

NOTE:-

- FOR TRAINING END LIMITS HOLE POSITION REFER DGR.NO.DW-1179
- M16-4 HOLES EQUIPAGED TO BE MADE ON PCD 1270 FOR LIFTING.
- M10-3 HOLES TO BE DONE IN ASSY FOR LRMR LAUNCHER

** TO BE MANUFACTURED FROM DW-1108-0210-42

* PHOSPHATING AND PAINTING

- PHOSPHATING TO BE DONE AS PER IS:3618 CLASS B
- PRIMER RED OXIDE TO STANDARD IS:12744 TO BE APPLIED BY FIRM WHO IS SUPPLYING STORE TO MPFAS PER DW-1134
- PAINTING TO BE DONE AT MPF IN OR DURING ASSEMBLY AS PER DW-1134
- DO NOT APPLY PRIMER AND PAINT ON THREAD AND BORE SURFACE

1	FRAME	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS																																												
No. OF	FRAME	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS																																												
<table border="1"> <thead> <tr> <th>LINEAR DIMENSIONS</th> <th>ANGULAR DIMENSIONS</th> <th>VALVE IN "µ"</th> <th>DEVIATION</th> </tr> </thead> <tbody> <tr> <td>0-100</td> <td>0-100</td> <td>0-100</td> <td>0</td> </tr> <tr> <td>100-200</td> <td>100-200</td> <td>100-200</td> <td>0</td> </tr> <tr> <td>200-300</td> <td>200-300</td> <td>200-300</td> <td>0</td> </tr> <tr> <td>300-400</td> <td>300-400</td> <td>300-400</td> <td>0</td> </tr> <tr> <td>400-500</td> <td>400-500</td> <td>400-500</td> <td>0</td> </tr> <tr> <td>500-600</td> <td>500-600</td> <td>500-600</td> <td>0</td> </tr> <tr> <td>600-700</td> <td>600-700</td> <td>600-700</td> <td>0</td> </tr> <tr> <td>700-800</td> <td>700-800</td> <td>700-800</td> <td>0</td> </tr> <tr> <td>800-900</td> <td>800-900</td> <td>800-900</td> <td>0</td> </tr> <tr> <td>900-1000</td> <td>900-1000</td> <td>900-1000</td> <td>0</td> </tr> </tbody> </table>								LINEAR DIMENSIONS	ANGULAR DIMENSIONS	VALVE IN "µ"	DEVIATION	0-100	0-100	0-100	0	100-200	100-200	100-200	0	200-300	200-300	200-300	0	300-400	300-400	300-400	0	400-500	400-500	400-500	0	500-600	500-600	500-600	0	600-700	600-700	600-700	0	700-800	700-800	700-800	0	800-900	800-900	800-900	0	900-1000	900-1000	900-1000	0
LINEAR DIMENSIONS	ANGULAR DIMENSIONS	VALVE IN "µ"	DEVIATION																																																
0-100	0-100	0-100	0																																																
100-200	100-200	100-200	0																																																
200-300	200-300	200-300	0																																																
300-400	300-400	300-400	0																																																
400-500	400-500	400-500	0																																																
500-600	500-600	500-600	0																																																
600-700	600-700	600-700	0																																																
700-800	700-800	700-800	0																																																
800-900	800-900	800-900	0																																																
900-1000	900-1000	900-1000	0																																																

SCALE: DRAWN 1:1, CHECKED 1:1, APPROVED 1:2

DATE: 10/10/12

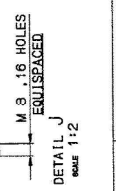
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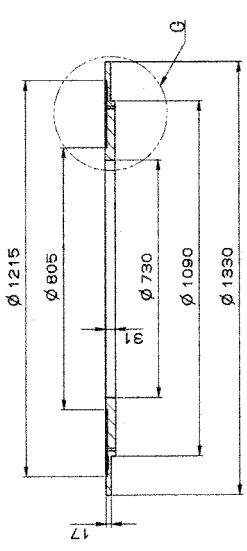
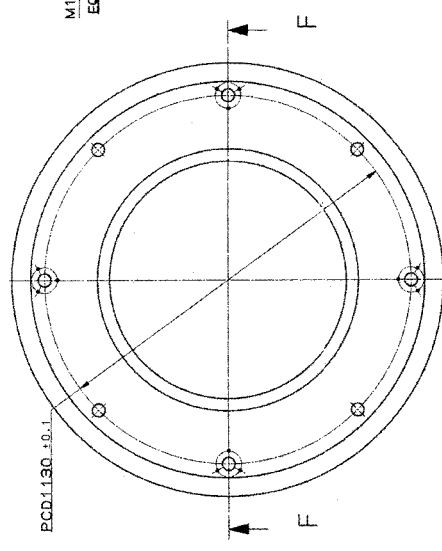
DESIGN: LR-MR LAUNCHER

