.		
ZONE APPD: J. R. R.		
MTL SPECN A1S1 304		
WBS C-20 IS: 226		



SECTION-A-B

THIS SECTION TILTED 30° AND DRAWN.

	8x120x830		
		A1S1 304	
ITEM NO.	DESCRIPTION	MATL CODE	UNIT WT
		MATL SPEC	QTY

EQPT: PUSH BENCH



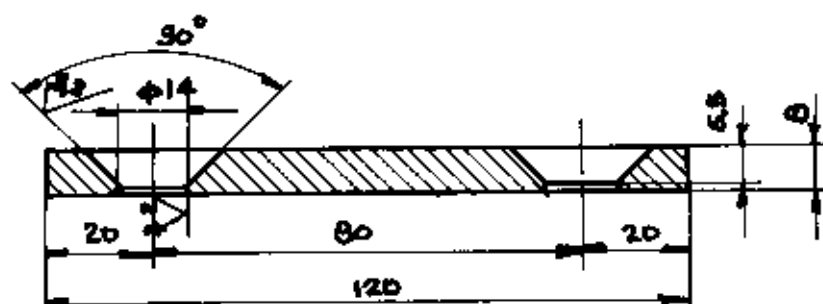
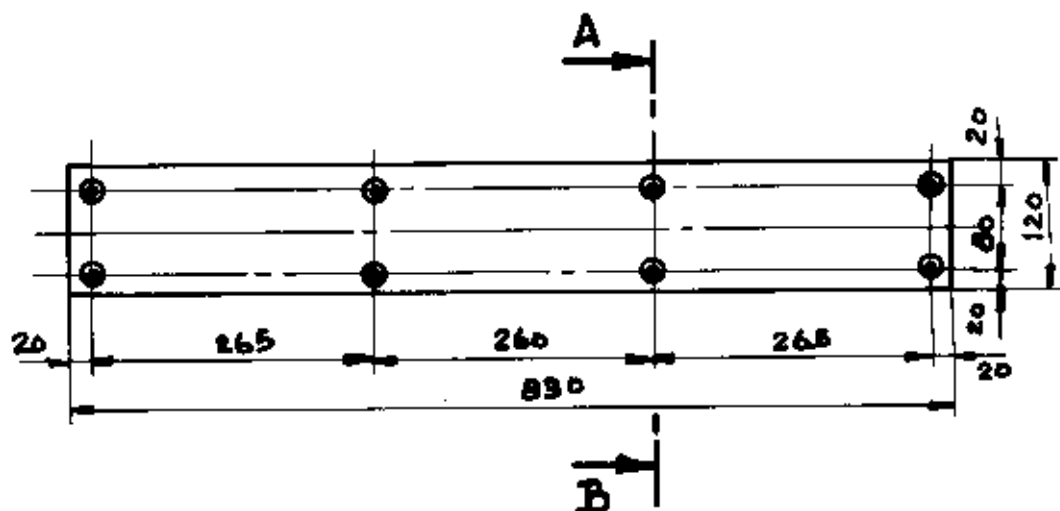
Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI - 620 014

DRN	NAME A. MANOHARAN	SIGN A. Manoharan	DATE 26.2.90
CHD	A. ARUN	A. Arun	26.2.90
APPD		J. R. R.	26.2.90

DEPT	GRADE OF CONTROL D.M.	SCALE	WEIGHT (kg)	REF TO ASSY OLD DRG	ITEM NO.
CODE	C/M/F	1:1, 1:5	6.25	RW 28023/10 1-7-1127-11-00667	
TITLE			CARD CODE	DRAWING NO.	REV
STRIP (COVER OF FRONT RACK GUIDE BED)			U 01	4-7-1127-11-02110	01

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REV 01	DATE 22.2.90	ALTERED F. R. R.
		CHECKED A. U. M. C.
ZONE APPD: J. P. R.		
MTC SPEN 8151 304		
WASE-20 15:226		

**SECTION-AB****THIS SECTION TILTED 30° AND DRAWN**

ITEM NO.	DESCRIPTION	8x120x830	
		AISI 304	8
		MATL CODE	UNIT WT
		MATL SPEC	QTY

EQPT: PUSH BENCH



Bharat Heavy Electricals Ltd.,
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI - 620 014

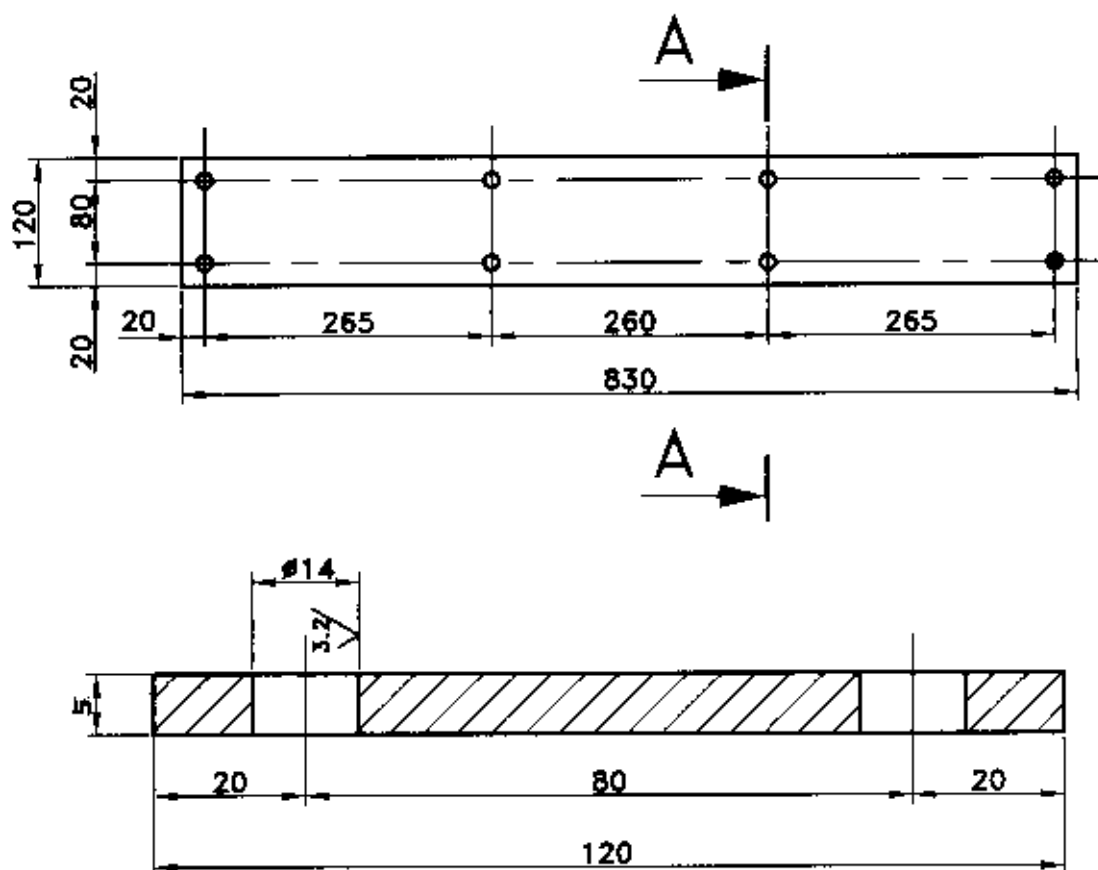
DRN	NAME A. MANOHARAN	SIGN A. Manoharan	DATE 26.2.90
CHD	A. A. ROCKIM	A. C. M. C.	26.2.90
APPD		J. P. R.	26.2.90

DEPT	GRADE OF UNTEL. ORG	SCALE	WEIGHT (kg)	REF TO ASSY/OLD DRG	ITEM NO.
CODE	C/M/F	1:1, 1:5	6.25	RW 28023/11 1-7-1127-11-00667	
TITLE			CARD CODE	DRAWING NO.	REV
STRIP (COVER OF FRONT RACK GUIDE BED)			U 01	4-7-1127-11-02111	01

ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED
01		CHECKED
		APPROVED

~ / 3.2 /



SECTION-AA

THIS SECTION TILTED 90° AND DRAWN
(SCALE 1:1)

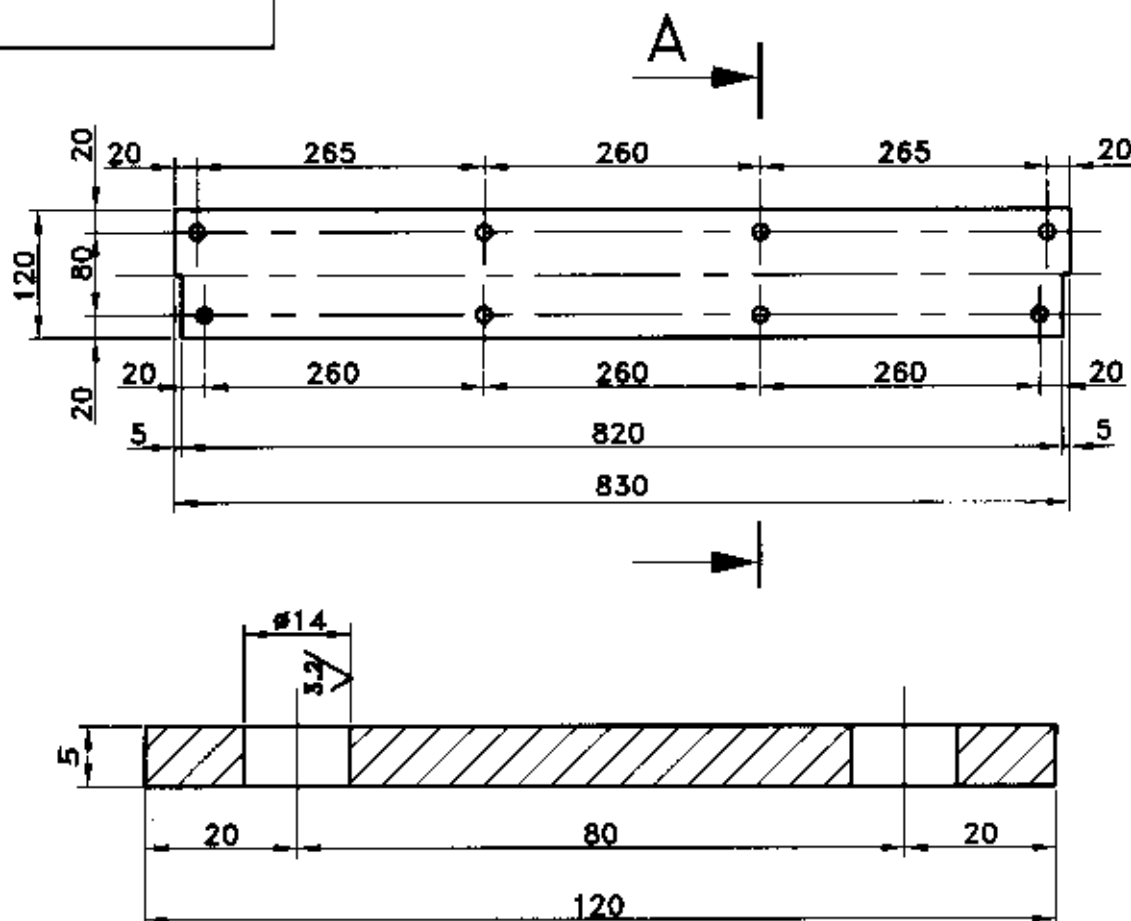
HARDNESS 70-75 SHORE A

				NEOPRENE RUBBER	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT	
			MATL SPEC	QTY	
EQPT: PUSH BENCH					
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRM	NAME K.Ramakrishnan	SIGNATURE <i>K. Ramakrishnan</i>	DATE 26/5/2000
		CHD	A.AROCKIAM.	<i>A. Arockiam</i>	26.5.2000
		APPD	S.SHANMUGASUNDARAM	<i>S. Shanmugasundaram</i>	26.5.2000
DEPT	GRADE OF UNTOOL DIM 2/10/14	SCALE NTS	WEIGHT (Kg) 1.000	REF TO ASSY DRG 1-7-1127-11-00567	ITEM NO 36
CODE				REF TO OLD DRG	
TITLE GASKET (COVER OF FRONT RACK GUIDE ASSY)			CARD CODE U 01	DRAWING NO : 4-7-1127-11-05965	

ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED
05		CHECKED
		APPROVED

~ / 3.2 /

**SECTION-AA**THIS SECTION TILTED 90° AND DRAWN**HARDNESS 70-75 SHORE A**

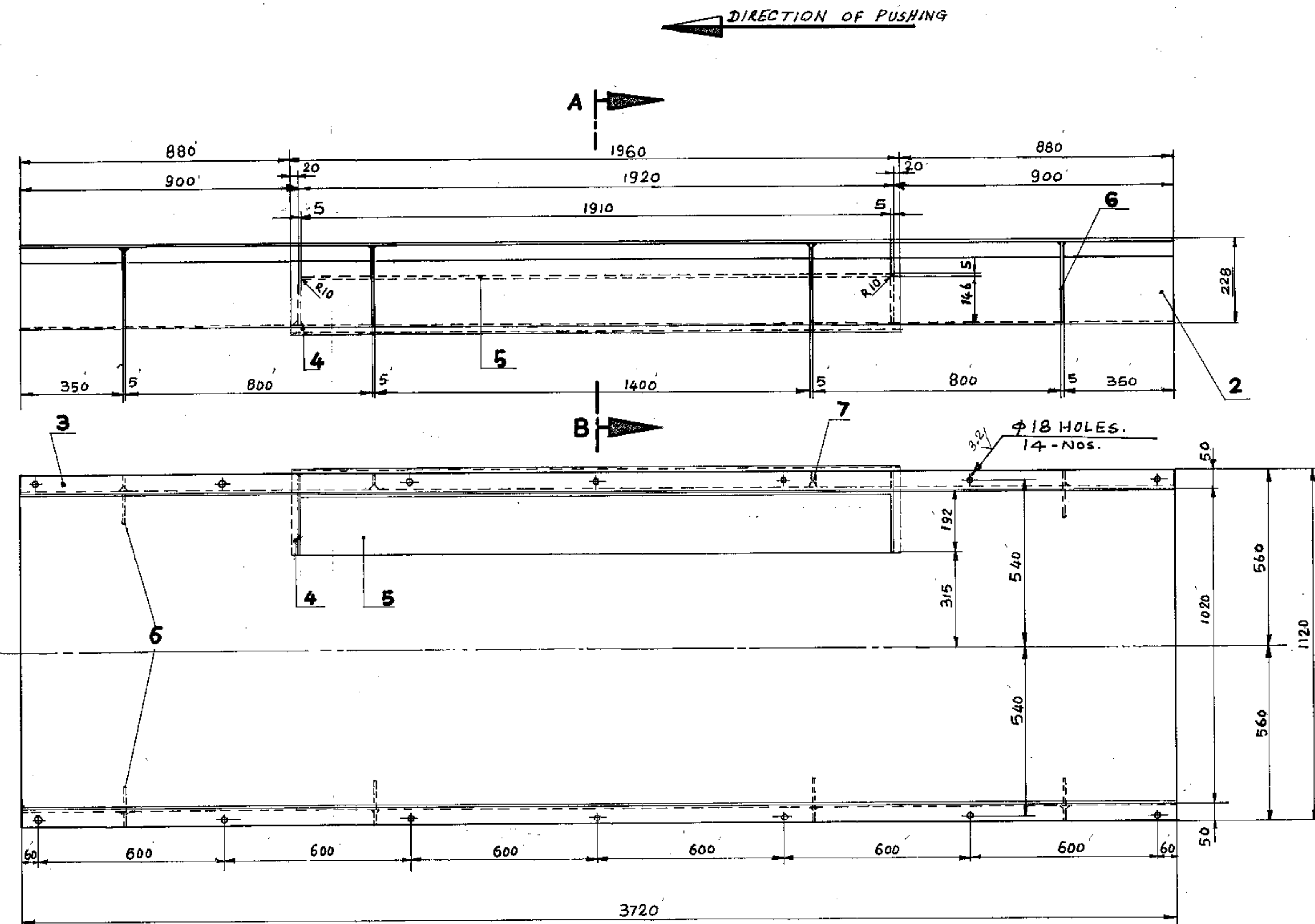
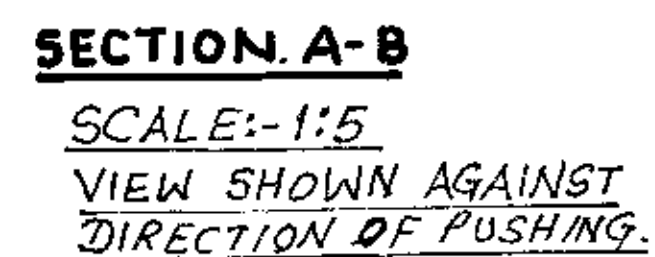
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY

EQPT: PUSH BENCH

 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014	DRN	NAME K.Ramakrishnan	SIGNATURE <i>K. Ramakrishnan</i>	DATE 26-5-2000
	CHD	A.AROCKIAM.	<i>A. Arockiam</i>	26-5-2000
	APPD	S.SHANMUGA SUNDARAM	<i>S. Shanmuga Sundaram</i>	26-5-2000

DEPT	GRADE OF UNTOOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DRG	ITEM NO
CODE	2/1/17	NTS	1.000	1-7-1127-11-00667	32
TITLE GASKET			CARD CODE U 01	DRAWING NO : 4-7-1127-11-05966	RE
(COVER OF FRONT RACK GUIDE BED ASSY)					



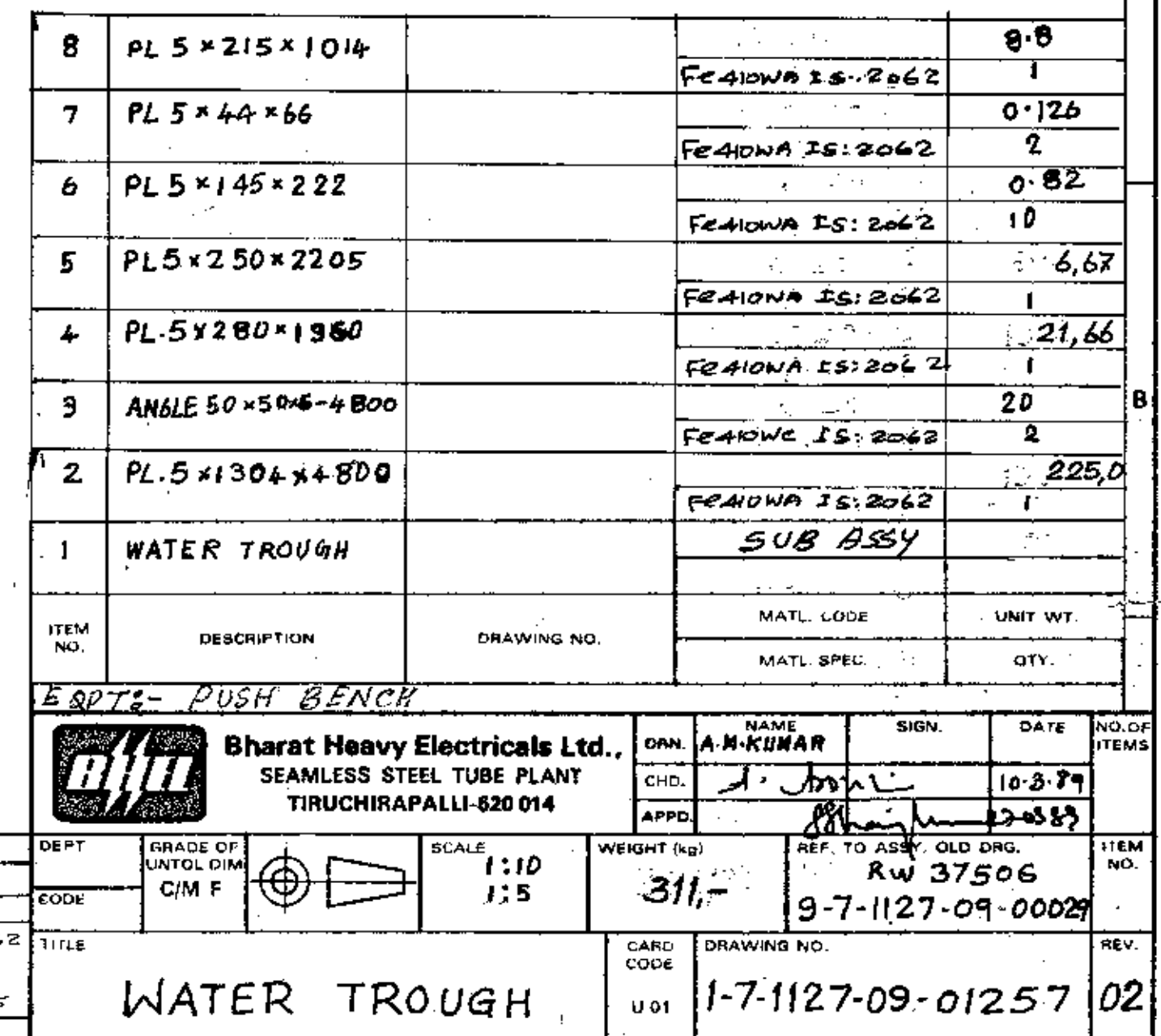


ALL WELDED A 3MM

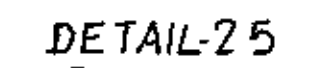
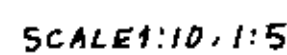
07	PLATE 44X5X66		FE 410 WA IS: 2062	0,126 2
06	PLATE 145X5X222		FE 410 WA IS: 2062	0,82 6
05	PLATE 250X5X222		FE 510 WA IS: 2062	6,70 1
04	PLATE 280X5X1960		FE 410 WA IS: 2062	21,67 1
03	ANGLE 50X50X6X3720		FE 410 WA IS: 2062	18,4 2
02	PLATE 1305X5X3720		FE 410 WA IS: 2062	170,- 1
01	WATER TROUGH		SUB ASSY	1
ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. CODE	UNIT WT.
			MATL. SPEC.	QTY.

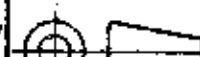
EQPT: PUSH BENCH						
		Bharat Heavy Electricals Ltd., SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014		DRN. S. MUTHUSAMY CHD. J. Jagan APPD. 884	SIGN. 884 DATE 7-8-89 10-3-89 2-5-89	NO. OF ITEMS
DEPT	GRADE OF UNTOL DIM C/M F		SCALE 1:10 1:5	WEIGHT (kg) 240.5	REF. TO ASBY. OLD DNG. RW 37507 9-7-1127-09-00029	ITEM NO.
CODE	TITLE <u>WATER TROUGH</u>			CARB CODE U 01	DRAWING NO. 1-7-1127-09-01256	REV. 02

REV	DATE	ALTERED	BY	REV	DATE	ALTERED	BY
02	11-03-95	CHECKED & APPROVED	G. LUST <i>G. Lust</i> <i>MM</i>	26	7-95	CHECKED	<i>1</i> <i>mm</i>
ITEM NOS. 02, 04 & 05 PLATE THICKNESS 5mm WAS 3mm. CORRESPONDING DIMENSIONS ARE ALSO CHANGED.				APP'D: <i>John</i> MAIL: SPCC FEATION 15502 FROM: 02, 04 & 05 C80 25: 272 15502 41010 TS: 2062 FOR ITEM 03 WAS			



