

ANNEXURE – A

CNC Laser Sheet Cutting machine with full safety enclosure Classs-I
(On Turn Key Basis)

Code No. _____

Qty. – 01Set.

SCOPE

1. Laser Sheet Cutting System.
2. CNC System and Software.

PURPOSE

All types of sheet (material & thickness as mentioned) to be cut for ALIMCO products through this CNC Laser Sheet Cutting Machine.

SPECIFICATIONS

<u>S.No.</u>	<u>Description of Requirement</u>	<u>Required</u>
	<u>CNC laser Sheet Cutting Machine</u>	
1	Sheet cutting	
1.1	X travel	3000 mm minimum
1.2	Y travel	1500 mm minimum
1.3	Z travel	100 mm (minimum)
1.4	Sheet size (to be cut)	(3000 x 1500) mm (minimum)
1.5	Weight carrying capacity	900 Kg (minimum)
1.6	Maximum Speed (simultaneous positioning)	At least 100 m/minute or more
1.7	Maximum Acceleration	1 g (minimum)
1.8	Linear Axis Resolution	0.001 mm
1.9	Linear Accuracy	0.1 mm
1.10	Edge Detection Accuracy	0.05 mm
1.11	Repeatability	0.05 mm
1.12	Material: Iron (mild steel), SS & Al to be cut by laser	Confirm
1.12.1	Cutting thickness (MS Sheet)	At-least up to 20 mm
1.12.2	Cutting thickness (AL Sheet)	At-least up to 8 mm
1.13	Laser sheet cutting system, consisting of :	
1.13.1	Electrical cabinet	Confirm
1.13.2	Safety devices i.e. guard, Alarm system etc.	Confirm
1.13.3	Automatic Pallet changer with double platform (simultaneous type and suitable as per sheet dimension)	Confirm
2	Controller:	
2.1	Siemens/Fanuc /Beck-Hoff/ABB/B R Automation/Mitsubishi	Vendor to specify
2.2	Laser safety window with full safety enclosure Class-1	Confirm
2.3	TFT color touch monitor	Min 19"
2.4	USB Port for program loading with source key	Confirm
2.5	Ethernet connectivity through network card	Confirm
3	Laser Source	
3.1	Fiber laser source with pulse generator, control panel and control	Confirm

3.2	Laser source	Fibre laser
3.3	Fiber laser source nominal power	Minimum 3000 W
3.4	Fibre Laser Make	IPG
3.5	Lens holder	01 Set
3.6	Chiller with closed circuit for laser source	01 Set
3.7	Fume extractor with high efficiency cartridges: Hourly air flow rate Min. 1500 m ³ /h.	01 Set
3.8	Wide door opening required for manual sheet loading and unloading whenever required	Confirm
4	Hardware, Software & IT Systems	
4.1	Offline programming system should have a CAD module to design and draw a workable piece	Confirm
4.2	Software should have library of cut management for optimal utilization of sheet to reduce scrap	Confirm
4.3	CAM system for automatically applying the cutting parameters on every part geometry and decide the operating sequence, cutting strategy (auto nesting).	Confirm
4.5	Integrated parametric three-dimension software suited to design and draw Sheets of any type and section and to automatic generate the single relevant components	Confirm
4.6	Post processor for loading of program to the machine	Confirm
4.7	PC license of the software for operating and checking on PC.	Confirm
4.8	System configuration- As per software requirement; with following minimum requirements i) Compatible O.S. Genuine Windows 10 Professional 64 bit or above ii) Processor: Inteli7 or Xeon E3, 3.2Ghz or faster iii) Min. 1920*1080 resolution, monitor size- 23" (min.) iv) Storage: SSD with at least 1 TB v) Memory: 32 GB extendable up-to 64 GB v) NVIDIA graphic card Min. 8 GB memory	Confirm
	GENERAL OPERATING CONDITION	
6	Electrical should be designed for	
6.1	3 Phase 415V (\pm 10%)	Confirm
6.2	Frequency 50 Hz (\pm 3%)	Confirm
6.3	Total Electrical Power required (In KW)	Confirm
6.4	Protection level	IP54 or better
7	Complete electrical system with tropicalization for Indian condition +5°C to +50°C temp and RH 100%	Confirm
8	Service: The authorized Service Partners in India (Name & Address) must be certified by manufacturer and shown in the quotation	Confirm
9	Machine to have capability to handle voltage and current fluctuation and power backup required for minimum 15 mins. For CNC control system	Confirm
10	Spares & Consumables:	
10.1	Spares & Accessories: Limit switches (02 Sets) CNC Panel Keys (02 Sets) Fuses (01 Sets) Protection Mirror (10 Nos.) Ceramic parts (01 Set) Basic equipment cutting nozzles – 50 numbers. Any other spare over and above mandatory items necessary	Confirm

	for offered machine	
11	Supplier shall provide undertaking for availability of machine spares up to minimum 10 years from date of supply.	Confirm
12	Documentation: Following documents (3 sets of hard copy and 1 set of soft copy) along with delivery will be required	Confirm
12.1	Operating instruction	Confirm
12.2	Quality Test records	Confirm
12.3	Preventive maintenance instructions	Confirm
12.4	Lubrication chart & parameter list	Confirm
12.5	Lifting instruction mentioned in packing list.	Confirm
12.6	Detailed invoice and packing list of all items and all other accessories enclosed in respective boxes	Confirm
13	Training at site (for a team as decide by ALIMCO)	
13.1	Operation and Programming	06 Days
13.2	Preventive maintenance training	02 Days
14	Prove-out:	
14.1	Vendor to perform complete trial run and prove out	Confirm
14.2	Vendor has to prove-out operations of cutting operations on attached drawings for prove-out at ALIMCO premises after successful installation and commissioning on site. Raw material shall be provided by ALIMCO	Confirm
15	Delivery Period (including Installation & Commissioning)	5 months
16	Vendor to deliver machine at " ALIMCO Kanpur"	Confirm
17	Packaging and Transportation	In the scope of vendor
18	Installation and Commissioning should be done within 21 days on receipt of machine at ALIMCO Kanpur by the vendor. All necessary things to maintain precision & accuracy shall be done by vendor at the time of handover the machine.	Confirm
19	Bidder having experience of 5 years to serve the industry based in India & bidder should also supplied at least 3 similar capacity Laser Sheet cutting machine in Govt. Sector. PO to be enclosed.	Confirm
20	Warranty	2 Years (Min.)

DELIVERY PERIOD INCLUDING INSTALLATION & COMMISSIONING:

The delivery period including installation & commissioning including at site training of all of the machines at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 5 months from the date of placement of Purchase Order/work contract.

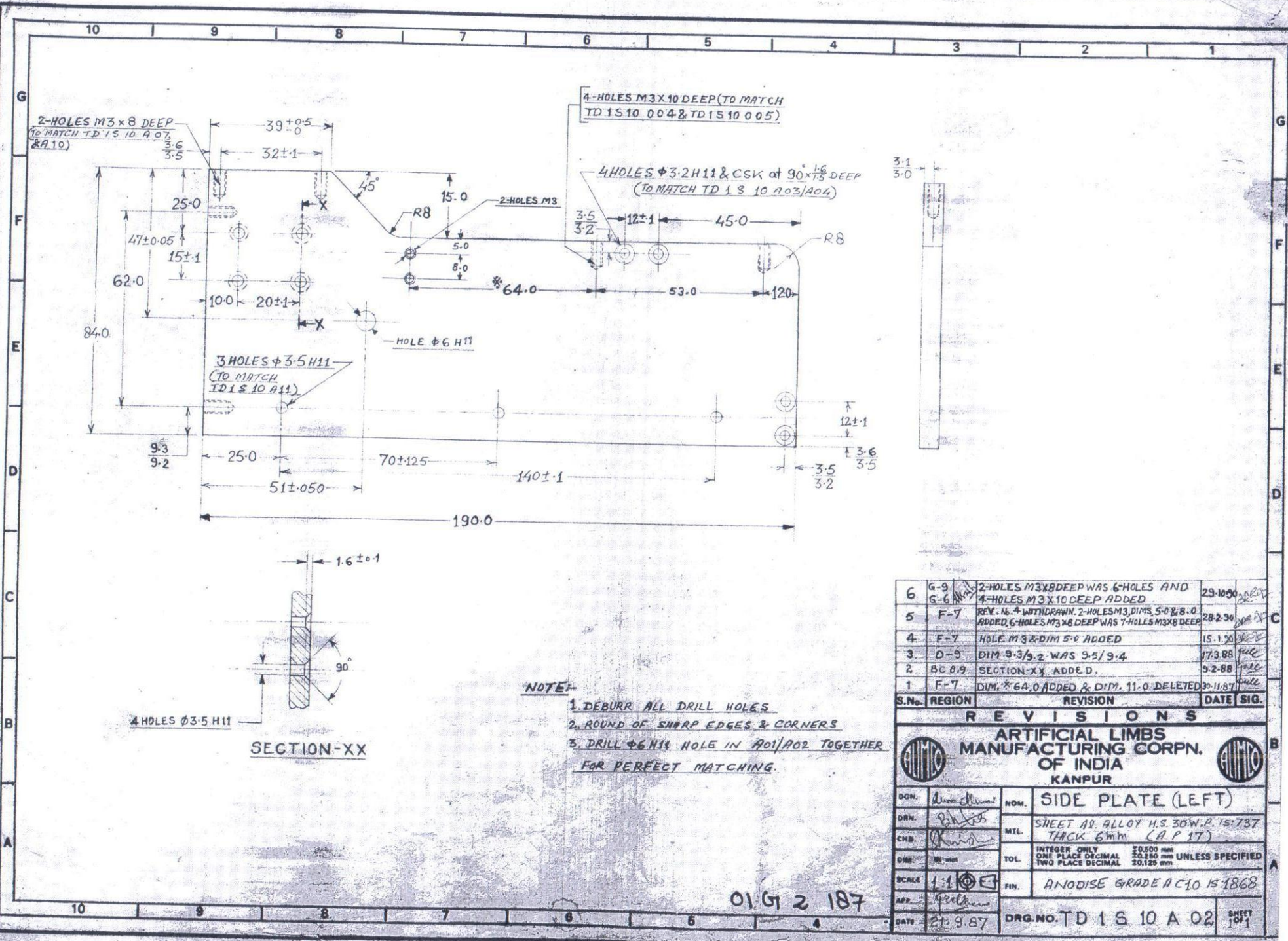
WARRANTY:

The Entire machine inclusive of all system/accessories should be covered under warranty for a period of 24 months from the date of successful commissioning (Warranty shall specifically cover laser source).

