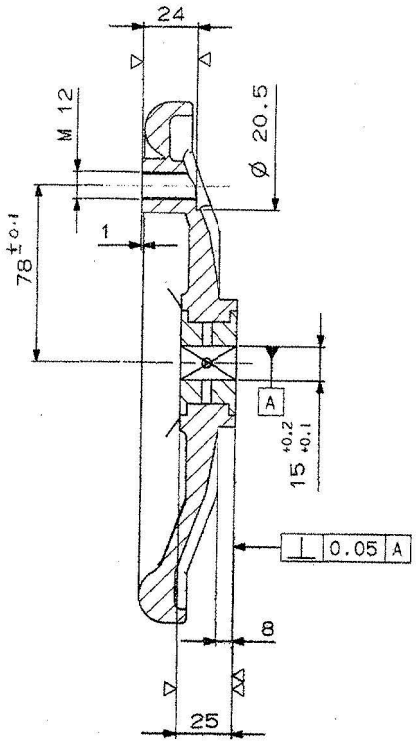
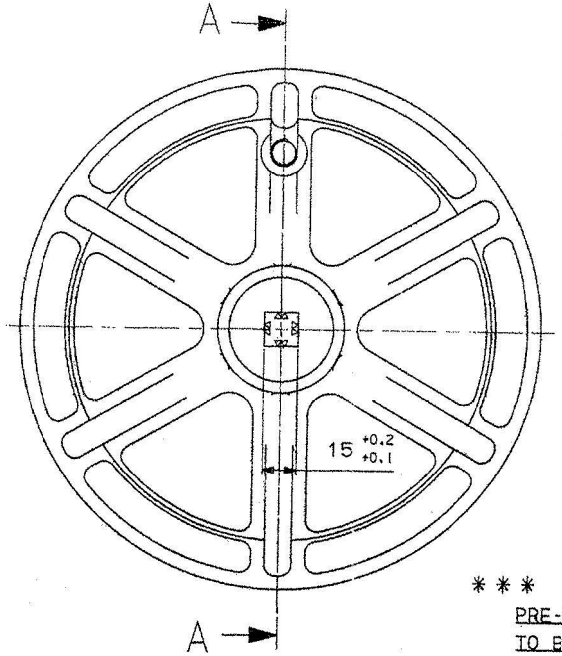


SECTION A-A



* * *
PRE-BROACH SIZE Ø 10-H8
TO BE MANUFACTURED FROM DW-1108-0701-13-2

~(▽,▽▽)

* * PAINTING

1. PRE-TREATMENT PRIMER TO DEF STAN 80-15 (Patt.No.8010 - 000116 & 8010 - 000117) AND PRIMER YELLOW ZINC CHROMATE TO IS:1874 (Patt.No.8010-000113) TO BE APPLIED BY FIRM WHO IS SUPPLYING STORE TO MPF AS PER DW-1134
2. PAINTING TO BE DONE AT MPF IN OR DURING ASSEMBLY AS PER DW-1134
3. DO NOT APPLY PRIMER AND PAINT ON THREAD & RECTANGLE HOLE FACES OF DIM 15

No.OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
1	HANDWHEEL		* * *			* *

GENERAL TOLERANCE	
LINEAR DIMENSIONS	
0-6	±0.1
6-30	±0.2
30-120	±0.3
120-315	±0.5
315-1000	±0.8
1000-2000	±1.2
ANGULAR DIMENSION	
1-10	±1°
10-50	±30'
50-100	±20'
>100	±10'