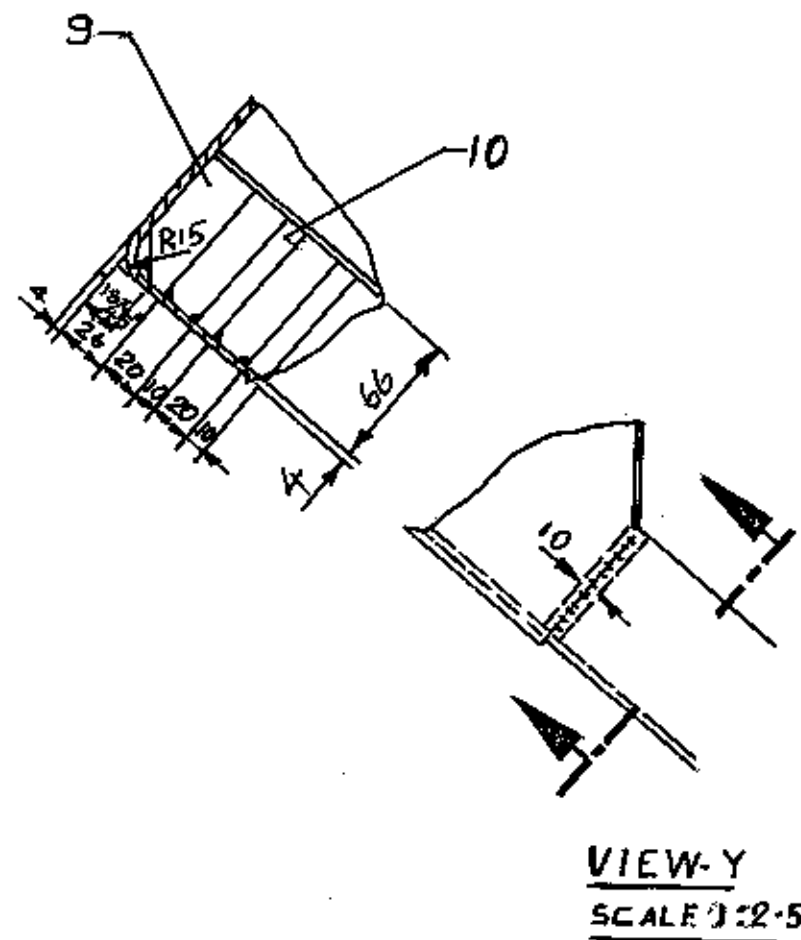
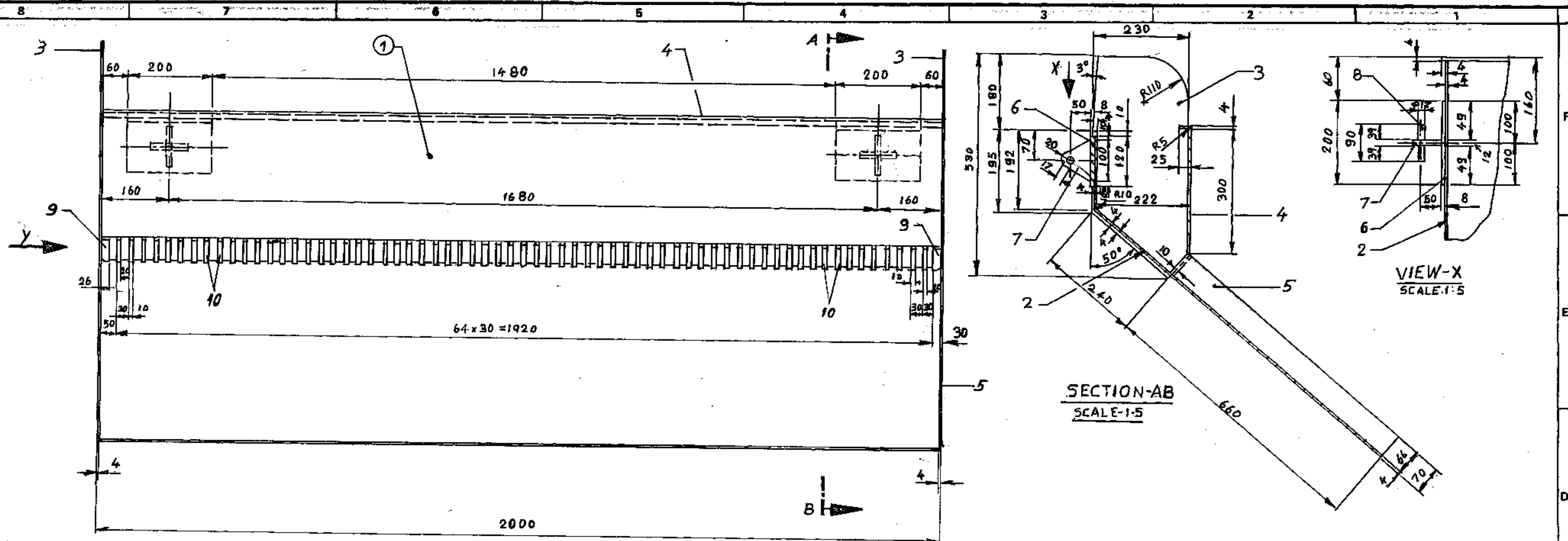
	B	C	D	E	F	G	H
ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.							



ESPT 2-PUSH BENCH		DATE		CITY	
	Bharat Heavy Electricals Ltd. SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014	DRN.	NAME A. N. KUMAR	ISSUE NO. 13/3/89	NO. OF ITEMS
		CHD.	1. 200	15-8-89	
		APPD.	9-7-1127-09-0029	22-03-89	
DEPT	GRADE OF UNIT/ DIM	SCALE	WEIGHT (kg)	ATT. TO ASSN. OLD DWS. RW-37305	
COLOR	C/M F		1:5:1:0	280,-	9-7-1127-09-0029
TITLE			CARD CODE	DRAWING NO.	REV.
WATER TROUGH			U 01	1-7-1127-09-01258	02

DATE 11-01-76	REV 02	ALTERED CHECKED APPROVED	S. Graham J. Kane S. Kane	REV 01	DATE 8-27-75	ALTERED CHECKED	S. Graham J. Kane	ZONE
ITEM NOS. 2, 4, 5, 6, 7 & 8 PLATE THICKNESS SHOWN WAS 3mm. CORRESPONDING DIMENSIONS ARE ALSO CHANGED.								
MATL SPEC. IDENT. IS 2061 FOR ITEM NOS. 2, 4 TO 26 WERE Q26 751226 AND 8412106 751226 FOR ITEM 3 W/8 Q26512								

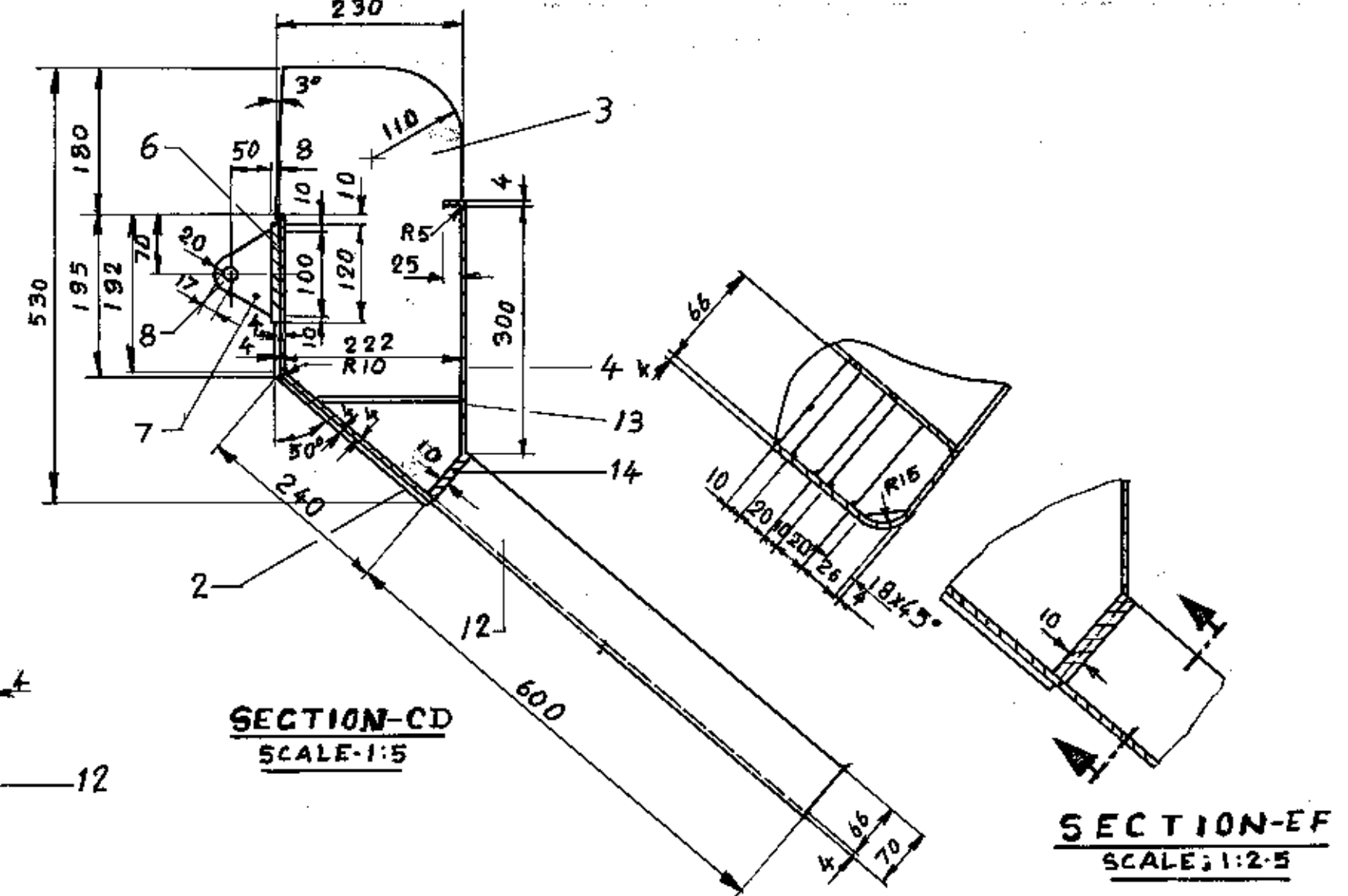
WATER TROUGH



ITEM NO.	DESCRIPTION	DRAWING NO.	MATL CODE	UNIT WT
10	PL 10x66x10			0.052
9	PL 26x66x10			0.135
8	ROUND 17x90			0.16
7	PL 100x12x70			0.33
6	PL 200x120x8			1.5
5	PL 660x2125x4			44.0
4	PL 330x992x4			20.6
3	PL 230x530x4			3.3
2	PL 4x440x1992			27.5
1	DRAIN BOX			
ITEM NO.	DESCRIPTION	DRAWING NO.	MATL SPEC	QTY

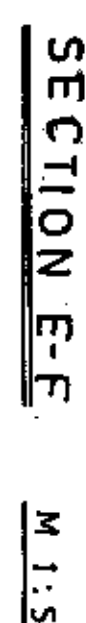
EQPT:- PUSH BENCH

		Bharat Heavy Electricals Ltd., SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014		DRN NAME SIGN DATE NO. OF ITEMS		
CHD NAME SIGN DATE NO. OF ITEMS	APPD NAME SIGN DATE NO. OF ITEMS	DEPT GRADE OF UNTOOL DRN C/M/F	SCALE 1:5, 1:2.5	WEIGHT (kg) 110 kg	REF TO ASSY OLD DRG 9-7-1127-09-00029 RW 28229/1	ITEM NO. 01
TITLE DRAIN BOX		CARD CODE U 01	DRAWING NO. 2-71127-09-01962		REV 00	

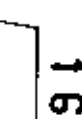


EQPT:- PUSH BENCH-

 Bharat Heavy Electricals Ltd., SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620 014			DRN	NAME	SIGN	DATE	NO. OF ITEMS
			CHG	A. M. KUMAR	<i>[Signature]</i>	29/5/81	
			APPD	<i>[Signature]</i>		27/5/81	
DEPT	GRADE OF UNTOOL DIM C/M/F		SCALE 1:5, 1:2.5	WEIGHT (Kil)	REF TO ASSY. OLD DRG 9-7-1127-09-00029 RW 28229/11		ITEM NO. 14
CODE				82			
TITLE DRAIN BOX				CARD CODE U 01	DRAWING NO. 2-7-1127-09-01963		REV <i>[Signature]</i>