Note:

1. Supply to be done on Turnkey Basis. ALIMCO shall provide electrical supply point near to the place of installation.
2. Machine shall be supplied with 3 sets of comprehensive operation and maintenance manual.
3. Breakdown calls to be attended within 72 hrs. Physically or through tele-diagnostic.
4. Civil foundation details and drawings with specifications to be provided by the tenderer.
5. Total power consumption (in kW) to be provided by the tenderer.

6. The Bus-bar trunking (BBT) for electricity has been provided at 8.5 meter height. Sufficient suitable cable, cable tray, Circuit breaker, fittings to connect the machine from power source is in Vendor's scope.
7. Compressed air pipeline is available in the work center (air pressure will be available approx. 4.5 to 5 bar), all necessary fittings, air dryer, air booster as per machine requirements, is in vendor's scope.
8. Vendor to arrange any civil foundation work, if required, for the installation of machine.
9. Separate list of spares and consumables along with rate, required for smooth functioning of machine/equipment/item. The list is solely required with respect to future requirements/reference of machine/equipment/item. Hence total cost of items from the list should not be the part of final price of tender quote.
10. Vendor to agree on providing at-least 3 years AMC after completion of warranty i.e. 2 years.



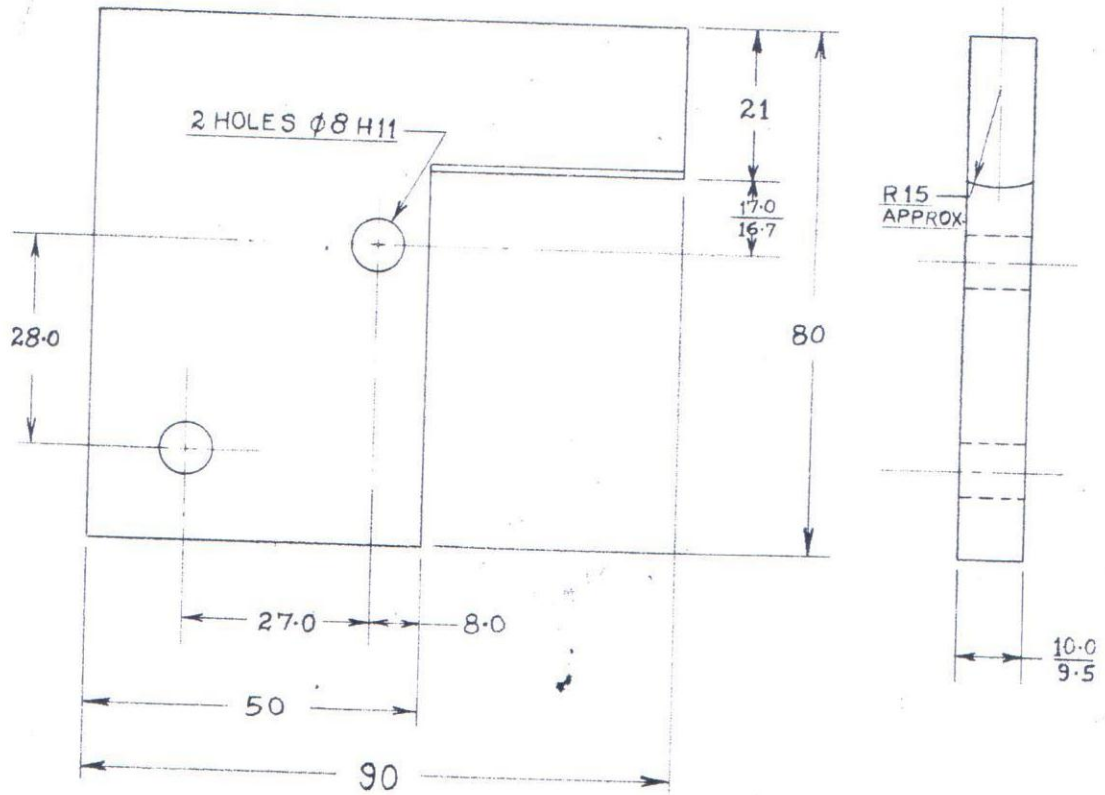
NOTE:-
 1. DEBURR ALL DRILL HOLES
 2. ROUND OFF SHARP EDGES & CORNERS
 3. DRILL $\phi 6$ H11 HOLE IN A01/A02 TOGETHER FOR PERFECT MATCHING.

S.No.	REGION	REVISION	DATE	SIG.
6	G-9	2-HOLES M3 X 8 DEEP WAS 6-HOLES AND 4-HOLES M3 X 10 DEEP ADDED	29-10-90	
5	F-7	REV. IN 4 WITHDRAWN. 2-HOLES M3, DIMS 5.0 & 8.0 ADDED. 6-HOLES M3 X 8 DEEP WAS 7-HOLES M3 X 8 DEEP	28-2-90	
4	F-7	HOLE M3 & DIM 5.0 ADDED	15-1-90	
3	D-9	DIM 9.3/9.2 WAS 9.5/9.4	17-3-88	
2	BC 8/9	SECTION-XX ADDED.	9-2-88	
1	F-7	DIM. * 64.0 ADDED & DIM. 11.0 DELETED	30-11-87	

REVISIONS			
ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA KANPUR			
DGN.	Divachandran	NOM.	SIDE PLATE (LEFT)
DRN.	Bhaskar	MTL.	SHEET AL ALLOY U.S. 30 W.P. 15:737 THICK 6mm (A.P.17)
CHG.	Sharma	TOL.	INTEGER ONLY 0.500 mm ONE PLACE DECIMAL 0.125 mm UNLESS SPECIFIED TWO PLACE DECIMAL 0.125 mm
DWG. NO.	1:1	FIN.	ANODISE GRADE A C10 15:1868
APP.	Pruthi	DATE	27-9-87
DRG. NO. TD 1 S 10 A 02			SHEET 10/1

01/01 2 187

124



NOTE :-

1- REMOVE SHARP EDGES

S.No.	REGION	REVISION	DATE	SIG.
4	A-2	MAT. CODE 'AA43' ADDED	15-1-92	<i>[Signature]</i>
3	D-1, C-5 A-2	DIM. 10.0 WAS 10, NOTE NO. 2 DELETED & MTL. SE. 42-S WAS TOOL STEEL - T 55	33-79	<i>[Signature]</i>
2	F-2 TO 5 E-3	2 SLOTS (13X9), DIM. 38.0 & MARKING 0.5 - DELETED & 2 HOLES $\phi 8$ & DIM. 17.0 ADDED	21-12-78	<i>[Signature]</i>
1	A-2, E-3	MTL., TOL. & FINISH CHANGED, MARKING 0.5 TO BE MADE ON ASSY.	22-7-76	<i>[Signature]</i>

REVISIONS

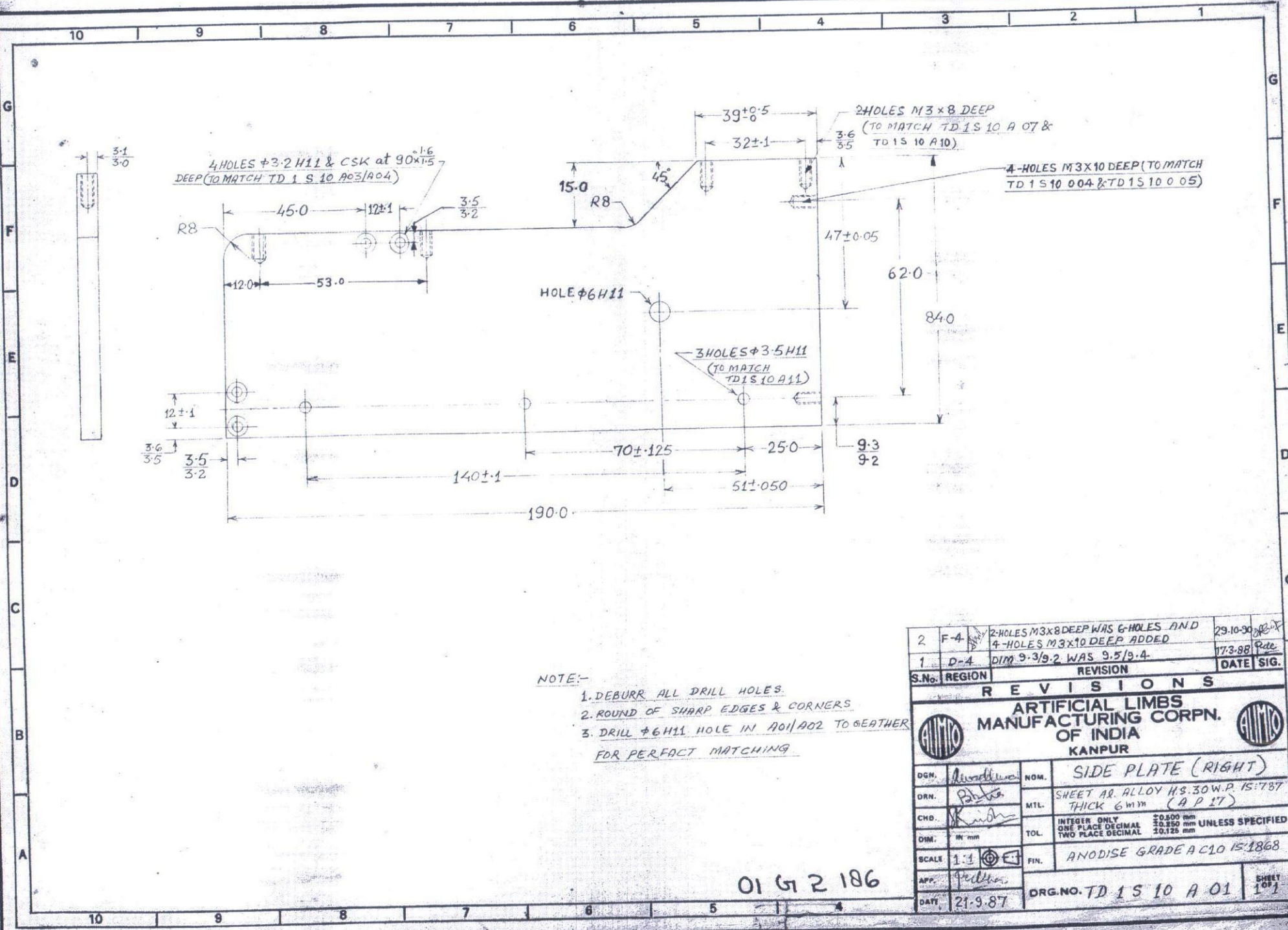


**ARTIFICIAL LIMBS
MANUFACTURING CORPN.
OF INDIA
KANPUR**



DGN.	<i>[Signature]</i>	NOM.	GUIDE PLATE
DRN.	<i>[Signature]</i>	MTL.	PLATE MS SE. 42-S IS: 226 (AA43)
CHD.	<i>[Signature]</i>	TOL.	INTEGER ONLY ± 0.500 mm ONE PLACE DECIMAL ± 0.250 mm TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED
DIM.	IN mm	FIN.	PHOSPHATING BLACK, THICKNESS 4 TO 8 MICRONS
SCALE		DATE	2-1-76
APP.	<i>[Signature]</i>	DRG. NO.	TE 2 A 03 0 04
		SHEET	1 OF 1