VALUE IN "um"	
~	>25
▽	6-25
▽▽	1.6-6
▽▽▽	0.025-1.6
▽▽▽▽	<0.025

No.OFF	DRG. No. OF ASSOCIATED PART	INDEX	ALTERATION	DATE	NAME

HANDWHEEL
HANDWHEEL ASSY.
LR-MR LAUNCHER
SAVACH MOD-II

MACHINE TOOL PROTOTYPE FACTORY,
AMBERNATH

Design Office

SCALE			
1:2	DRAWN	02.02.09	VIJAY
	CHECKED		
	APPROVED	17/2/09	

REPLACED BY
REPLACED FOR
REVISION 0

DRAWING No.
DW-1108-0701-13

NOMINAL SIZE & FIT	DEVIATION

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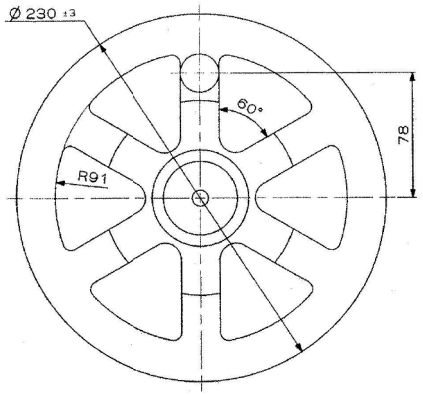
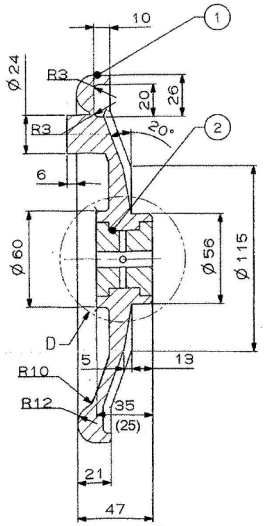
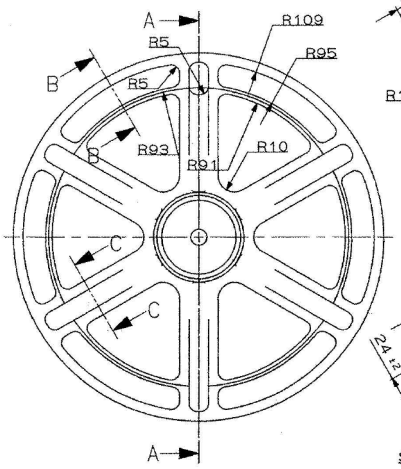
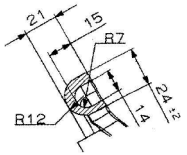
APPROVED





SECTION A-A





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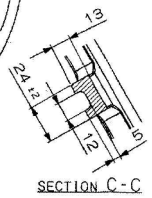
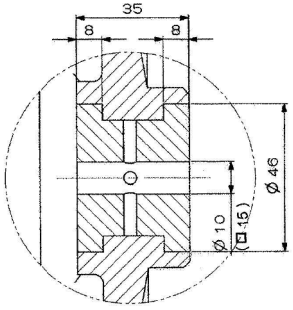
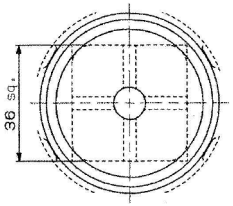


SECTION C-C



DETAIL D
SCALE 1:1



NOTE:
1. CASTING TO BE DULY CLEANED & FREE FROM FINS, RUNNERS, RISERS ETC.
2. CASTING TO BE FREE FROM CRACKS, BLOW HOLES & OTHER CASTING DEFECTS.
3. CASTING TO BE SUPPLIED IN HEAT TREATED CONDITION TO ACHIEVE MECHANICAL PROPERTIES AS SPECIFIED.
4. ALL UNSPECIFIED RADII ARE 3mm.
5. CASTING AND TEST BAR SHOULD BE SUPPLIED AT SAME HEAT TREATED CONDITION.
6. CASTING SHOULD BE TESTED FOR RADIOGRAPHIC TEST AS PER ASTM E-155-2008 LEVEL-II
7. MACHINING SIZE SHOWN IN BRACKET

***
PHOSPHATING
PHOSPHATING TO BE DONE AS PER IS:3618 CLASS-A1

No.OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
1	INSERT	2	IS:2073 - C40			***
1	HANDWHEEL	1	IS:617 - 2280 T4			

GENERAL TOLERANCE

LINEAR DIMENSIONS

0-6	±0.1
6-30	±0.2
30-120	±0.3
120-315	±0.5
315-1000	±0.8
1000-2000	±1.2

ANGULAR DIMENSION

1-10	±1°
10-50	±30'
50-100	±20'
>100	±10'

VALUE IN "um"

~	>25
▽	6-25
▽▽	1.8-6
▽▽▽	0.025-1.8
▽▽▽▽	<0.025

No.OFF	ORG. No. OF ASSOCIATED PART	INDEX	ALTERATION	DATE	NAME

CASTING FOR HANDWHEEL
HANDWHEEL ASSY.
LR-MR LAUNCHER
KAVACH MOD-II

SCALE 1:1 | DRAWN 02.01.09 VIJAY | CHECKED | APPROVED | REVISION 0

REPLACED BY | REPLACED FOR

MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH

Design Office

DRAWING No. DW-1108-0701-13-2

NOMINAL SIZE & FIT | DEVIATION

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APPROVED

CHEMICAL COMPOSITION

GRADE	C	Si	Mn	S Max.	P Max.
C 40 IS:2073	0.35-0.45	0.05-0.35	0.60-0.90	0.055	0.055