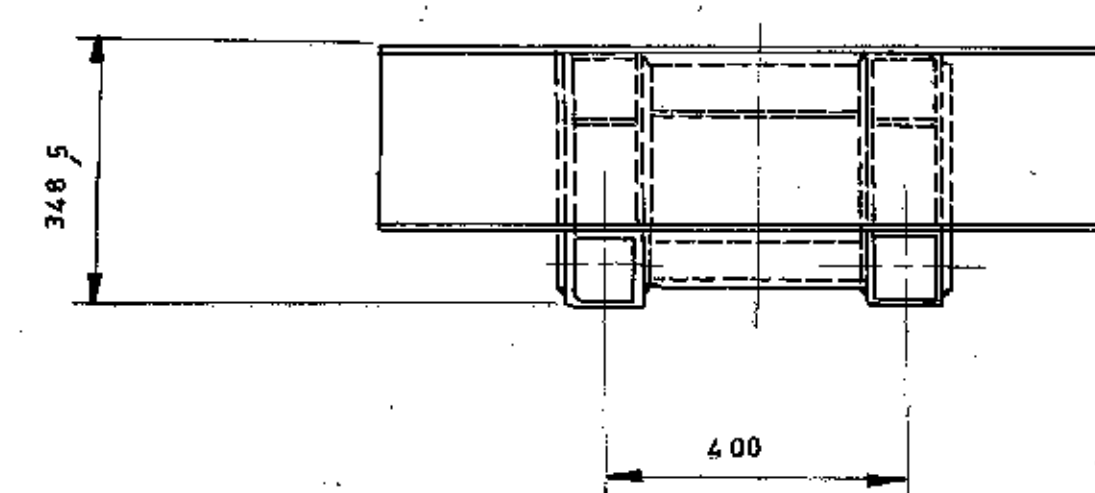


SCALE 1:2,5



1-7-1134-02-01419

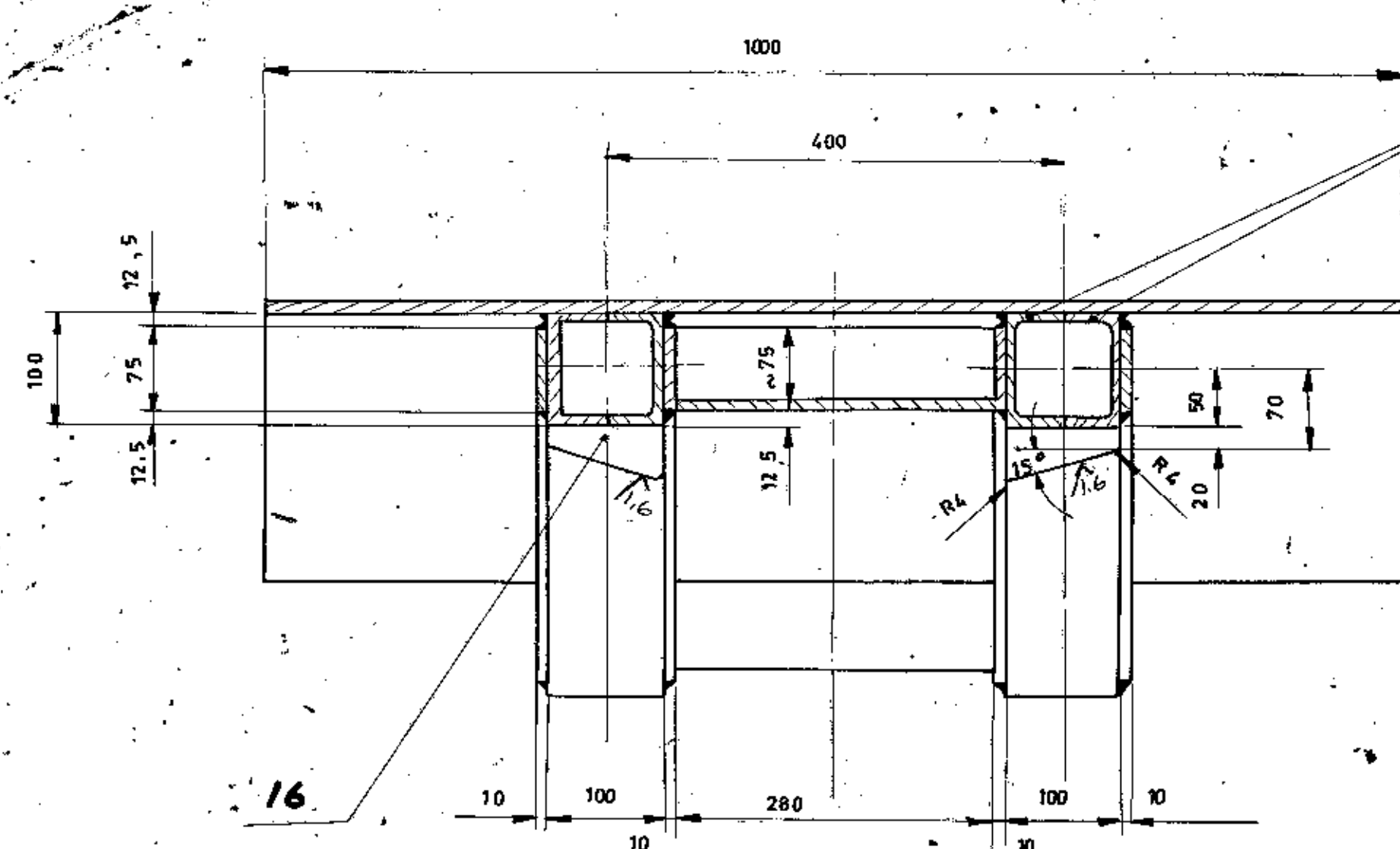
0-7-1134-01-000085



Technical drawing of a mechanical part showing a cross-section. The drawing includes dimensions: $15 \times 45^\circ$ and 50 ± 0.5 .

SCALE 11

19	ISA 100X100X10 ⁵ 280E		FEAIONA IS:262	2	4.25
18	ISA 100X100X10 ⁵ 300E		FEAIONA IS:262	2	4.58
17	PE 20 300X60		FEAIONA IS:262	2	2.82
16	PE 60 100X47		FEAIONA IS:262	4	2.0
15	PE 10 4178X520		FEAIONA IS:262	1	170.5
14	PE 10 1000X362		FEAIONA IS:262	2	28.5
13	PE 10 1000X273		FEAIONA IS:262	3	21.5
12	PE 10 779X520		FEAIONA IS:262	1	31.8
11	PE 32	4-7.1134-00-00054	FEAIONA IS:262	4	4.0
10	PE 10	4-7.1134-00-00053	FEAIONA IS:262	1	14.4
09	PE 10	4-7.1134-00-00052	FEAIONA IS:262	4	5.6
08	PE 10	4-7.1134-00-00051	FEAIONA IS:262	4	6.5
07	CHANNEL	4-7.1134-00-00050	FEAIONA IS:262	2	1.8
06	CHANNEL	4-7.1134-00-00049	FEAIONA IS:262	2	1.8
05	CHANNEL	4-7.1134-00-00048	FEAIONA IS:262	4	45.2
04	CHANNEL	4-7.1134-00-00047	FEAIONA IS:262	8	3.3
03	CHANNEL	4-7.1134-00-00046	FEAIONA IS:262	12	2.9
02	CHANNEL	4-7.1134-00-00045	FEAIONA IS:262	2	5.6
01	CHANNEL	4-7.1134-00-00044	FEAIONA IS:262	2	8.6
ITEM	DESCRIPTION	DRG. N°	NATL.	QTY.	WT.

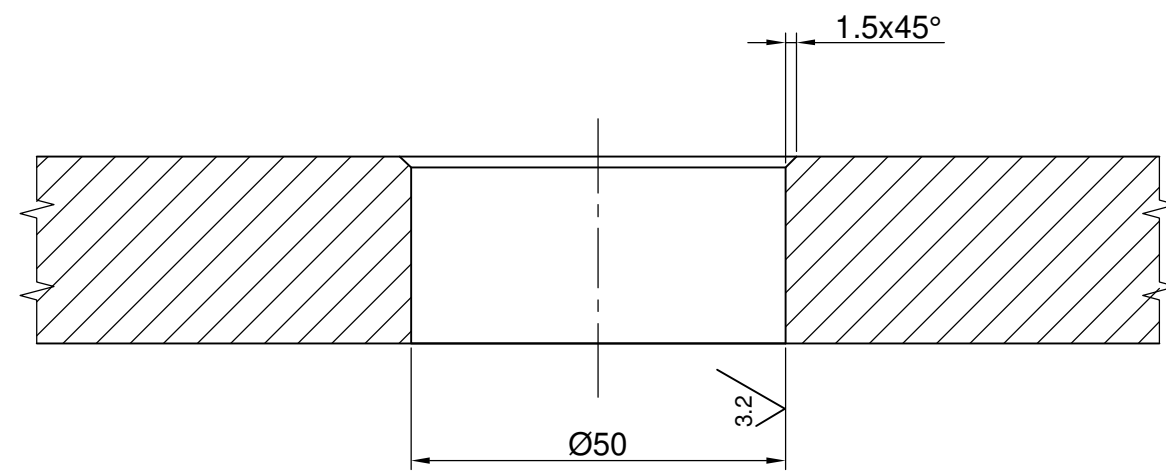
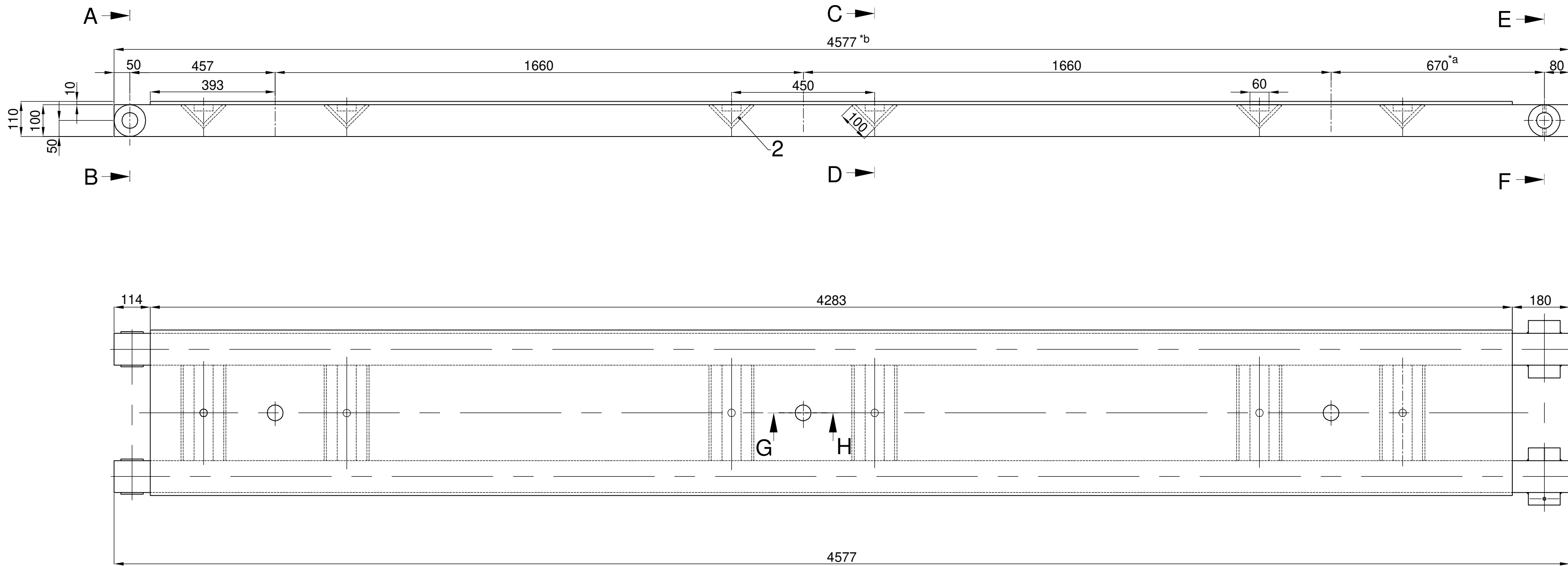


Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and features. The drawing includes a top view and a side view. Key dimensions are: overall width 520, overall height 110, mounting hole diameter M24, and various internal dimensions like 400, 100, 300, and 500. Callouts 01 and 02 point to specific features.

CARD TYPE 2				CARD TYPE 2			
 BHARAT HEAVY ELECTRICALS LIMITED, SEAMLESS STEEL TUBE PLANT - TRUCHIRAPALLI - 620 014				REF. TO THE D.O. NO. <u>010-1134-007</u>			
				ITEM NO. <u>010-1134-007</u>			
REV	DATE	ALTERED	DEPT	CODE	SCALE	WEIGHT (KG)	ITEM NO.
01	04-09-76	CHECKED BY <u>RAJA</u>			 <u>N70, 11.5, 11.1</u>	<u>785</u>	
TITLE				NAME			
FRAME MATL. SPEC. ENCL 6000 ITM. 10 TO 12 & 13 TO THEIR LATEST SPEC.				A.G. <u>RAJA</u> CHECKED BY <u>RAJA</u> APPROVED <u>RAJA</u>			
				DIMENSIONS TO BE CONTROLLED WITHIN LIMITS AS SHOWN MACHINING TOLERANCE ± 0.25 MM. UNLESS OTHERWISE NON-MACHINING TOLERANCE ± 0.50 MM.			
CARD CODE				DRAWING NO.			
				<u>0-7-1134-007-000000</u>			
SHEET NO.				SHEET NO.			
				<u>010-1134-007-000000</u>			