01K1029

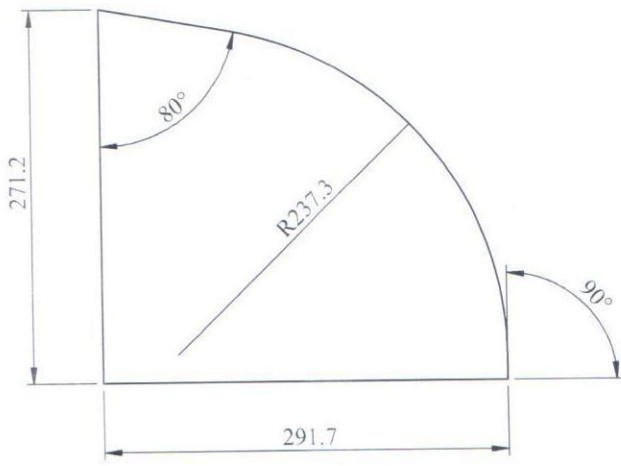
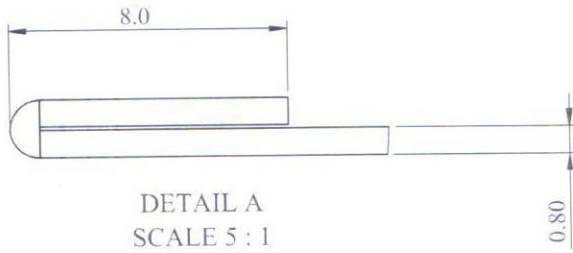


NOTE:-
 1. DEBURR ALL DRILL HOLES.
 2. ROUND OFF SHARP EDGES & CORNERS
 3. DRILL $\phi 6H11$ HOLE IN A01/A02 TO WEATHER FOR PERFECT MATCHING

01 G 2 186

2	F-4	2-HOLES M3x8 DEEP WAS 6-HOLES AND 4-HOLES M3x10 DEEP ADDED	29-10-80	Red	
1	D-4	DIM 9.3/9.2 WAS 9.5/9.4	17-3-88	Red	
S.No.		REGION	REVISION	DATE	SIG.
REVISIONS					
ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA KANPUR					
DGN.	<i>Aradhana</i>	NOM.	SIDE PLATE (RIGHT)		
DRN.	<i>P. S.</i>	MTL.	SHEET AR. ALLOY HS. 30W.P. IS: 787 THICK 6 mm (A.P.I.T)		
CHD.	<i>K. S.</i>	TOL.	INTEGER ONLY 0.500 mm ONE PLACE DECIMAL 0.250 mm TWO PLACE DECIMAL 0.125 mm UNLESS SPECIFIED		
DIM.	IN mm	FIN.	ANODISE GRADE A C10 IS: 1868		
SCALE	1:1	APP.	<i>P. S.</i>		
DATE	21-9-87	ORG. NO.	TD 15 10 A 01	SHEET 10/1	

122



DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD 'O' IS-513 THICK 0.8mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	10.02.18	SUR. TRT.	

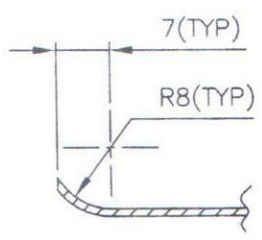
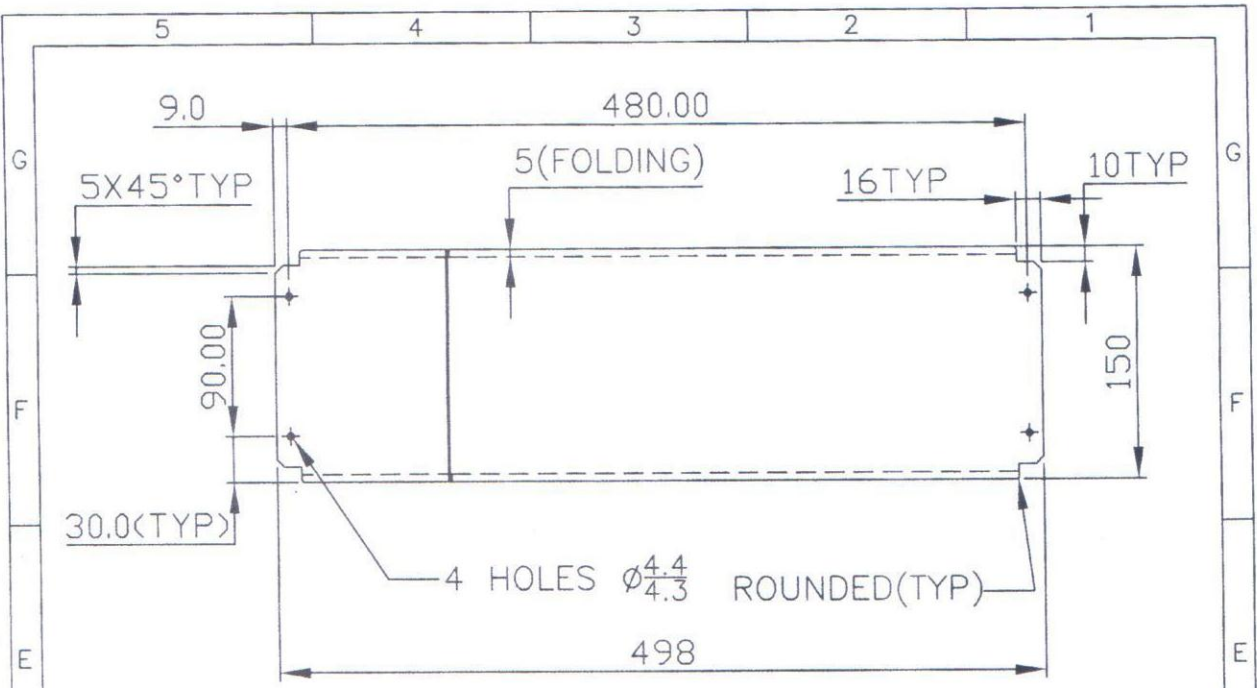
		IS: 2102	DEBURR ALL SHARP EDGES 0.5x45°
		ISO: 2768-mK	

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

WEIGHT		NOM.	SIDE GUARD - R
SCALE	1:5		
SHEET	1 OF 1	DRG NO.	TD2B37CA4
REV. NO.			

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.



121



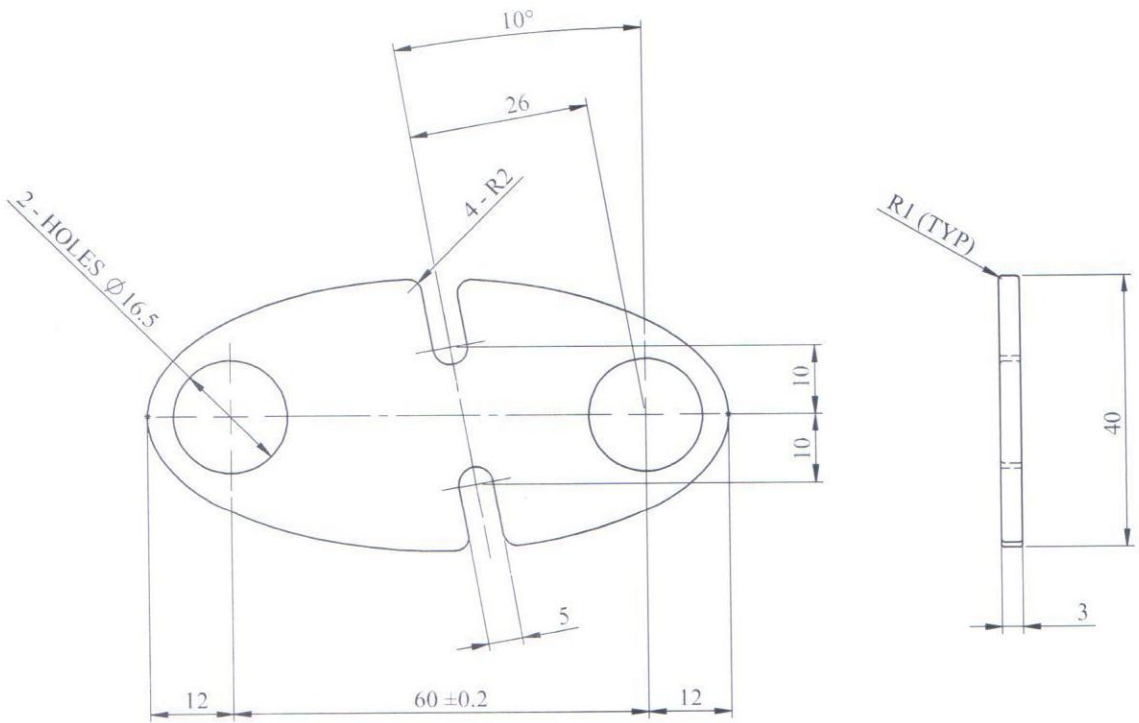
SECTION-XX

NOTE:-

- 1. REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				
 ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR 				
DGN	<i>Abdullah</i>	NOM	SIDE PLATE	
DRN	<i>Abdullah</i>	MTL	SHEET MS CRA Gd '0' IS:513, THICK 1mm (AA 22)	
CHD	<i>Abdullah</i>	TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm	UNLESS SPECIFIED
DIM	IN mm	FIN	POWDER COATED COLOUR AS APPROVED	
SCALE	NTS			
APP	<i>Abdullah</i>			
DATE	26.06.2014		DRG No:-TD 2 A 26 B 01	SHEET 10F1

120




THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD'O' IS:513 THICK 3mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	10.02.18	SUR. TRT.	