DRAWING No.: DW-1108-0210-12

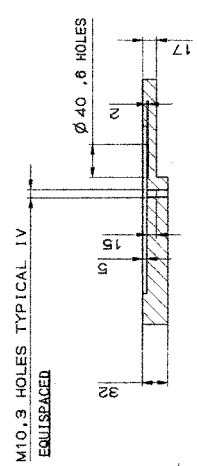
OFFICE: [Signature]

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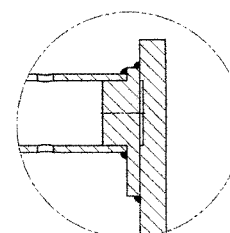
SECTION F-F



DETAIL G
SCALE 1:4

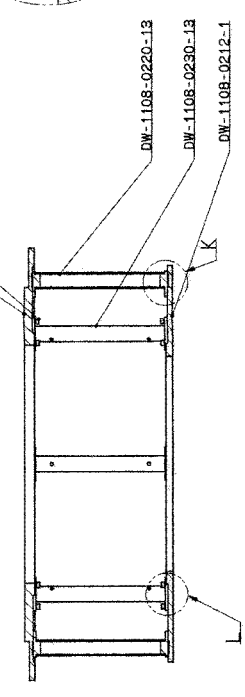
ALTERNATE MATERIAL - EN-8 OR
080M40 BS-970 PART-1 1983

DW-1108-0211-1 TOP PLATE 1400B, 1515B17 1:15
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE



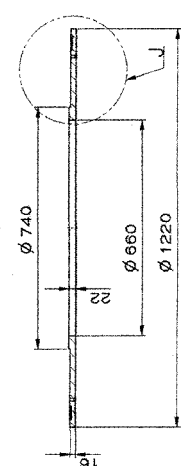
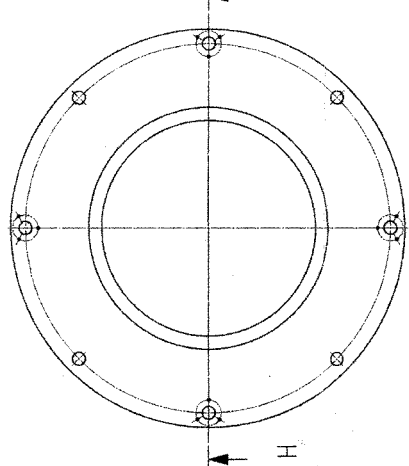
DETAIL K
SCALE 1:2

E-WELDED



DETAIL L
SCALE 1:2

1. FIRST DRAWING NO. DW-1108-0211-1, DW-1108-0212-1 AND DW-1108-0230-13 SCREWED TOGETHER
2. DRAWING NO. DW-1108-0211-1, DW-1108-0212-1 AND DW-1108-0220-13 WELDED TOGETHER
3. STRESSES TO BE BELIEVED AFTER WELDING