3.2/ 1.6/

ø75 H7	+0.030 0.000
ø48 H7	+0.025 0.000

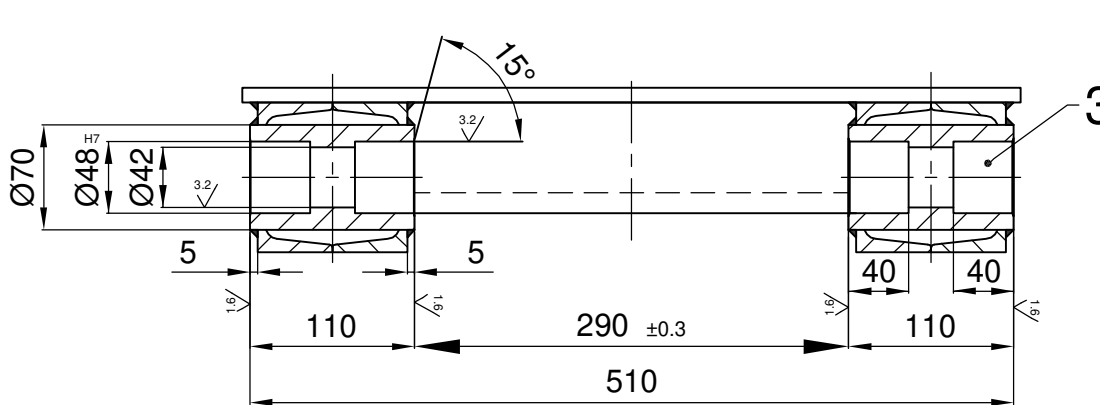


SECTION G-H
SCALE 1:1

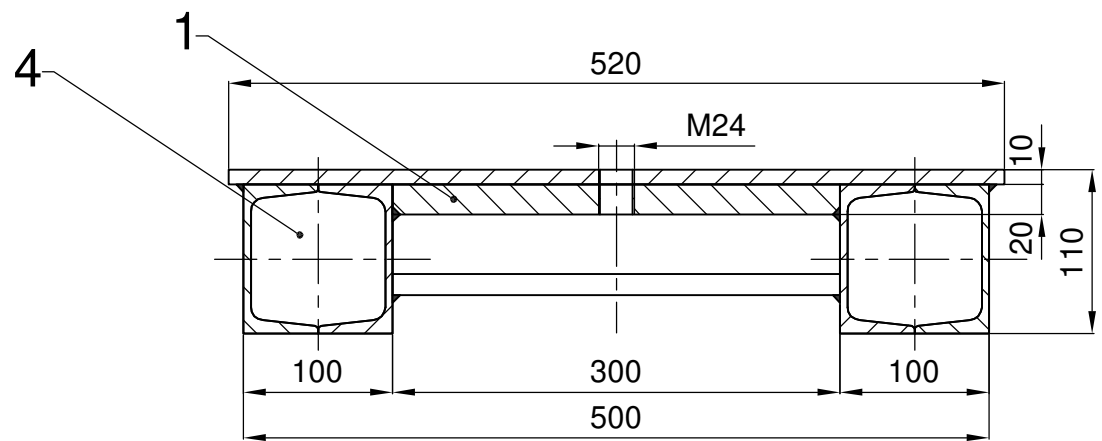
- Notes:
- This drawing is to be read along with 0-7-1127-05-11119 for assembly.
 - Changes carried out Before and After CPE Implementation

Sl.No.	Before CPE Implementation	After CPE Implementation
01	750	670 ^a
02	4657	4577 ^b

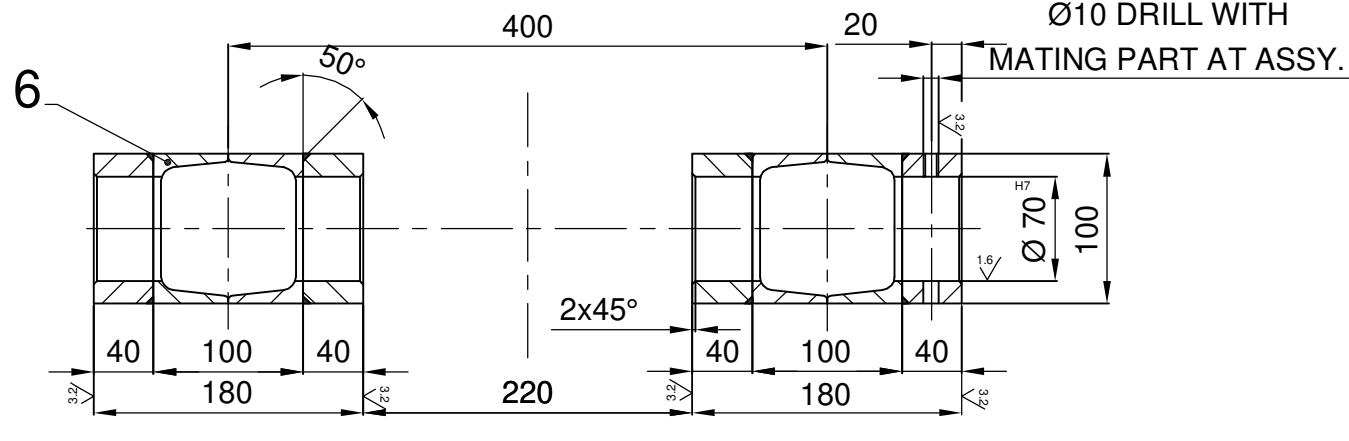
ALL WELDED CONSTRUCTIONS.
FILLET SIZE 5 mm.



SECTION A-B
SCALE 1:5



SECTION C-D
SCALE 1:5



SECTION E-F
SCALE 1:5

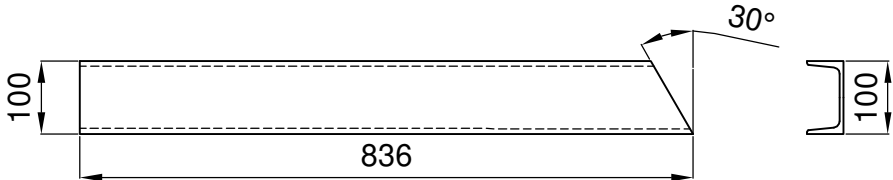
REV 01	DATE 04.11.11	ALTERED CHECKED APPROVED	<i>M. Prakash</i> <i>S. Loganathan</i> <i>S. Mohan</i>
1. CONVERTED TO AUTOCAD 2. TOTAL WEIGHT 400.422kg WAS 408.8kg 3. ROLLER PITCH WAS CORRECTED AS 670mm			

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06	ROUND Ø100x50		45C8 IS:1875	4	0.469
05	PL. 10x520x4283		E250A IS:2062	1	174.832
04	ISMC 100x4577		E250A IS:2062	4	43.756
03	ROUND Ø70x110		45C8 IS:1875	2	2.456
02	ISA 100x10x300		E250A IS:2062	6	4.470
01	PL.10x60x300		E250A IS:2062	6	2.826
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT	QTY
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH					
Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014					
DEPT SSTP	GRADE OF UNTOL DIM Ø/M/F IS:2102	SCALE 1:10,1:5,1:1	WEIGHT (Kg) 400.422	REF TO ASSY D REF TO OLD DWG NO 0301 164-19.034	ITEM
TITLE PHB - FRAME FOR INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH - AFTER CPE IMPLEMENTATION				CARD CODE U 01	DRAWING NO : 1-7-1134-00-00315

ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash	
		CHECKED	A Arockiam			CHECKED	S Loganathan	
		APPROVED	SS Sundaram			APPROVED	S Mohan	
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.				2



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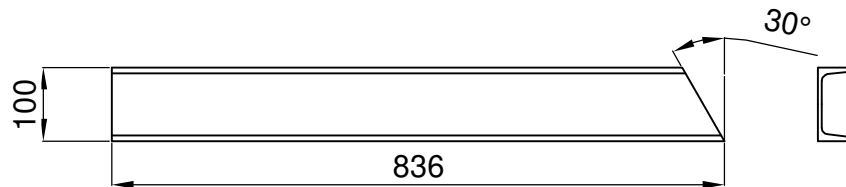
						E250A IS: 2062			
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT				
			MATL SPEC		QTY				
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH									
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014			DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90		
				CHD	A. AROCKIAM	A AROCKIAM	31.10.90		
				APPD	SS SUNDARAM	SS SUNDARAM	21.1.93		
DEPT SSTP	GRADE OF UNTOL. DIM Ø/M/√ IS: 2102		SCALE 1:10	WEIGHT (Kg) 7.992	REF TO ASSY DWG NO 0-7-1134-00-00090			ITEM 01	
CODE 456					REF TO OLD DWG NO 0301164-19.013				
TITLE PHB - CHANNEL				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00044			R 02	

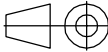


ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

2



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	ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE	UNIT WT		
					MATL SPEC	QTY		
	EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90	
				CHD	A. AROCKIAM	A AROCKIAM	31.10.90	
				APPD	SS SUNDARAM	SS SUNDARAM	21.1.93	
	DEPT SSTP	GRADE OF UNTOL. DIM φ/M/# IS: 2102		SCALE 1:10	WEIGHT (Kg) 15.984	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 02
	CODE 456					REF TO OLD DWG NO 0301164-19.014		
	TITLE PHB - CHANNEL				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00045		R 02

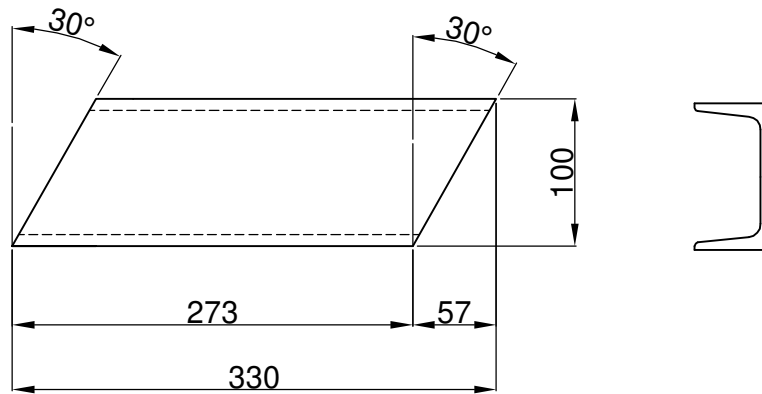


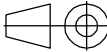
A4-SIZE

ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

2



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	ITEM NO	DESCRIPTION	DRAWING NO	E250A IS: 2062		12		
				MATL CODE		UNIT WT		
				MATL SPEC		QTY		
	EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014			DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90
					CHD	A. AROCKIAM	A AROCKIAM	31.10.90
					APPD	SS SUNDARAM	SS SUNDARAM	21.1.93
	DEPT SSTP	GRADE OF UNTOL. DIM φ/M/√ IS: 2102		SCALE 1:5	WEIGHT (Kg) 37.86	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 03
	CODE 456					REF TO OLD DWG NO 0301164-19.015		
TITLE PHB - CHANNEL				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00046		R 02	

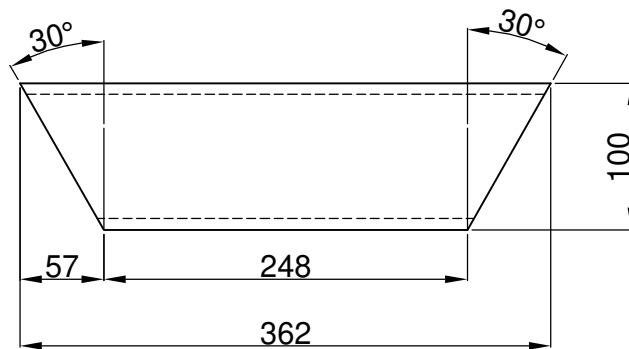


A4-SIZE

ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

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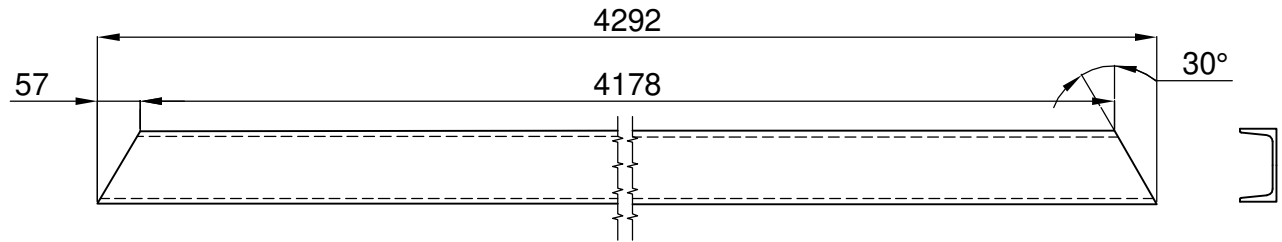
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	ISMC 100X362				3.461		
				E250A IS: 2062	8		
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT		
			MATL SPEC		QTY		
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90	
			CHD	A. AROCKIAM	A AROCKIAM	31.10.90	
			APPD	SS SUNDARAM	SS SUNDARAM	21.1.93	
DEPT SSTP	GRADE OF UNTOL. DIM φ/M/√ IS: 2102		SCALE 1:5	WEIGHT (Kg) 27.688	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 04
CODE 456					REF TO OLD DWG NO 0301164-19.016		
TITLE PHB - CHANNEL			CARD CODE U 01	DRAWING NO : 4-7-1134-00-00047			R 02

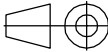


ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			



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	ISMC 100X4292				E250A IS: 2062	4	41.032
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT		
			MATL SPEC		QTY		
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90
				CHD	A. AROCKIAM	A AROCKIAM	31.10.90
				APPD	SS SUNDARAM	SS SUNDARAM	21.1.93
DEPT SSTP	GRADE OF UNTOL. DIM φ/M/# IS: 2102		SCALE 1:5	WEIGHT (Kg) 164.128	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 05
CODE 456					REF TO OLD DWG NO 0301164-19.017		
TITLE PHB - CHANNEL				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00048		R 02