IS: 2102
ISO: 2768-mK

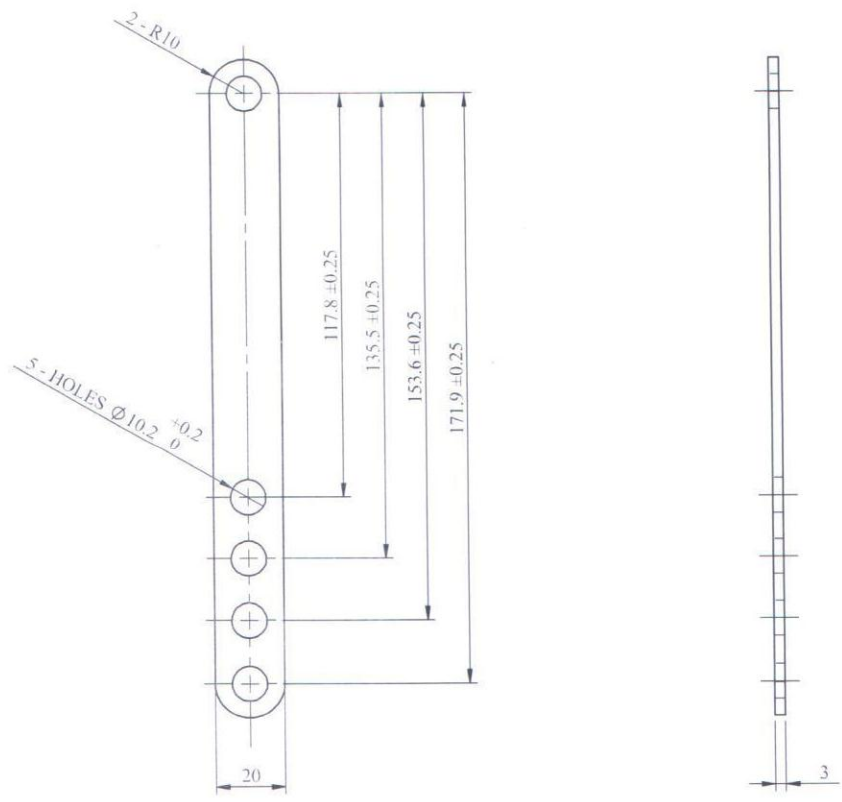
DEBURR ALL SHARP EDGES 0.5x45°
 ALL DIMENSIONS ARE IN mm

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

WEIGHT		NOM.	AXLE PLATE - GENERIC
SCALE	1:1		
SHEET	1 OF 1	DRG NO.	TD2B37BB1
REV. NO.			

119

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.



DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

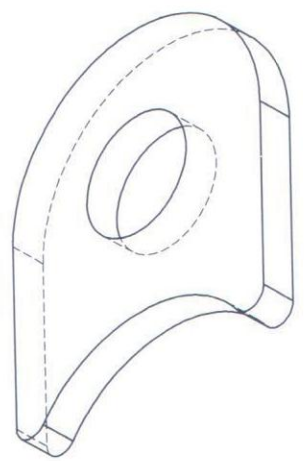
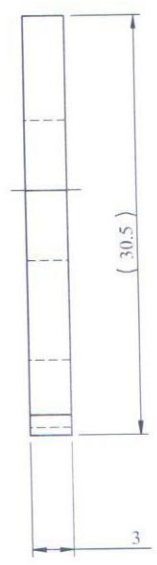
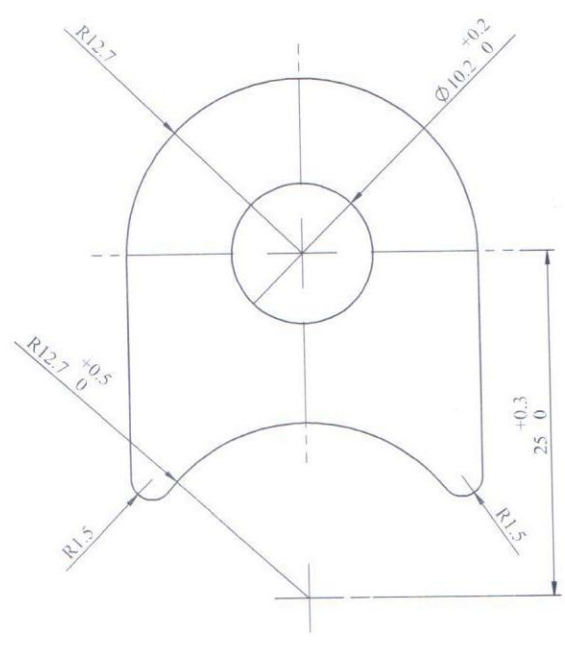
DRN BY	A.SHUKLA	DT		MATERIAL	SHEET SS HRA 04Cr19Ni9 THICK 3mm IS:6911
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	09.02.18	SUR. TRT.	

IS: 2102
ISO: 2768-mK
DEBURR ALL SHARP EDGES 0.5x45°
ALL DIMENSIONS ARE IN mm

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

WEIGHT		NOM.	LOCK OUT BAR
SCALE	1:2		
SHEET	1 OF 1	DRG NO.	TD2B37B04
REV. NO.			


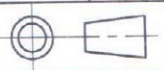
118



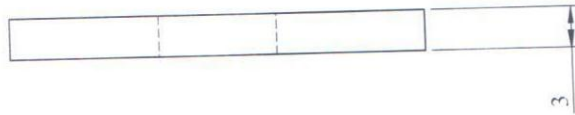
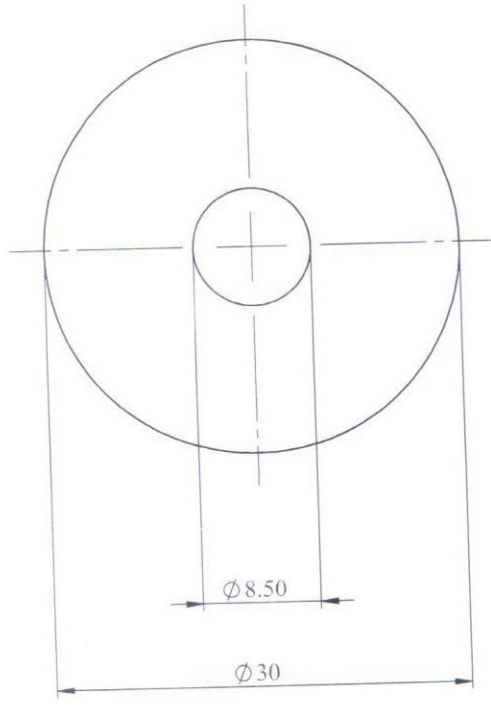
DEVELOPMENT DRAWING

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

 ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)			
DRN BY	A.SHUKLA	DT	
CHKD BY	A.TOMER	DT	
APPD BY	V.SHUKLA	DT	10.02.18
		MATERIAL SHEET MS CR1 GD'O' IS:513 THICK 3mm	
		HEAT TRT.	
		SUR. TRT.	
		IS: 2102 ISO: 2768-mK	
		DEBURR ALL SHARP EDGES 0.5x45°	
		ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.	X BRACE FRAME PIVOT
SCALE	2:1		
SHEET	1 OF 1	DRG NO.	TD2B37B01
REV. NO.			

117

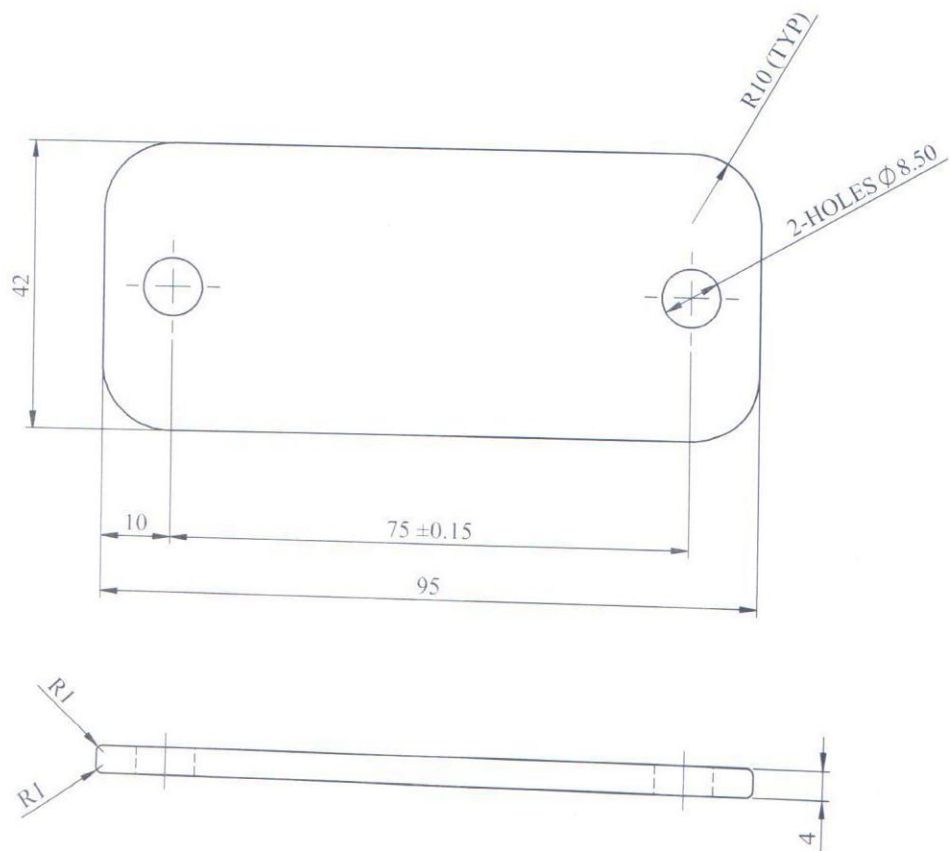


THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	SHEET MS CR1 GD 'O' IS:513 THICK 3mm
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	Zn PLATING 8-12µ, IS:1573
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		8mm WASHER OD 30mm	
SCALE	1:1	DRG NO.		TD2B37F06	
SHEET	1 OF 1				
REV. NO.					