MECHANICAL PROPERTIES

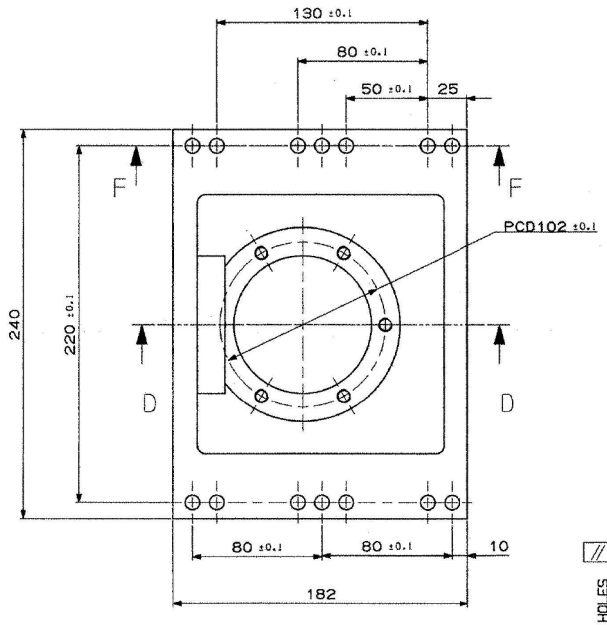
GRADE	ULTIMATE TENSILE STRENGTH Kgf/mm²	PERCENTAGE ELONGATION%
C 40 IS:2073	58-68	18

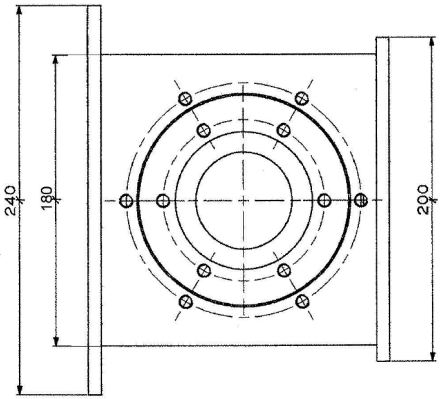
CHEMICAL COMPOSITION

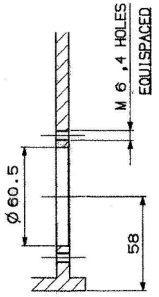
GRADE	AL	Cu	Si	Mg Max	Fe Max	Mn Max	Ni Max	Zn Max	Pb Max	Sn Max	Ti Max
2280 T6 IS:617	Remainder	4.0-5.0	0.25	0.10	0.25	0.1	0.1	0.1	0.05	0.05	0.2-0.3

MECHANICAL PROPERTIES

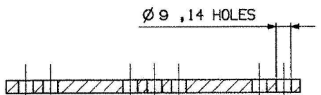
GRADE	TENSILE STRENGTH N/mm² (Kg/mm²)	SPECIFIC ELONGATION%
2280 T6 IS:617-75	310 (31.5)	9







SECTION E-E



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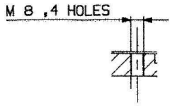