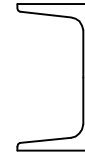
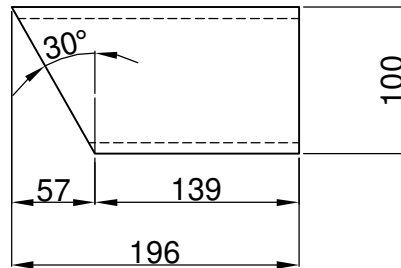


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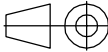
ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

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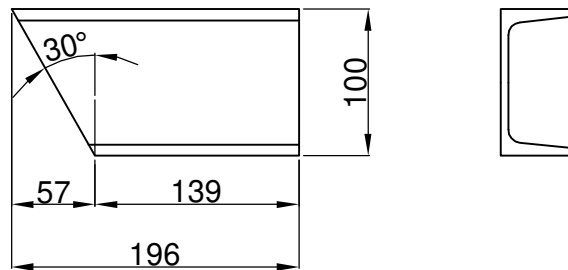
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	ISMC 100X196				1.874		
			E250A IS: 2062		2		
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT			
			MATL SPEC	QTY			
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI — 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90	
			CHD	A. AROCKIAM	A AROCKIAM	31.10.90	
			APPD	SS SUNDARAM	SS SUNDARAM	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM $\phi/M/\#$ IS: 2102		SCALE 1:5	WEIGHT (Kg) 3.748	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 06
CODE 456					REF TO OLD DWG NO 0301164-19.018		
TITLE PHB - CHANNEL			CARD CODE U 01	DRAWING NO : 4-7-1134-00-00049			R  02

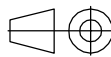
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ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED <i>SSN Kumar</i>	REV 02	DATE 04.04.12	ALTERED <i>M Prakash</i>	
		CHECKED <i>A Arockiam</i>			CHECKED <i>S Loganathan</i>	
		APPROVED <i>SS Sundaram</i>			APPROVED <i>S Mohan</i>	
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226			CONVERTED TO AUTOCAD.			2



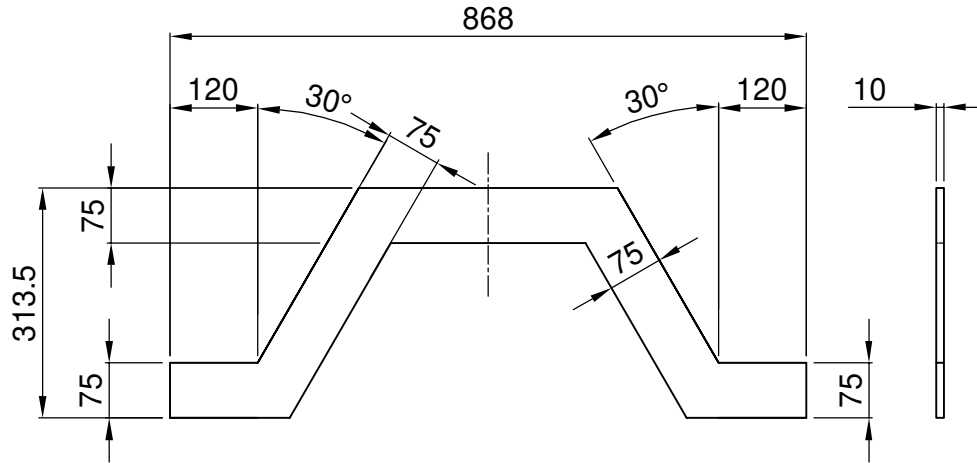
CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED.IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

	ISMC 100X196				1.874		
			E250A IS: 2062		2		
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT			
			MATL SPEC	QTY			
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE <i>SSN KUMAR</i>	DATE 31.10.90	
			CHD	A. AROCKIAM	<i>A AROCKIAM</i>	31.10.90	
			APPD	SS SUNDARAM	<i>SS SUNDARAM</i>	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM  IS: 2102		SCALE 1:5	WEIGHT (Kg) 3.748	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 07
CODE 456					REF TO OLD DWG NO 0301164-19.019		
TITLE PHB - CHANNEL			CARD CODE U 01	DRAWING NO : 4-7-1134-00-00050		R  02	



ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	S Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			



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	PL 10X868X313.5				6.732		
			E250A IS: 2062		4		
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT			
			MATL SPEC	QTY			
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH							
	Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI — 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90	
			CHD	A. AROCKIAM	A AROCKIAM	31.10.90	
			APPD	SS SUNDARAM	SS SUNDARAM	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM φ/M/# IS: 2102		SCALE 1:10	WEIGHT (Kg) 26.928	REF TO ASSY DWG NO 0-7-1134-00-00090		ITEM 08
CODE 456					REF TO OLD DWG NO 0301164-19.020		
TITLE PHB - PLATE				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00051		R 02

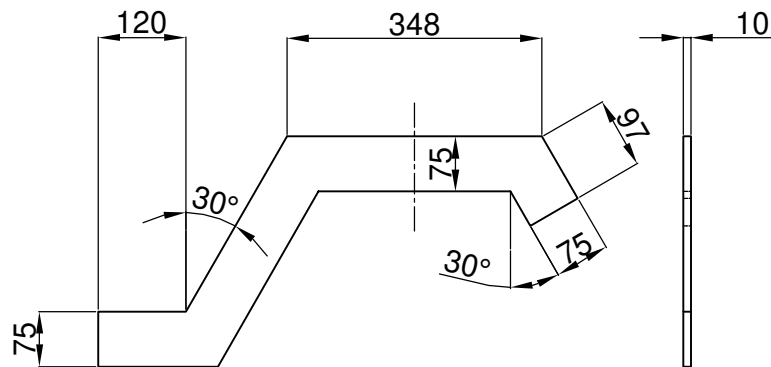


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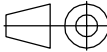
ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	G Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

2



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	PL 10X589.5X313.5			E250A IS: 2062	4	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT	
			MATL SPEC		QTY	
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH						
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE <i>SSN KUMAR</i>	DATE 31.10.90	
		CHD	A. AROCKIAM	<i>A AROCKIAM</i>	31.10.90	
		APPD	SS SUNDARAM	<i>SS SUNDARAM</i>	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM $\phi/\checkmark/M/\#$ IS: 2102		SCALE 1:10	WEIGHT (Kg) 18.772	REF TO ASSY DWG NO 0-7-1134-00-00090	ITEM 09
CODE 456					REF TO OLD DWG NO 0301164-19.021	
TITLE PHB - PLATE				CARD CODE U 01	DRAWING NO : 4-7-1134-00-00052	R 02

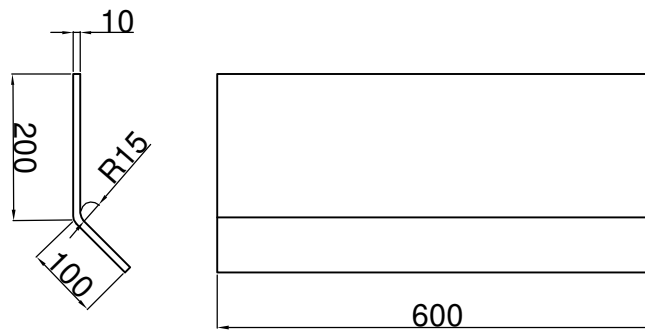


A4-SIZE

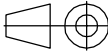
ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED	SSN Kumar	REV 02	DATE 04.04.12	ALTERED	M Prakash
		CHECKED	A Arockiam			CHECKED	G Loganathan
		APPROVED	SS Sundaram			APPROVED	S Mohan
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226				CONVERTED TO AUTOCAD.			

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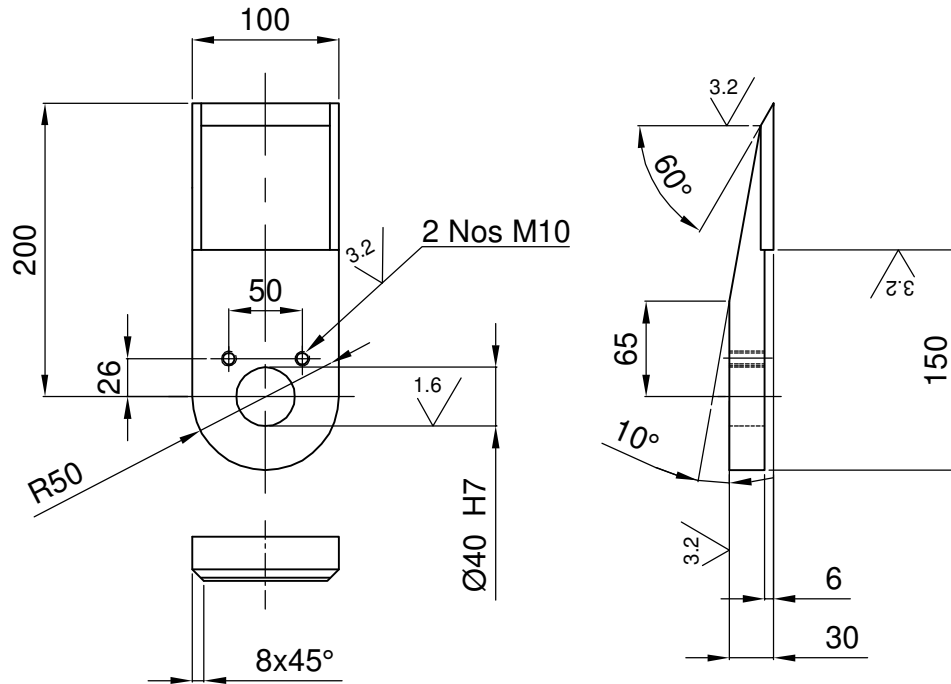
	PL 10X600X300			E250A IS: 2062	1	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT	
			MATL SPEC		QTY	
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH						
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE <i>SSN KUMAR</i>	DATE 31.10.90	
		CHD	A. AROCKIAM	<i>A AROCKIAM</i>	31.10.90	
		APPD	SS SUNDARAM	<i>SS SUNDARAM</i>	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM $\phi / M / F$ IS: 2102		SCALE 1:5	WEIGHT (Kg) 14.130	REF TO ASSY DWG NO 0-7-1134-00-00090	ITEM 10
CODE 456					REF TO OLD DWG NO 0301164-19.021	
TITLE PHB - PLATE			CARD CODE U 01	DRAWING NO : 4-7-1134-00-00053		R  02



A4-SIZE

ALL DIMENSIONS ARE IN MM

REV 01	DATE 24.8.96	ALTERED <i>S.P.N. Kumar</i> CHECKED <i>A. Arockiam</i> APPROVED <i>S.P. Sundaram</i>	REV 02	DATE 21.1.97	ALTERED <i>J. James</i> CHECKED <i>A. Arockiam</i> APPROVED <i>S.P. Sundaram</i>	REV 03	DATE 04.04.12	ALTERED <i>M. Prakash</i> CHECKED <i>G. Loganathan</i> APPROVED <i>S. Mohan</i>
MATL. SPEC.Fe410WA IS:2062 WAS C20 IS:226			Ø40 H7 WAS Ø30 STEP MACHINING 150x6 AND M10 TAPPED HOLE ADDED			CONVERTED TO AUTOCAD.		