116



DEVELOPMENT DRAWING



ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET AL. ALLOY HS30 WP IS:737 THICK 4mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	

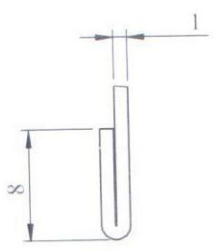
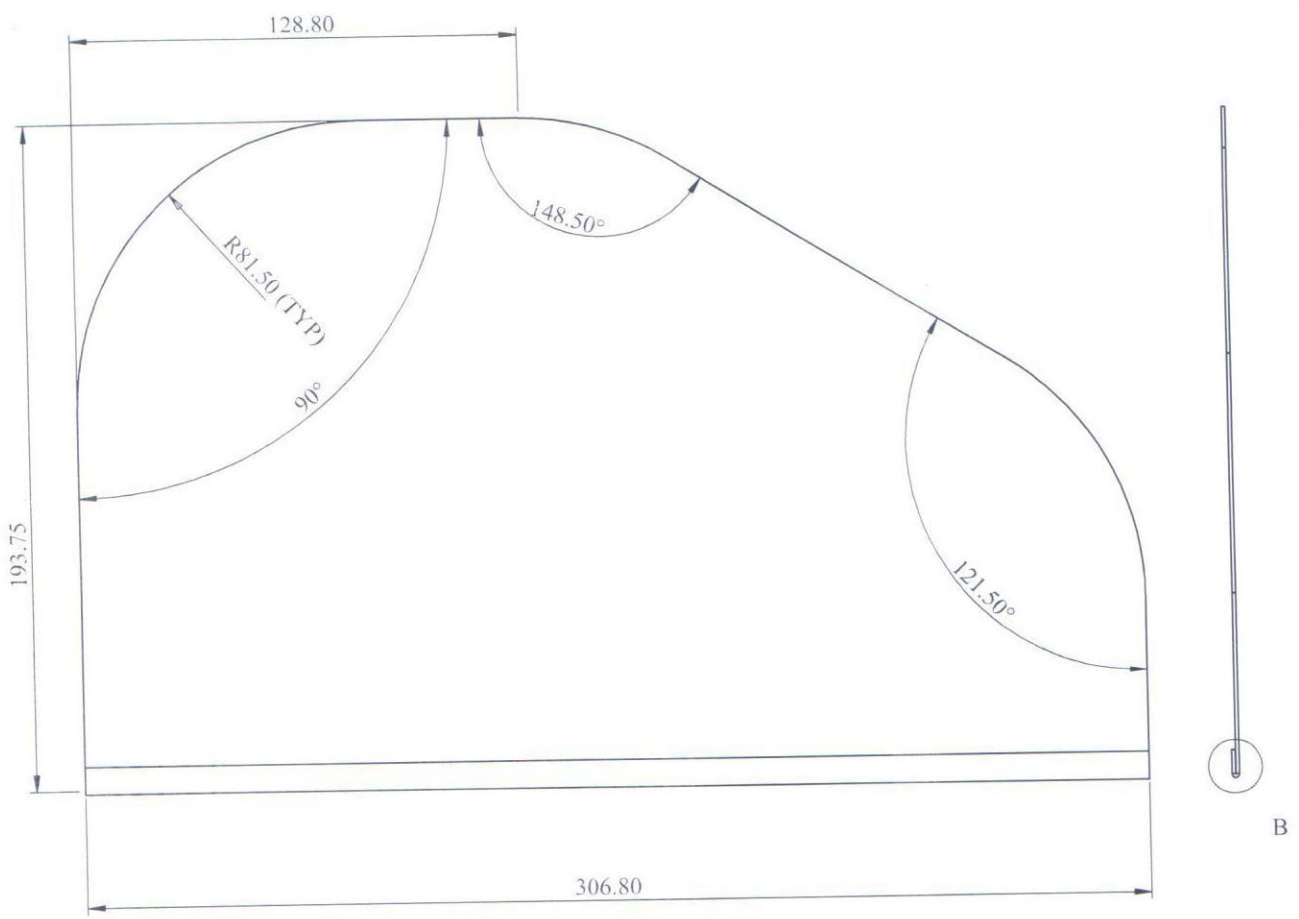
	IS: 2102	DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm
	ISO: 2768-mK	

WEIGHT		NOM.	FOOTREST SUPPORT PLATE
SCALE	1:1		
SHEET	1 OF 1	DRG NO.	TD2B36F02
REV. NO.			

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DIM	TOLERANCE
1-16	±0.2 / ±0.3 / ±0.4
17-63	±0.2 / ±0.5 / ±0.7
64-250	±0.3 / ±0.7 / ±1.0
250-960	±0.5 / ±0.12 / ±1.5

115



DETAIL B
SCALE 2 : 1

DEVELOPMENT DRAWING

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

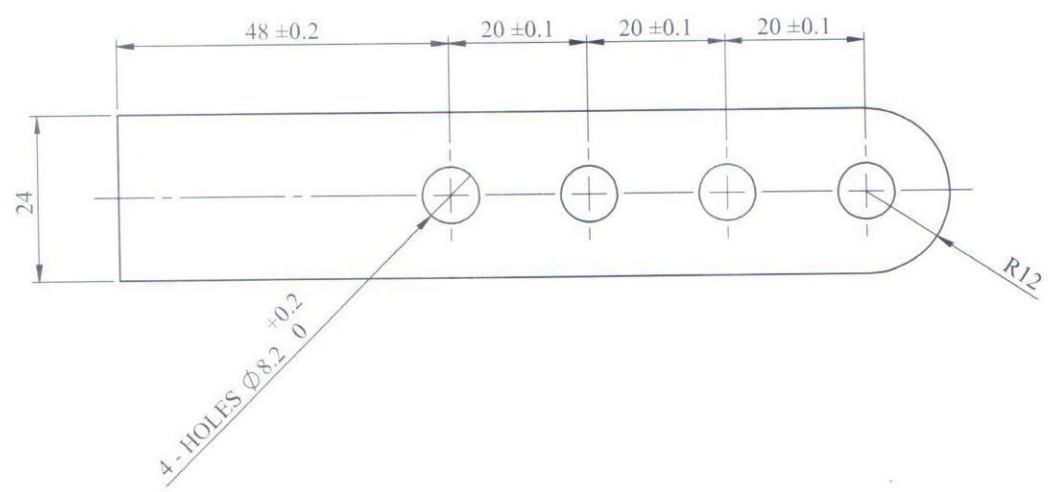
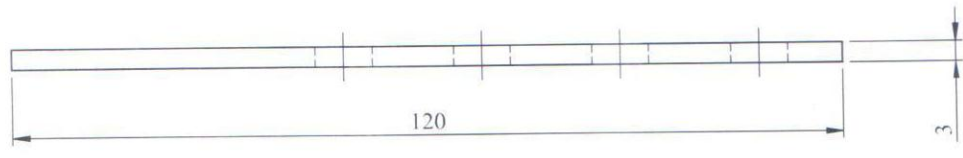
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET AL. ALLOY HS 30 WP IS:737 THICK 1 mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	

DIM	TOLERANCE
1-16	±0.2 ±0.3 ±0.4
17-63	±0.2 ±0.5 ±0.7
64-250	±0.3 ±0.7 ±1.0
250-960	±0.5 ±0.12 ±1.5

		IS: 2102 ISO: 2768-mK	DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm
WEIGHT		NOM.	ARM REST SHEET
SCALE	1:2		
SHEET	1 OF 1	DRG NO.	TD2B36E02
REV. NO.			


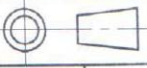
114



DEVELOPMENT DRAWING

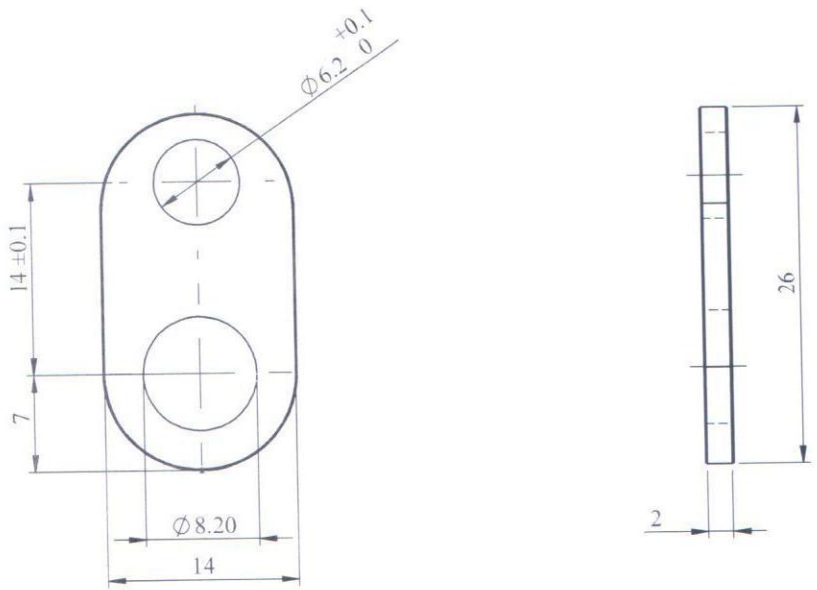
THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

 ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)			
DRN BY	A.SHUKLA	DT	
CHKD BY	A.TOMER	DT	
APPD BY	V.SHUKLA	DT	15.01.18
		IS: 2102 ISO: 2768-mK	
		DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM. ADJUSTMENT FLAT STRIP	
SCALE	1:2		
SHEET	1 OF 1	DRG NO. TD2B36CA4	
REV. NO.			