DETAIL J
SCALE 1:4

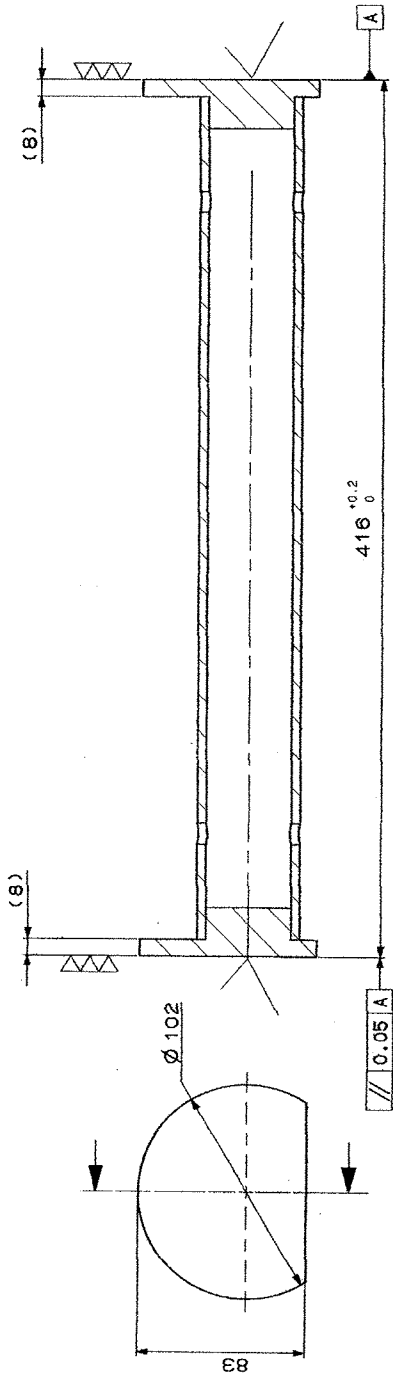
ALTERNATE MATERIAL - EN-8 OR
080M40 BS-970 PART-1 1983

DW-1108-0212-1 BOTTOM PLATE 1400B, 1515B17 1:15
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE

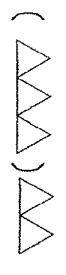
E-WELDED

1	FRAME	DESCRIPTION	PART NO.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
GENERAL TOLERANCES							
LINEAR DIMENSIONS							
±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3
±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4
±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
ANGULAR DIMENSIONS							
±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3
±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4
±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
VALUE IN °							
±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3
±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4	±0.4
±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
SCALE							
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE							
FRAME (WELDING)							
FRAME ASSY							
LR-MR LAUNCHER							
KAVACH MOD-11							
MACHINE TOOL PROTOTYPE FACTORY, AMBARNATH							
DRAWING NO. DW-1108-0210-42							

APPROVED

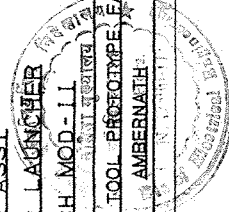


* TO BE MANUFACTURED FROM DW-1108-0220-43



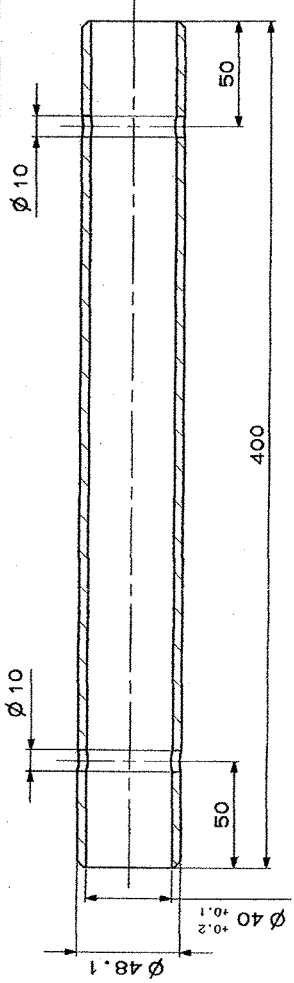
No. OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
4	TUBE ASSY-1		*			
GENERAL TOLERANCE						
LINEAR DIMENSIONS						
0-8	±0.1					
9-30	±0.2					
30-120	±0.3					
120-216	±0.5					
216-1000	±0.8					
1000-2000	±1.2					
ANGULAR DIMENSION						
1-10	±1'					
11-30	±2'					
31-60	±3'					
61-100	±4'					
VALUE IN "IN"						
0-25	±0.005					
26-50	±0.010					
51-75	±0.015					
76-100	±0.020					
TUBE ASSY-1						
FRAME ASSY						
LR-MR LAUNCHER						
KAVACH MOD-11						
MACHINE TOOL PROTOTYPE FACTORY						
AMBERNATH						
SCALE 1:1						
CHECKED						
APPROVED						
DATE						
DRAWN						
REPLACED BY						
REF. JAGD						
DRAWING No. DW-1108-0220-13						