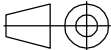
~ / 3.2/1.6 /

Ø40 H7	+0.025
	0.000

NOTES:

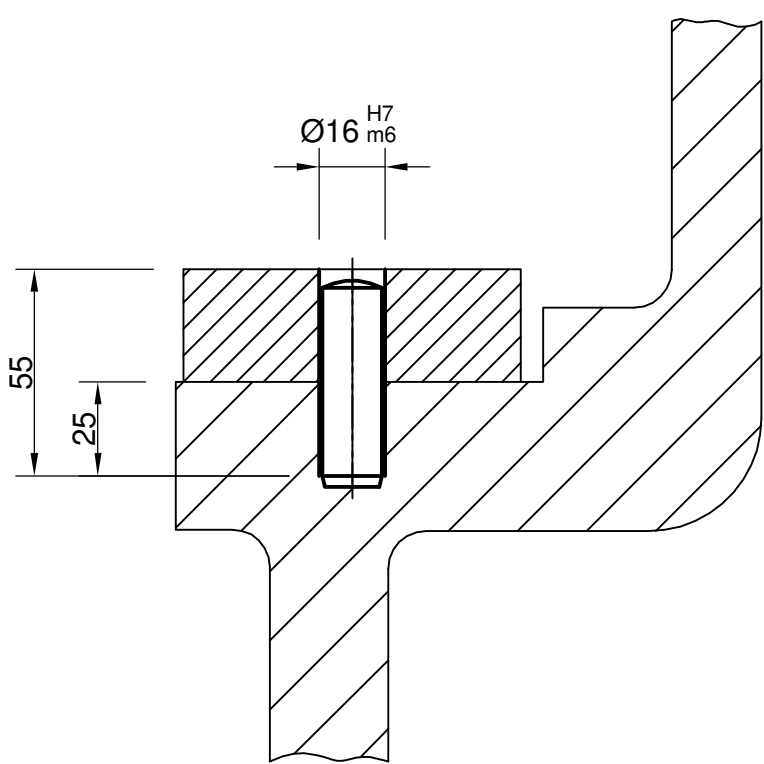
1. UNSPECIFIED CHAMBER 0.5x45°
2. THIS COMPONENT IS TO BE PROPERLY ALIGNED AND WELDED AT ASSY. DRG NO.:0-7-1134-00-00090

CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED.IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

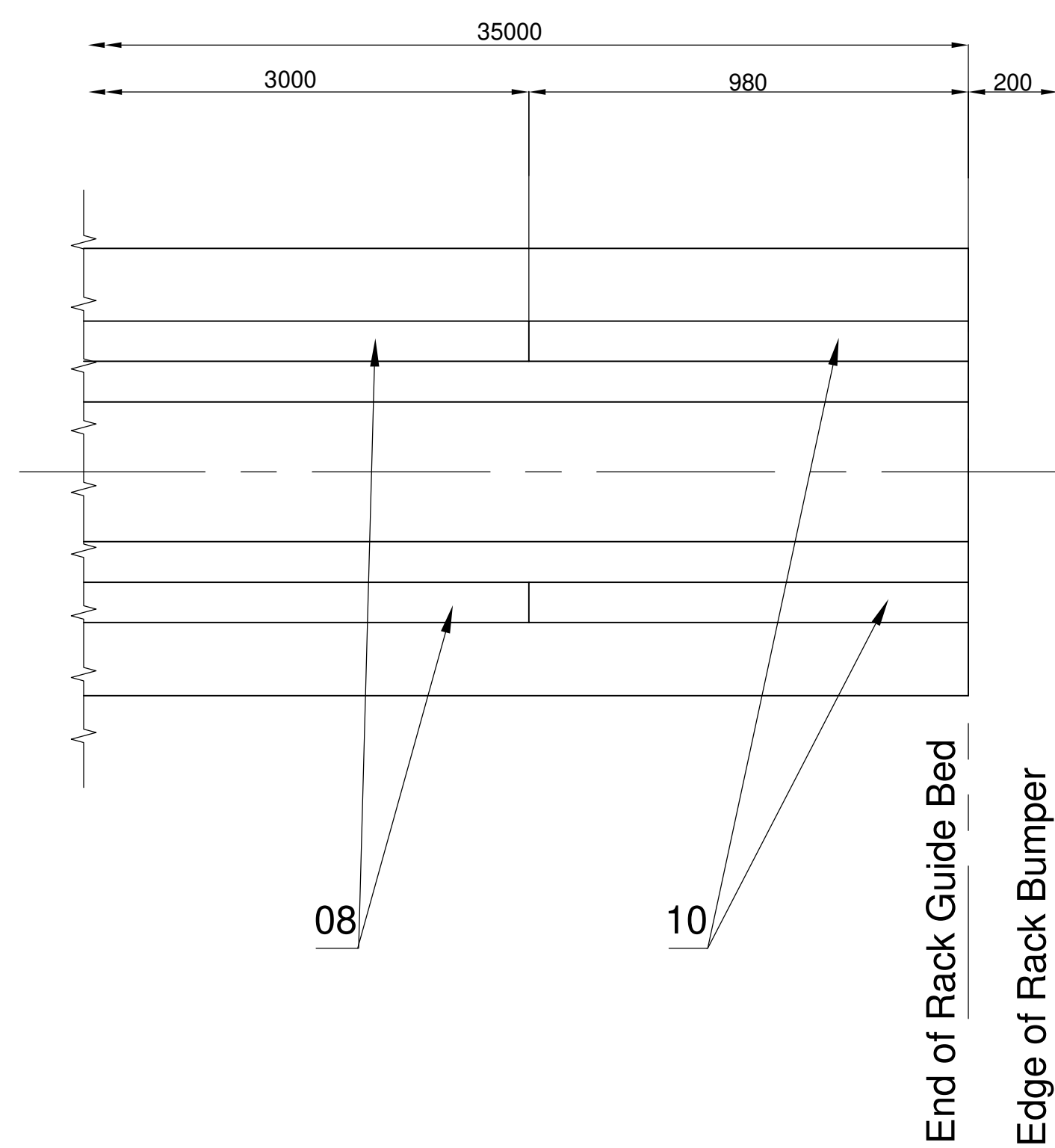
	PL 32X250X100			E250A IS: 2062	4	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT	
			MATL SPEC		QTY	
EQPT: INTERMEDIATE ROLLER CONVEYOR ON PUSH BENCH						
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SSN KUMAR	SIGNATURE SSN KUMAR	DATE 31.10.90	
		CHD	A. AROCKIAM	A AROCKIAM	31.10.90	
		APPD	SS SUNDARAM	SS SUNDARAM	21.01.93	
DEPT SSTP	GRADE OF UNTOL. DIM ϕ/M/ℱ IS: 2102		SCALE 1:5	WEIGHT (Kg) 9.176	REF TO ASSY DWG NO 0-7-1134-00-00090	ITEM 11
CODE 456					REF TO OLD DWG NO 0301164-19.023	
TITLE PHB - PLATE			CARD CODE U 01	DRAWING NO : 4-7-1134-00-00054		R  03



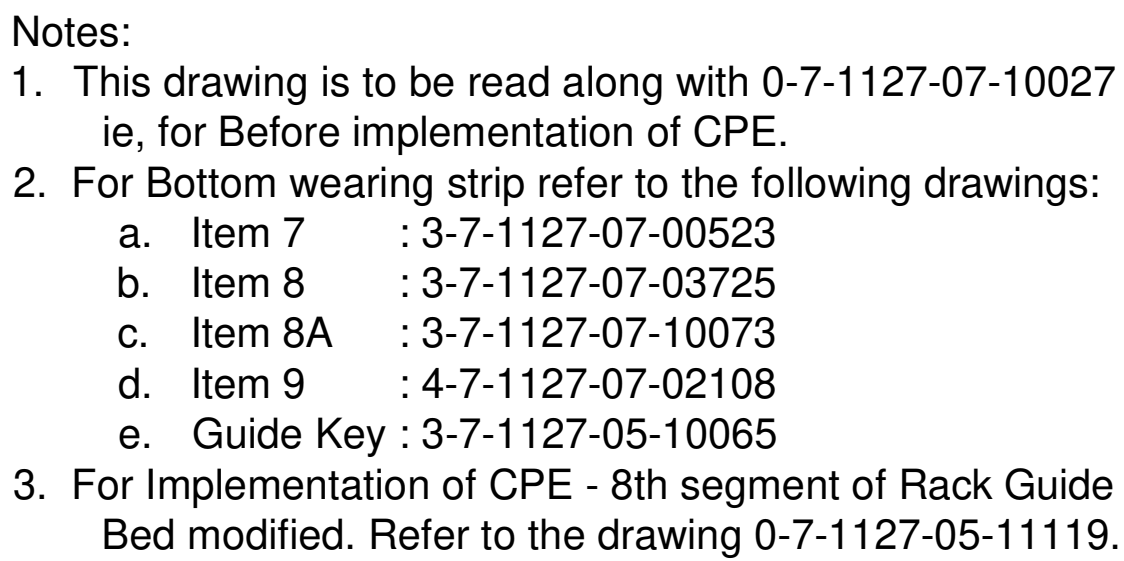
		3.2/	1.6/
∅16 H7	+0.0		
	0.00		
∅16 m6	+0.0		
	+0.00		



Before CPE Implementation



After CPE Implementation



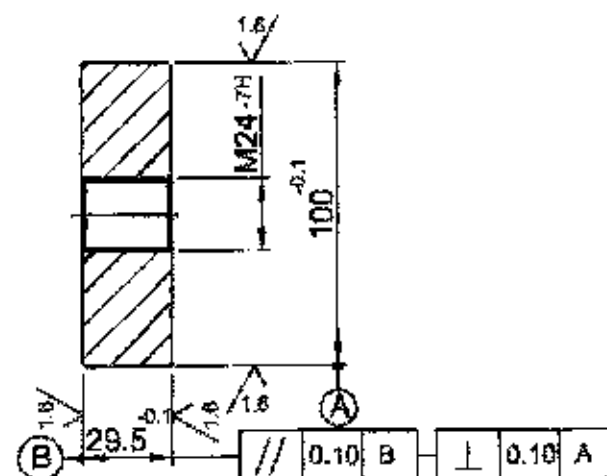
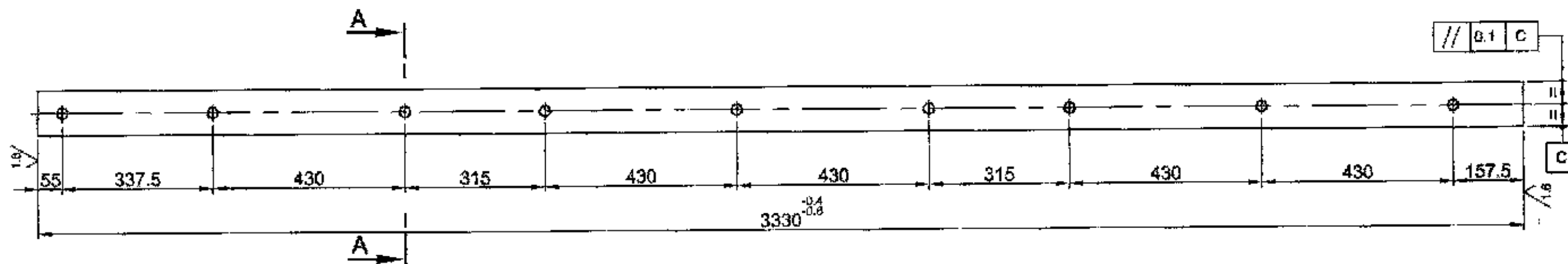
Section A-A

Scale 1:5

REV 01	DATE	ALTERED BY	APPROVED	CAUTION: THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF BARNETT INDUSTRIES, INC. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.	001P	GRADE OF UNTOL. DIM		SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
					456	15:2102		1:40,1:5,1:2	-----	0-7-1127-07-10027	
PHB - GA OF TOP AND BOTTOM WEARING STRIPS FOR RACK GUIDE ROLLERS - AFTER CPE IMPLEMENTATION											
								CARD CODE U 01	DRAWING NO: 0-7-1127-07-1122		REV 00

ALL DIMENSIONS ARE IN MILLIMETRES

3.2/1.6/



SECTION-AA

NOTES:

1. THE TOLERANCE ON HOLE PITCH DIMENSION SHOULD BE ± 0.1 mm AND THE TOLERANCE ON OVER ALL LENGTH SHOULD BE MAINTAINED AS PER DRAWING
2. CHAMFER SHARP CORNERS TO $0.5 \times 45^\circ$
3. USE ROLLED STEEL
4. NORMALISE BEFORE MACHINING TO 680 N/mm^2
5. FINISHING TO BE DONE BY GRINDING ON ALL THE SIDES
6. COUNTERSUNK THREAD ENDS BY 90°

REV	DATE	ALTERED	REV	DATE	ALTERED
01		CHECKED	02		CHECKED
		APPROVED			APPROVED
02	05.10.02	CHECKED	01	03.10.03	CHECKED
		APPROVED			APPROVED
SURFACE FINISH CHANGED; TOL ON LENGTH ADDED; HEAT TREATMENT REVISED TO NORMALISE FROM HARDEN AND TEMPER			ZONE		MATL. CHANGED. HARDNESS ADDED.