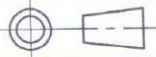
113

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

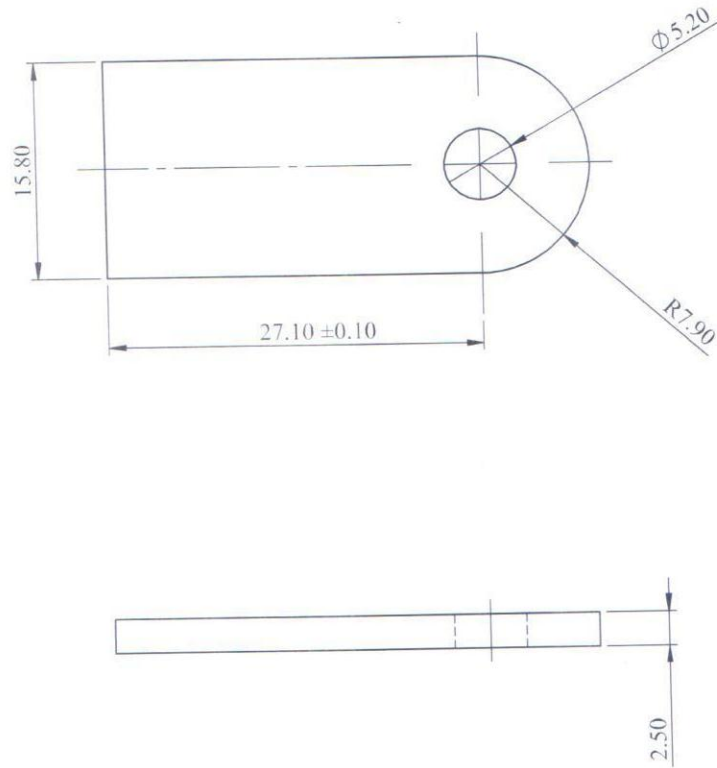


DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.12	±1.5

		ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)	
DRN BY	A.SHUKLA	DT	
MATERIAL	SHEET SS 304 THICK 2mm		
CHKD BY	A.TOMER	DT	
HEAT TRT.			
APPD BY	V.SHUKLA	DT	15.01.18
SUR. TRT.			
		IS: 2102 ISO: 2768-mK	
		DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.	LOCK BOLT REAR AXLE CAPTIVE WASHER
SCALE	2:1		
SHEET	1 OF 1	DRG NO.	TD2B36AB1
REV. NO.			

112



DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD'O' IS:513 THICK 2.5mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	

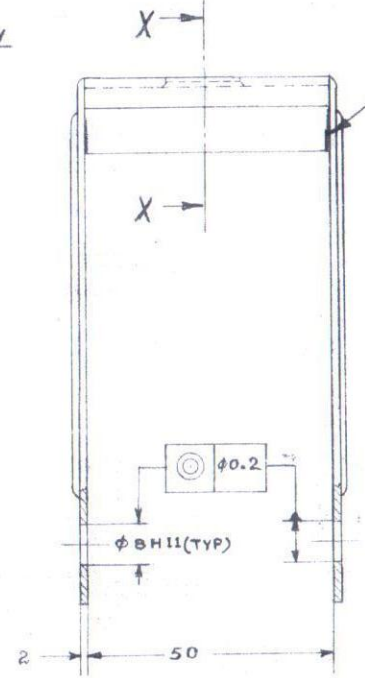
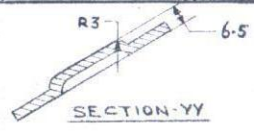
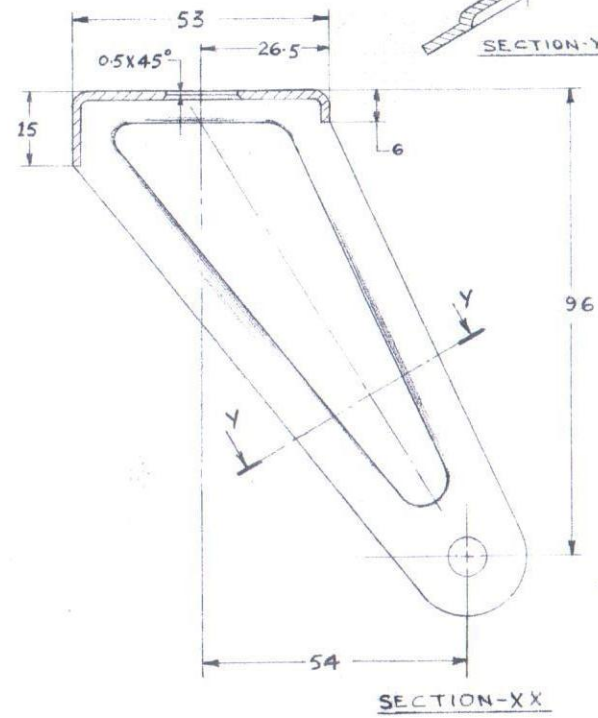
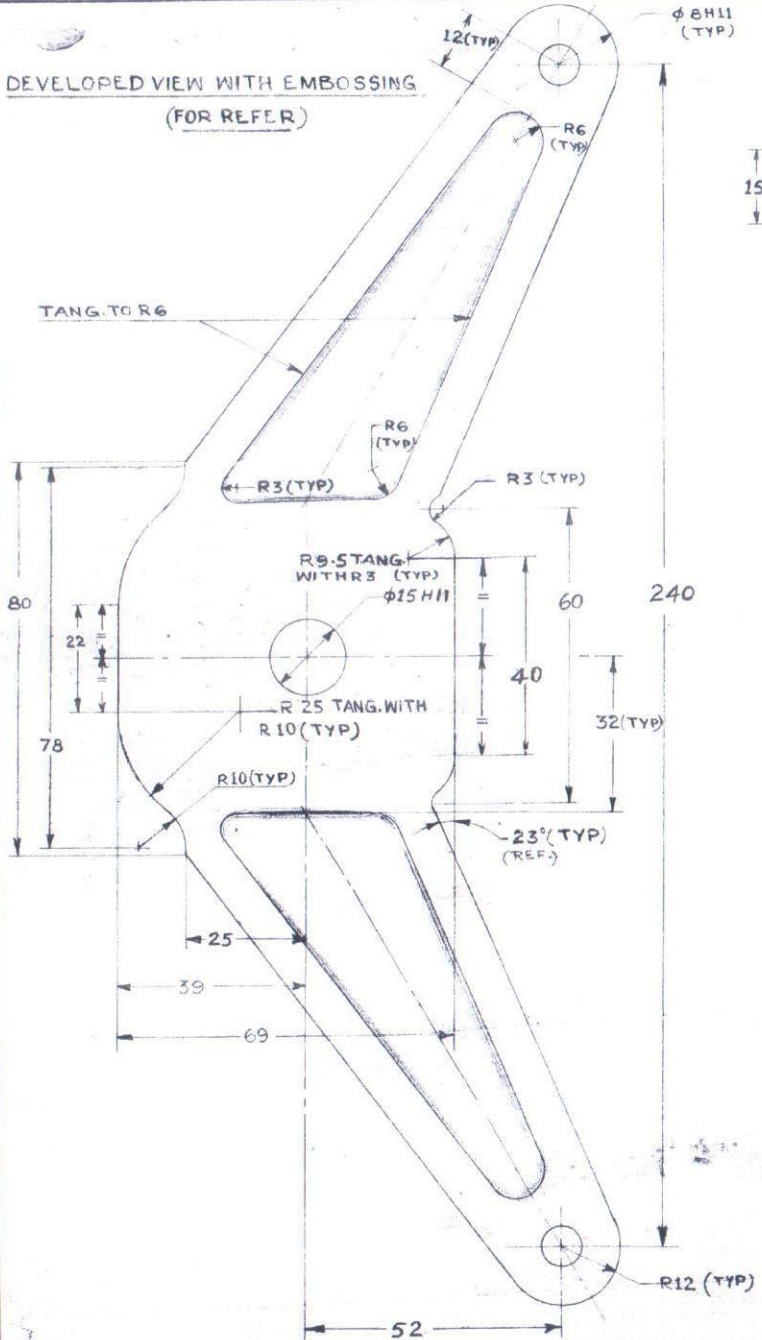
IS: 2102
ISO: 2768-mK
DEBURR ALL SHARP EDGES 0.5x45°
ALL DIMENSIONS ARE IN mm

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

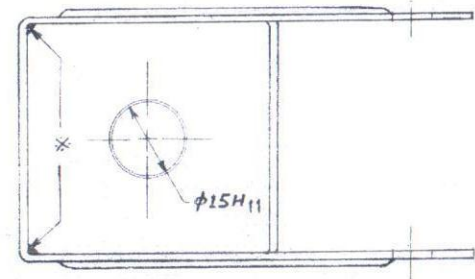
WEIGHT		NOM.	PUCH RING TAB
SCALE	2:1		
SHEET	1 OF 1	DRG NO.	TD2B36JC2
REV. NO.			

THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DEVELOPED VIEW WITH EMBOSSING
(FOR REFER)



* FILLET WELD/BRAZE
TO MINI. LENGTH OF
5-8 mm APPROX.