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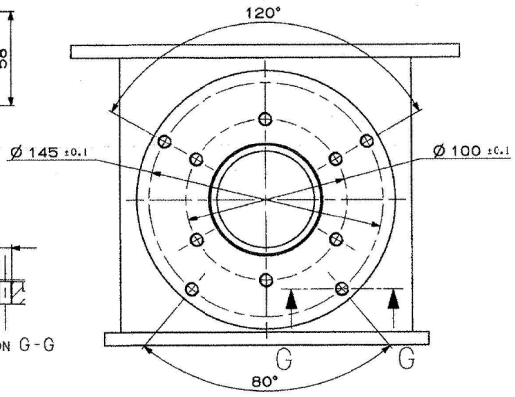
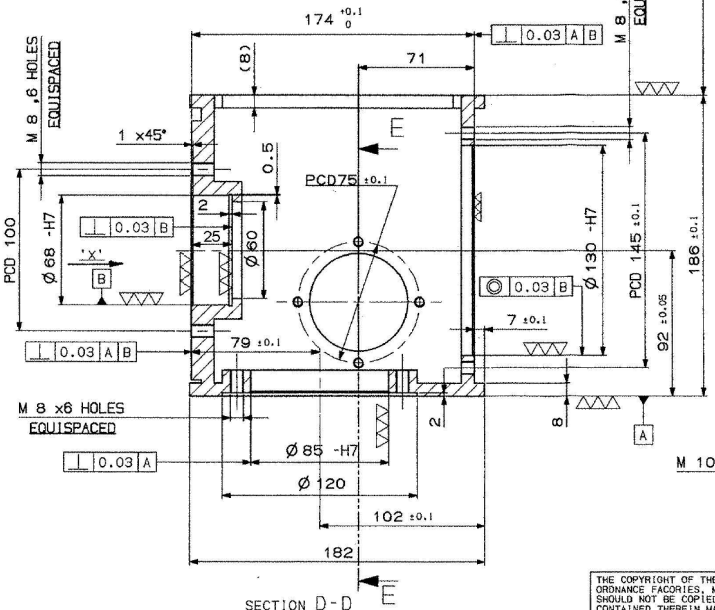


VIEW 'X'



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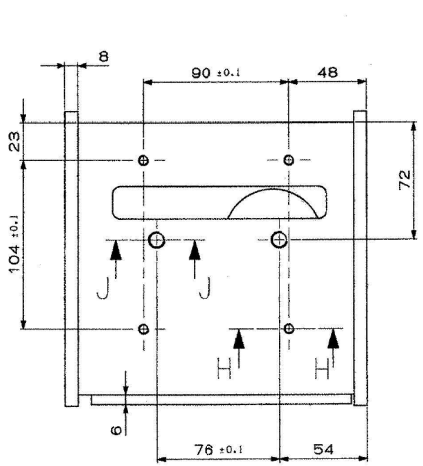
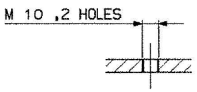


M 6 ,4 HOLES

SECTION H-H



SECTION J-J

***

PAINTING :-

1. PRE-TREATMENT PRIMER TO DEF STAN 80-15 (Patt.No.8010 - 000116 & 8010 - 000117) AND PRIMER YELLOW ZINC CHROMATE TO IS: 1874 (Patt.No.8010-000113) TO BE APPLIED BY FIRM WHO IS SUPPLYING STORE TO MPF AS PER DW-1134
2. PAINTING TO BE DONE AT MPF IN OR DURING ASSEMBLY AS PER DW-1134
3. DO NOT APPLY PRIMER AND PAINT ON THREAD AND CYLINDRICAL BORE FACE OF DIA 68 - H7, DIA 85 - H7, DIA 130 - H7

**

TO BE MANUFACTURED FROM DW-1108-4037-12-2

▽▽ (▽▽▽)

No. OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
1	HOUSING-I		**			***

GENERAL TOLERANCE

LINEAR DIMENSIONS

0-6	±0.1
6-30	±0.2
30-120	±0.3
120-315	±0.5
315-1000	±0.8
1000-2000	±1.2

ANGULAR DIMENSION

1-10	±1°
10-50	±30'
50-140	±20'
>100	±10'

VALUE IN "um"

~	125
▽	8-25
▽▽	1.8-6
▽▽▽	0.025-1.8
▽▽▽▽	<0.025

No. OFF	DRG. No. OF ASSOCIATED PART	INDEX	ALTERATION	DATE	NAME
REVISION-H	DIM 92 WAS 90			21.10.2010	VIJAY
REVISION-I	DIM 130 ADDED, DIM 25 ADDED			11.10.2010	VIJAY

HOUSING-I
ELEVATING DRIVE ASSY
LRMR LAUNCHER
KAVACH MOD-II

SCALE	1:1	DRAWN	02.01.09 VIJAY
		CHECKED	"
		APPROVED	
REPLACED BY		REVISION	II
REPLACED FOR			

MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH

Design Office

DRAWING No.: DW-1108-4037-12

Ø 68-H7	+0.030 0	
Ø 85-H7	+0.035 0	
Ø -130-H7	+0.040 0	
NOMINAL SIZE & FIT	DEVIATION	

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APPROVED