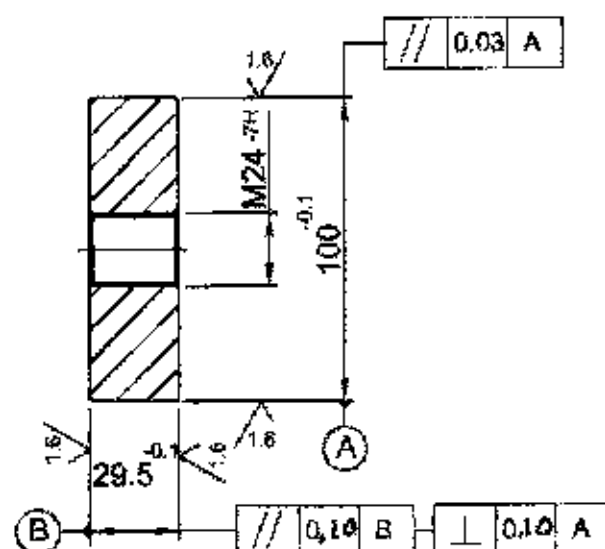
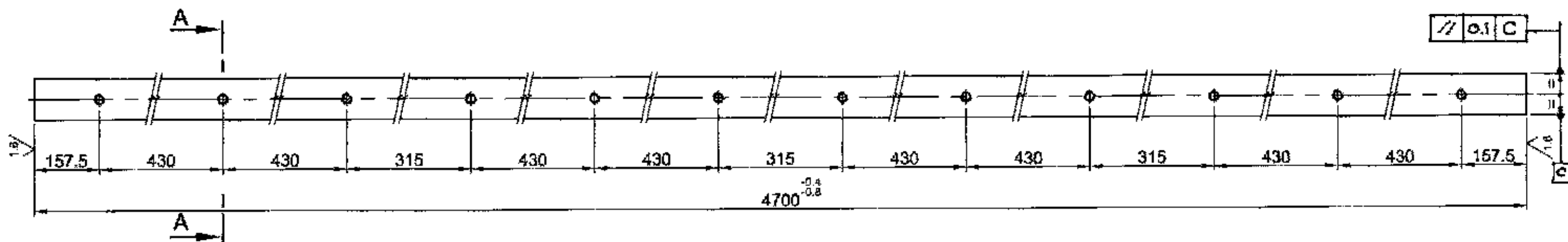
ITEM NO	DESCRIPTION	DRAWING NO	45C8 IS:1875	UNIT WT
			MATL CODE	QTY
			MATL SPEC	

EQPT:		PUSH BENCH	
Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		NAME B. ASHOKKUMAR	DATE 01.11.02
		SSN. KUMAR	21/1/03
		S. SHANMUGASUNDARAM	21/08/2003

DEPT	MPG	GRADE OF UNTOOL DIA	SCALE	WEIGHT(kg)	REF TO ASSY DWG NO	ITEM NO
		$\phi/10/1$	1:10 (1:2.5)	74	REF TO BLD DWG NO 0115005-71001	
TITLE WEARING STRIP-TOP 1				CARD CODE U 01	DRAWING NO : 3-7-1127-07-00522	REV 02

ALL DIMENSIONS ARE IN MILLIMETERS

3.2/1.6/



SECTION-AA

NOTES:

1. THE TOLERANCE ON HOLE PITCH DIMENSION SHOULD BE ± 0.1 mm AND THE TOLERANCE ON OVER ALL LENGTH SHOULD BE MAINTAINED AS PER DRAWING
2. CHAMFER SHARP CORNERS TO $0.5 \times 45^\circ$
3. USE ROLLED STEEL
4. NORMALISE BEFORE MACHINING TO 680 N/mm^2
5. FINISHING TO BE DONE BY GRINDING ON ALL THE SIDES
6. COUNTERSUNK THREAD ENDS BY 90°

REV 04	DATE	ALTERED CHECKED APPROVED	REV 03	DATE	ALTERED CHECKED APPROVED
REV 02	05.10.02	ALTERED CHECKED APPROVED	REV 01	03.10.83	ALTERED CHECKED APPROVED
SURFACE FINISH CHANGED; TOL ON LENGTH ADDED; HEAT TREATMENT REVISED TO NORMALISE FROM HARDEN AND TEMPER			MATERIAL CHANGED. HARDNESS ADDED.		

ITEM NO	DESCRIPTION	DRAWING NO	45C8 IS:1875	UNIT WT
			MATL CODE	QTY
			MATL SPEC	

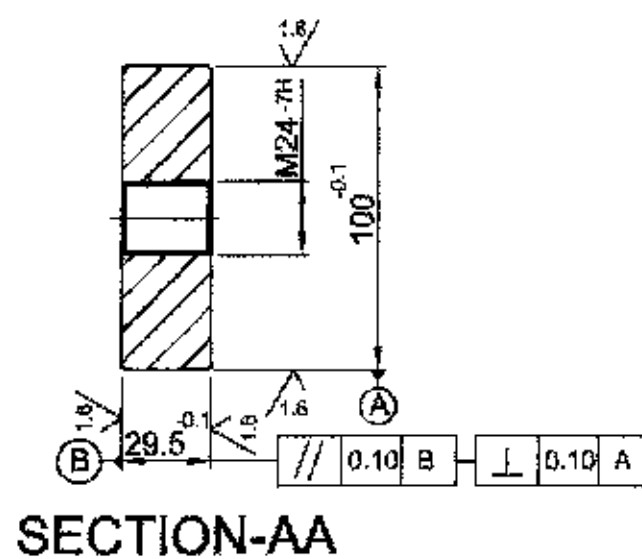
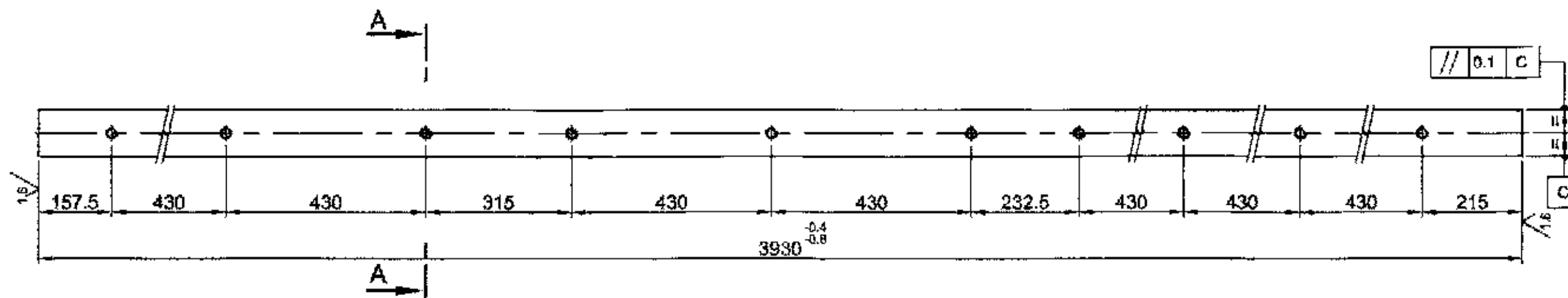
EQPT: PUSH BENCH		NAME	B. ASHOKKUMAR	SIGNATURE	DATE
Bharat Heavy Electricals Ltd		DRN			01.11.02
SEAMLESS STEEL TUBE PLANT		CHD	SSN.KUMAR		16/11/02
TRUCHIRAPALLI - 620014		APPD	S. SHANMUGASUNDARAM		16/11/02

DEPT	MPG	GRADE OF UNTOOL DME	C/M/F	SCALE	1:10 (1:2.5)	WEIGHT(kg)	108	REF TO ASSY DWG NO	REF TO OLD DWG NO	ITEM NO

TITLE	WEARING STRIP-TOP 2 TO 7	CARD CODE	U 01	DRAWING NO :	3-7-1127-07-00535	REV	02
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ALL DIMENSIONS ARE IN MILLIMETRES

32/18/



NOTES:

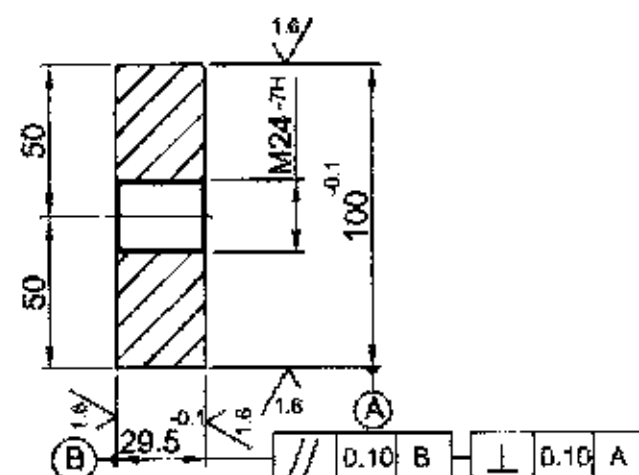
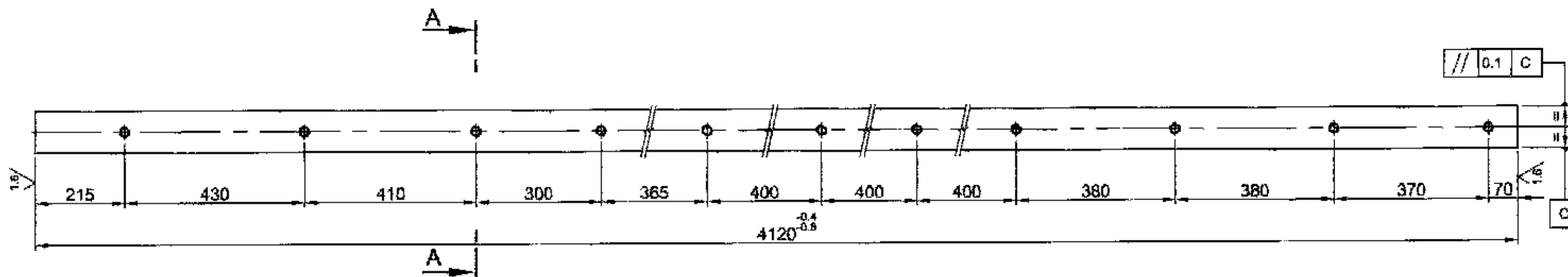
1. THE TOLERANCE ON HOLE PITCH DIMENSION SHOULD BE ± 0.1 mm AND THE TOLERANCE ON OVER ALL LENGTH SHOULD BE MAINTAINED AS PER DRAWING
2. CHAMFER SHARP CORNERS TO $0.5 \times 45^\circ$
3. USE ROLLED STEEL
4. NORMALISE BEFORE MACHINING TO 680 N/mm^2
5. FINISHING TO BE DONE BY GRINDING ON ALL THE SIDES
6. COUNTERSUNK THREAD ENDS BY 90°

REV	DATE	ALTERED	REV	DATE	ALTERED
04		CHECKED	03		CHECKED
		APPROVED			APPROVED
REV	DATE	ALTERED	REV	DATE	ALTERED
02	05.10.02	CHECKED	01	03.10.83	CHECKED
		APPROVED			APPROVED
SURFACE FINISH CHANGED; TOL ON LENGTH ADDED; HEAT TREATMENT REVISED TO NORMALISE FROM HARDEN AND TEMPER			MATERIAL CHANGED. HARDNESS ADDED.		

ITEM NO	DESCRIPTION	DRAWING NO	45C8 IS:1875	UNIT WT
			MATL CODE	QTY
			MATL SPEC	
EQPT: PUSH BENCH				
Bharat Heavy Electricals Ltd		DRW	NAME	SIGNATURE
SEAMLESS STEEL TUBE PLANT		CHD	B.ASHOKKUMAR	01.11.02
TIRUCHIRAPALLI - 620014		APPD	S.SHANMUGASUNDARAM	21/5/03
DEPT	MPG	GRADE OF UNIT	SCALE	WEIGHT(kg)
CODE		6/14/16	1:10 (1:2.5)	
TITLE		REF TO ASSY Dwg NO	REF TO OLD Dwg NO	REV
WEARING STRIP-TOP 7			RW 27900/3	02
DRAWING NO :		3-7-1127-07-00536		

ALL DIMENSIONS ARE IN MILLIMETRES

3.2/1.6/



SECTION-AA

NOTES:

1. THE TOLERANCE ON HOLE PITCH DIMENSION SHOULD BE ± 0.1 mm AND THE TOLERANCE ON OVER ALL LENGTH SHOULD BE MAINTAINED AS PER DRAWING
2. CHAMFER SHARP CORNERS TO $0.5 \times 45^\circ$
3. USE ROLLED STEEL
4. NORMALISE BEFORE MACHINING TO 680 N/mm^2
5. FINISHING TO BE DONE BY GRINDING ON ALL THE SIDES
6. COUNTERSUNK THREAD ENDS BY 90°

REV	DATE	ALTERED	REV	DATE	ALTERED
04		CHECKED	03		CHECKED
		APPROVED			APPROVED
02	05.10.02	CHECKED	01	03.10.83	CHECKED
		APPROVED			APPROVED

ITEM NO	DESCRIPTION	DRAWING NO	4508 IS:1875	UNIT WT

REV	DATE	ALTERED	REV	DATE	ALTERED
02	05.10.02	CHECKED	01	03.10.83	CHECKED
		APPROVED			APPROVED

DEPT	MPG	GRADE OF UNTO, DIN	SCALE	WEIGHT(kg)	REF TO ASSY Dwg NO	ITEM NO
			1:10 1:2.5	96.0		

NAME	SIGNATURE	DATE
B.ASHOKKUMAR		02.11.02
SBN.KUMAR		21/10/02
S.SHANMUGASUNDARAM		21/10/02

TITLE	CARD CODE	DRAWING NO :	REV
WEARING STRIP-TOP 8	U 01	3-7-1127-07-00537	02