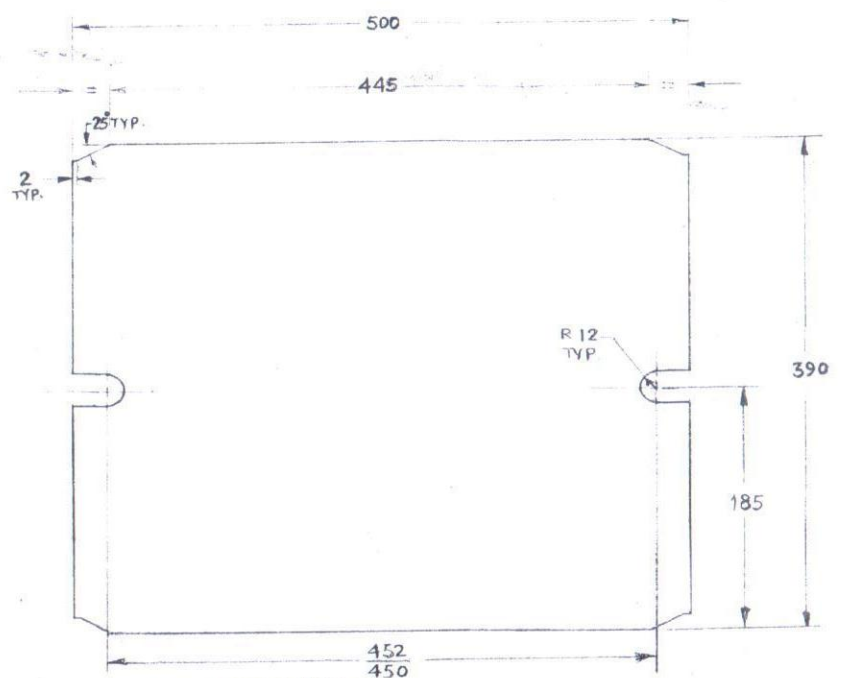
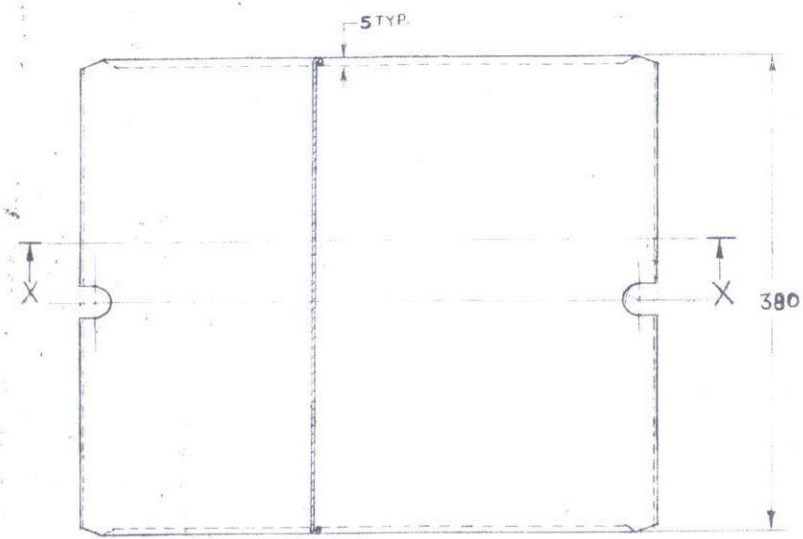


NOTE:-
1. REMOVE SHARP EDGES & CORNERS
2. ALL TYP DIMENSIONS TO BE IDENTICAL ON
BOTH SIDES ON THE BLANK FOR SYMMETRY
& PROPER ALIGNMENT AFTER BENDING.

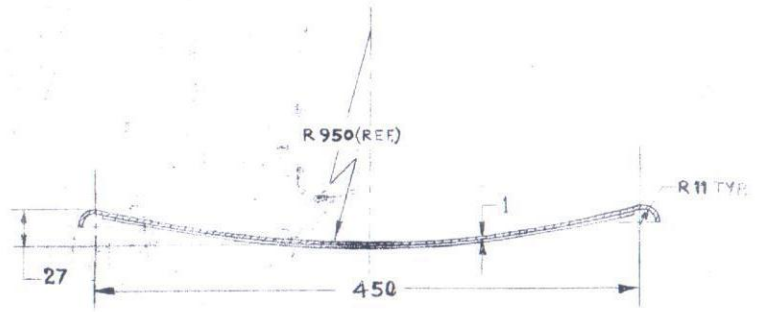
01 G 2 093

3	G-4	EMBOSING DIM 6.5 WAS 3.5	16-1-95	
2	D-3	MTL. THK. WAS 1.6 mm & $\phi 15H11$ WAS $\phi 15H8$	8-7-82	
1	-	REDESIGNED & REDRAWN	8-1-82	
S.No.	REGION	REVISION	DATE	SIG.
REVISIONS				
ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA				
KANPUR				
DGN.	<i>W. S. ...</i>	NOM.	FORK	
DRN.	<i>R. Dev. ...</i>	MTL.	SHEET MS CRA Gd. 10'15:513 THK. 2mm CODE NO. AA27	
CHD.	<i>S. ...</i>	TOL.	INTEGER ONLY 20.000 mm ONE PLACE DECIMAL 20.125 mm UNLESS SPECIFIED TWO PLACE DECIMAL 20.125 mm	
DIM.	IN mm	FIN.	BUFF SMOOTH, PRETREATMENT.	
SCALE	<i>1:1</i>	APP.		
DATE	11-4-81	DRG. NO.	TD 2 A 07 V B 1	SHEET 1 OF 1

011



DEVELOPED VIEW



SECTION X-X

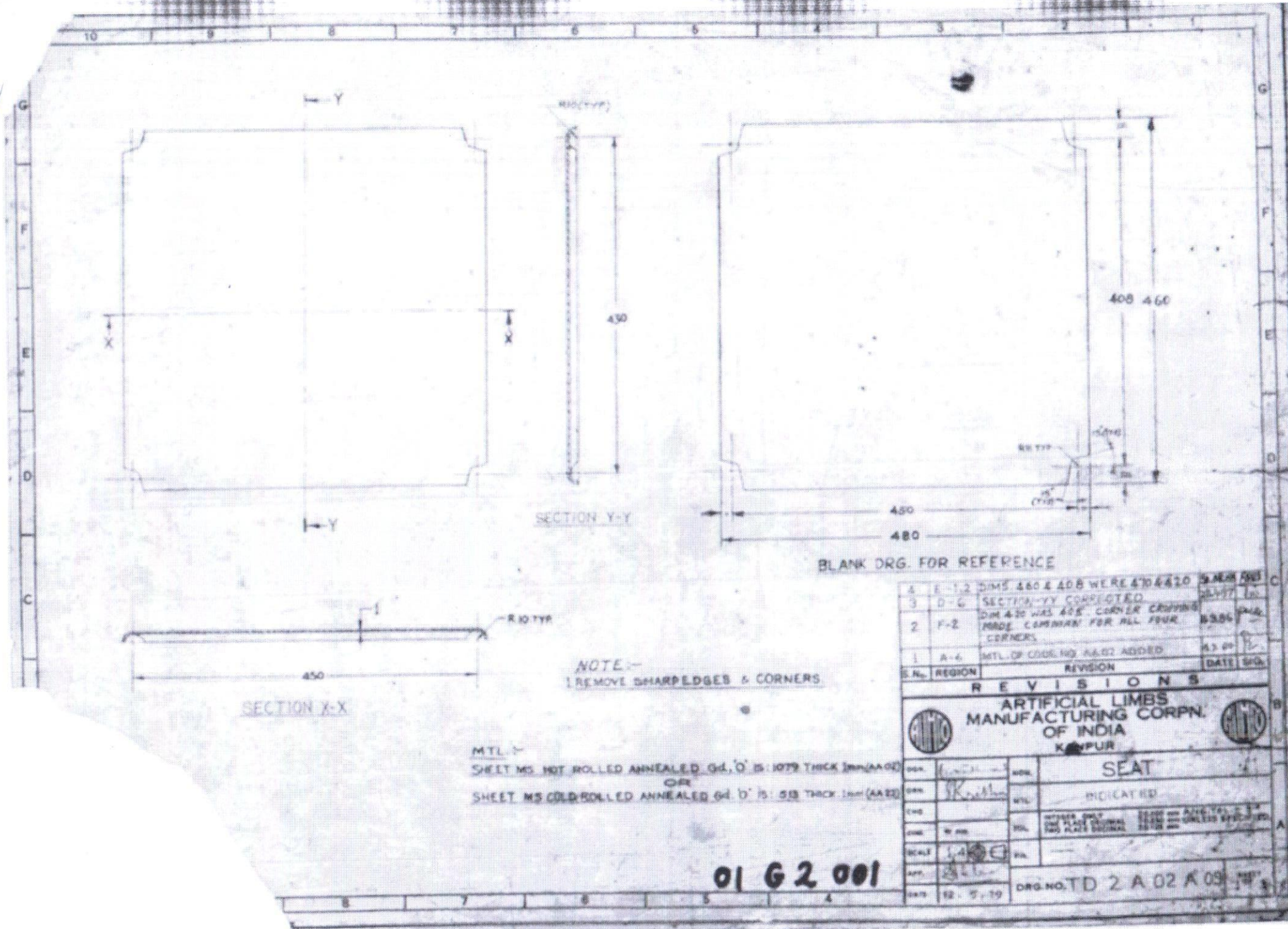
NOTE:-
1. REMOVE SHARPEGES & CORNERS.

S.No.	REGION	REVISION	DATE	SIG.
7	E-2	SLOTS. R12 ADDED IN BLANK.	9.2.89	<i>[Signature]</i>
6	D&E - 3-6	DIM. 180 & R12 (TYP) ADDED. CORNER CROPPING MADE COMMON FOR ALL FOUR CORNERS.	11.3.80	<i>[Signature]</i>
5	A-2	MTL. OF CODE NO AA 02 ADDED	27.80	<i>[Signature]</i>
4	B-8	SECTION X-X MODIFIED	15.11.79	<i>[Signature]</i>
3	-	REDESIGNED & REDRAWN	23.9.79	<i>[Signature]</i>
2	C-10	DIM. 27 ADDED & 'REF' ADDED TO R950	27.79	<i>[Signature]</i>
1	D4, D5	DIM. 450, 5, 30° DELETED & 45, R8, 15° ADDED	24.5.79	<i>[Signature]</i>

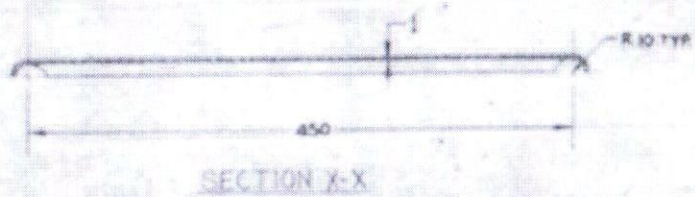
REVISIONS				
ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA KANPUR				
DGN.	<i>[Signature]</i>	NOM.	BACK REST	
DRN.	<i>[Signature]</i>	MTL.	SHEET MS HRA Gd. 'D' IS: 1079 THK. 1mm (AA 02) OR SHEET MS CRA Gd. 'D' IS: 513 THK. 1mm (AA 22)	
CHD.	<i>[Signature]</i>	TOL.	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.125 mm UNLESS SPECIFIED	
DIM.	IN mm	FIN.		
SCALE	1:4	APP.	<i>[Signature]</i>	
DATE	12.5.79	DRG. NO.	TD 2 A. 02 A 10	SHEET 08/14