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NOMINAL SIZE & FIT	DEVIATION

APPROVED



DW-1108-0222-1 TUBE IS:1161 1 1:2
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE

ALTERNATE MATERIAL - EN-8 OR
080M40 BS:970 PART-1 1983

DW-1108-0221-1 FLANGE 40CB, IS:15517 2 1:2
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE

1	TUBE ASSY	* PART NO.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
GENERAL TOLERANCE						
LINEAR DIMENSIONS						
0-3	10.1					
3-6	10.5					
6-30	12.5					
30-120	15.0					
120-315	18.0					
315-1000	20.0					
1000-2000	21.2					
ANGULAR DIMENSION						
1-10	±1'					
10-30	±30"					
30-100	±10'					
100-250	±10"					
VALUE IN "µm"						
±0.25	±25					
±0.50	±50					
±1.00	±100					
±2.00	±200					
SCALE						
DRAWN			10.12.08		1:1	
CHECKED					PW	
APPROVED					2009	
REPLACED BY						
REPLACED FOR						
DRAWING No.						
DW-1108-0220-43						

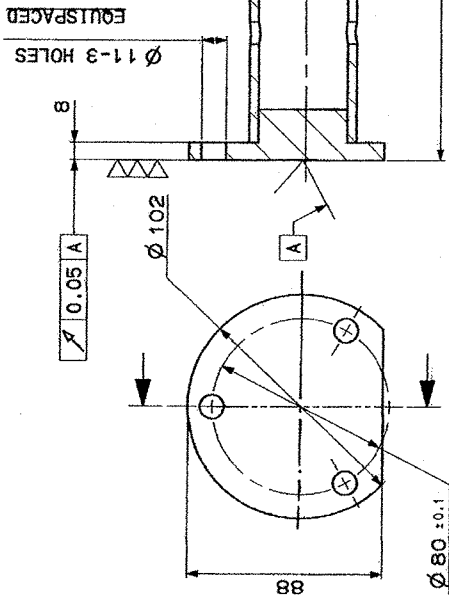
TUBE ASSY (WELDING)
FRAME ASSY
LR-MR LAUNCHER
KAVACH MOD. II
MACHINE TOOL PROTOTYPE FACTORY
AMBERNATH

STRESSES TO BE RELIEVED AFTER
E-WELDED

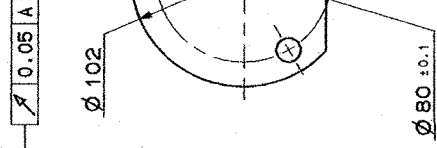
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Handwritten signature and initials in the top right corner of the drawing area.



EQUISPACED
Ø 11-3 HOLES



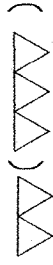
EQUISPACED
Ø 11-3 HOLES

**

PHOSPHATING AND PAINTING

1. PHOSPHATING TO BE DONE AS PER IS: 3618 CLASS B
2. PRIMER RED OXIDE TO STANDARD IS: 12744 TO BE APPLIED BY FIRM WHO IS SUPPLYING STORE TO MPFAS PER DW-1134 AS PER DW-1134
3. PAINTING TO BE DONE AT MPF IN OR DURING ASSEMBLY AS PER DW-1134
4. DO NOT APPLY PRIMER AND PAINT ON TOP AND BOTTOM FACE

* TO BE MANUFACTURED FROM DW-1108-0220-43



TUBE ASSY-11		PART No.		MATERIAL		STANDARD		DIMENSIONS		REMARKS	
No. OFF	DESCRIPTION	DRG. No. OF ASSOCIATED PART	INDEX	ALTERATION	No. OFF	DATE	NAME	SCALE	DRAWN	CHECKED	APPROVED
	TUBE ASSY-11							1:1	18.08	PA	
	FRAME ASSY										
	LR-MR LAUNCHER										
	KAVACH MOD-11										
<p>REPLACED BY: [Signature]</p> <p>REPLACED FOR: [Signature]</p>											
<p>TUBE ASSY-11 FRAME ASSY LR-MR LAUNCHER KAVACH MOD-11</p>										<p>DRAWING No. DW-1108-0230-13</p>	
<p>MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH</p>											

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