01 G 2 042

109



BLANK DRG. FOR REFERENCE



NOTE:-
REMOVE SHARPEGES & CORNERS

MTL :-
SHEET MS HOT ROLLED ANNEALED 64. D' IS 1079 THICK 1mm (AAE2)
OR
SHEET MS COLD ROLLED ANNEALED 64. D' IS 518 THICK 1mm (AAE2)

S.N.	REGION	REVISION	DATE	SIGN.
1	A-4	MTL. OF CODE NO. AA02 ADDED	11.3.09	
2	F-2	DIM 430 WAS 435. CORNER CROPPING MADE CONVENIENT FOR ALL FOUR CORNERS	03.06	
3	D-6	SECTION-Y-Y CORRECTED	26.07	
4	E-1,2	DIMS 480 & 408 WERE 470 & 410	26.08.09	

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA KANPUR

SEAT

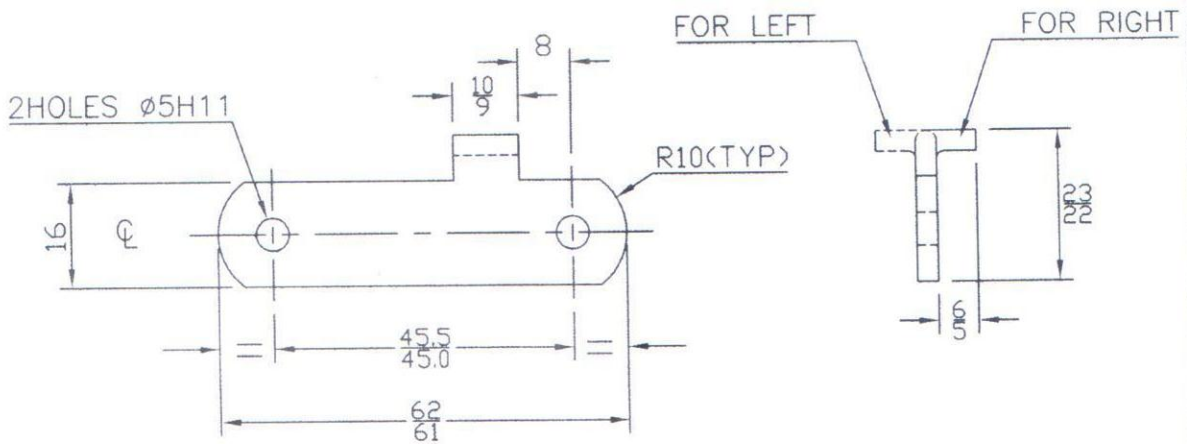
INDICATED

SCALE 1:1

ORG. NO. TD 2 A 02 A 09

01 G 2 001

108



MTL:—

SHEET MS HRA Gd,'0',IS:1079,THK 3.15 (AA08)
OR
SHEET MS CRA Gd,'0',THK 3mm (AA28)

NOTE:—

1.REMOVE SHARP EDGES & CORNERS.

4	A-2	FINISH WAS STOVE ENAMEL PAINT & DRAWING REDRAWN	26/09/13	<i>[Signature]</i>
SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

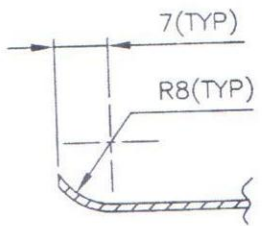
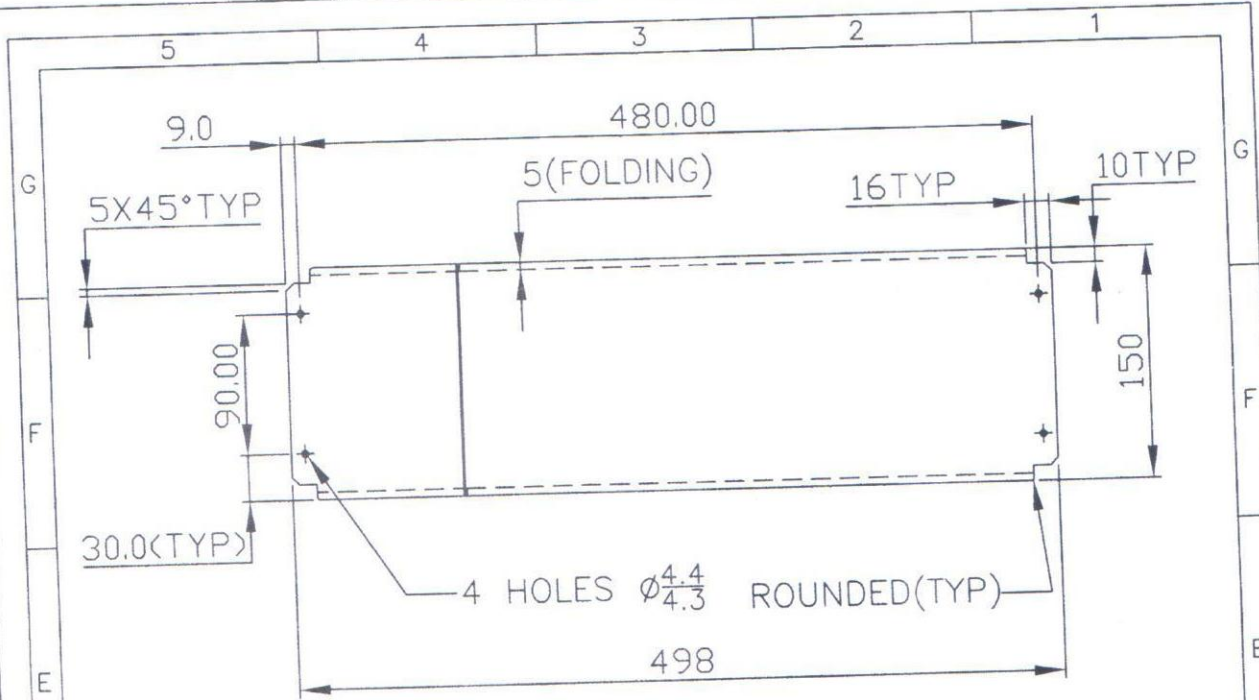


ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR



DGN	<i>[Signature]</i>	NOM	INTERMEDIATE LINK
DRN	<i>[Signature]</i>	MTL	INDICATED
CHD	<i>[Signature]</i>	TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm UNLESS SPECIFIED
DIM	IN mm	FIN	Ni.Cr.PLATED Gd.2, IS:1068
SCALE	NTS		



01	K	5	192	APP	<i>[Signature]</i>	RIGHT TD 2 A 02 D 03	SHEET 10F1
5	4	DATE	10.05.1983			LEFT TD 2 A 02 E 01	



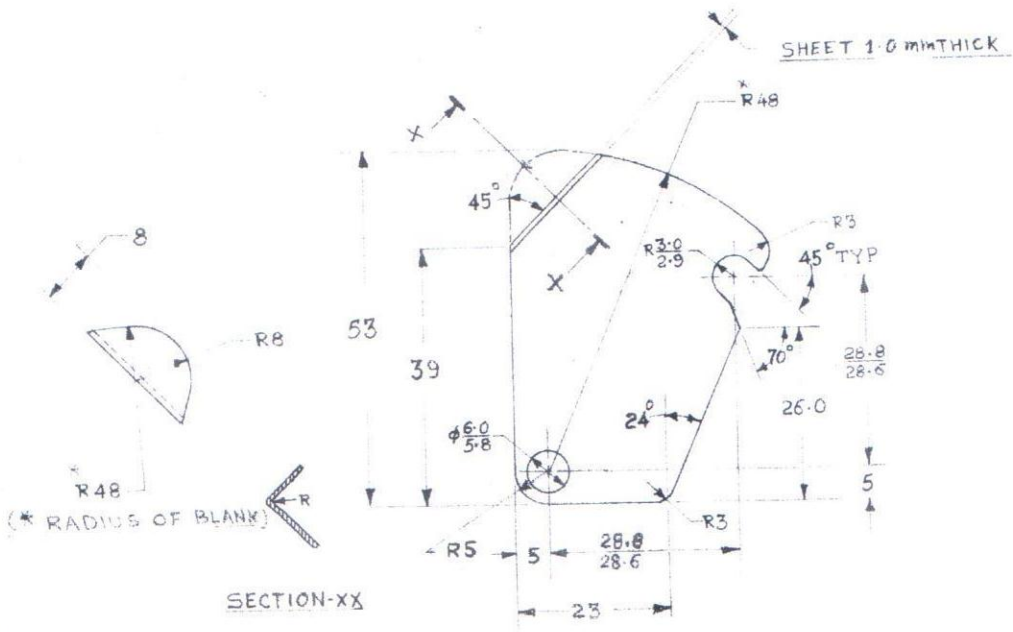
SECTION-XX

NOTE:-

1.REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				
 ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR 				
DGN	<i>Abdullah</i>	NOM	SIDE PLATE	
DRN	<i>Abdullah</i>	MTL	SHEET MS CRA Gd 'O' IS:513, THICK 1mm (AA 22)	
CHD	<i>Abdullah</i>	TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm	UNLESS SPECIFIED
DIM	IN mm	FIN	POWDER COATED COLOUR AS APPROVED	
SCALE	NTS	APP	DRG No:-TD 2 A 26 B 01	
DATE	26.06.2014			

106



- NOTE
1. ANGULAR TOL. $\pm 1/2^\circ$
 2. DEBURR SHARP EDGES

1	-	REDESIGNED & REDRAWN	13-10-77	<i>R</i>
S.No.	REGION	REVISION	DATE	SIG.
REVISIONS				
ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA KANPUR				
DGN.	<i>P. Shrivastava</i>	NOM.	LATCH	
DRN.	<i>P. Shrivastava</i>	MTL.	MS COLD ROLLED 'GRADE 'O' IS: 513	
CHD.	<i>NSM</i>	TOL.	INTEGER ONLY ± 0.500 mm ONE PLACE DECIMAL ± 0.250 mm TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED	
SCALE:	1:1	FIN.	BRIGHT Ni PLATED	
DATE	13-10-77	DRG. NO.	RU 0 A 02 0 11	SHEET OF 1

01 H 1 021