

**CHEMICAL COMPOSITION**

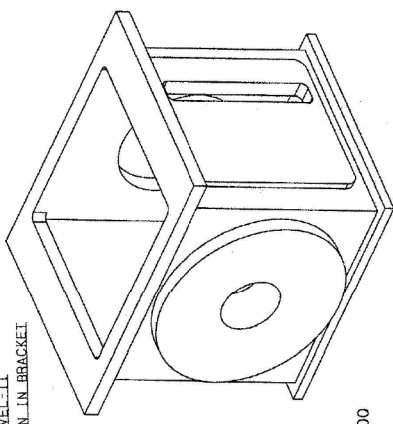
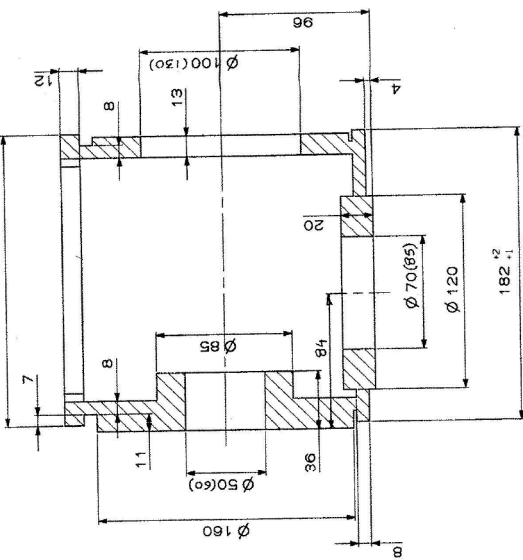
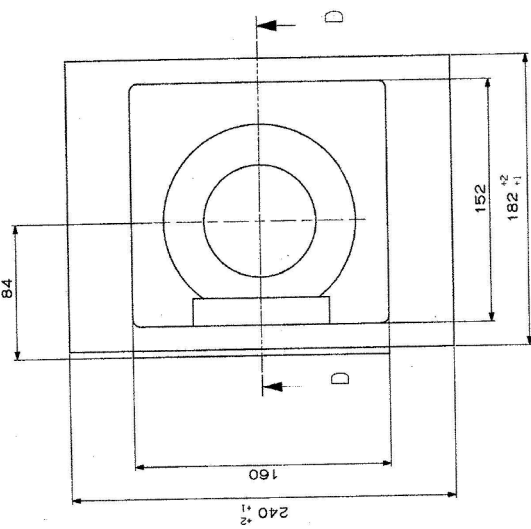
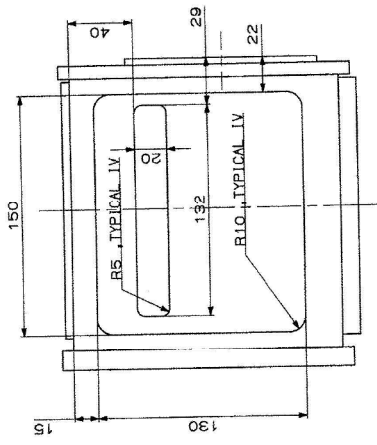
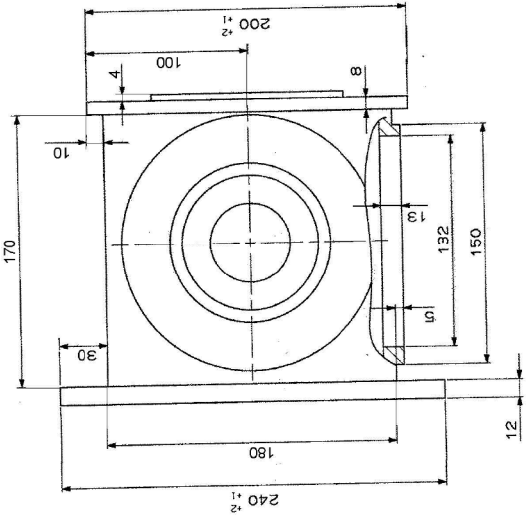
|                                    |  |
|------------------------------------|--|
| IS:617-94, 5500 CONDITION T4       |  |
| TENSILE STRENGTH 275 MPa Min.      |  |
| * ELONGATION ON 50 mm GAUGE 8 Min. |  |
| -----                              |  |
| -----                              |  |

|                             |            |
|-----------------------------|------------|
| S:617-94, 5500 CONDITION T4 |            |
| Mg %                        | 9.5 - 11.0 |
| Zr %                        | ---        |
| Be %                        | ---        |
| Fe %                        | 0.2 Max.   |
| Al %                        | Remainder  |
| Mn %                        | 0.4 Max.   |
| Cu %                        | 0.10 Max.  |
| Zn %                        | 0.1 Max.   |
| Si %                        | 0.25 Max.  |
| Pb %                        | 0.05 Max.  |
| Sb %                        | 0.05 Max.  |
| Ni %                        | 0.1 Max.   |
| Sum of impurities           | ---        |

**MECHANICAL PROPERTIES**

- NOTE:**
1. CASTING TO BE DULY CLEANED & FREE FROM FINIS, 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 HEREIN.
  4. ALL UNSPECIFIED PARTS SHOULD BE SUPPLIED AT SAME HEAT TREATED CONDITION.
  5. CASTING AND TEST PEB SHOULD BE SUPPLIED AT SAME HEAT TREATED CONDITION.
  6. CASTING SHOULD BE TESTED FOR RADIOGRAPHIC TEST AS PER ASTM E-122-2999-LEVEL-11.
  7. MACHINING SIZE SHOWN IN BRACKET.

\* TO IS:617-94, 5500  
CONDITION T4.



| No. OFF | DESCRIPTION | PART No. | MATERIAL | STANDARD | DIMENSIONS | REMARKS      |
|---------|-------------|----------|----------|----------|------------|--------------|
| 1       | HOUSING-I   |          |          |          |            | Wt. : -4.8Kg |

|                    |      |                   |      |                    |      |              |      |
|--------------------|------|-------------------|------|--------------------|------|--------------|------|
| GENERAL TOLERANCES |      | LINEAR DIMENSIONS |      | ANGULAR DIMENSIONS |      | VALU IN "µm" |      |
| ±0.8               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±0.15              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±0.3               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±0.5               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±1.0               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±1.5               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±2.0               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±3.0               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±5.0               | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±10.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±15.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±20.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±30.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±50.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±75.0              | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±100.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±150.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±200.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±300.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±500.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±750.0             | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |
| ±1000.0            | ±0.1 | ±0.1              | ±0.1 | ±0.5               | ±0.5 | ±0.5         | ±0.5 |

|         |  |                           |  |       |  |            |  |
|---------|--|---------------------------|--|-------|--|------------|--|
| NO. OFF |  | ISS. No. of ASSIGNED PART |  | INDEX |  | ALTERATION |  |
|         |  |                           |  |       |  |            |  |

SCALE: DRAWN 10.5.94 BY [Signature] 1:1  
CHECKED [Signature] 10.5.94  
APPROVED [Signature]

DESIGNING: DW-1108-4037-12-2  
DESIGN: [Signature] OFFICE

MACHINE TOOL PROTOTYPE FACTORY,  
KAWACHIMOD-11  
AMBARNATH

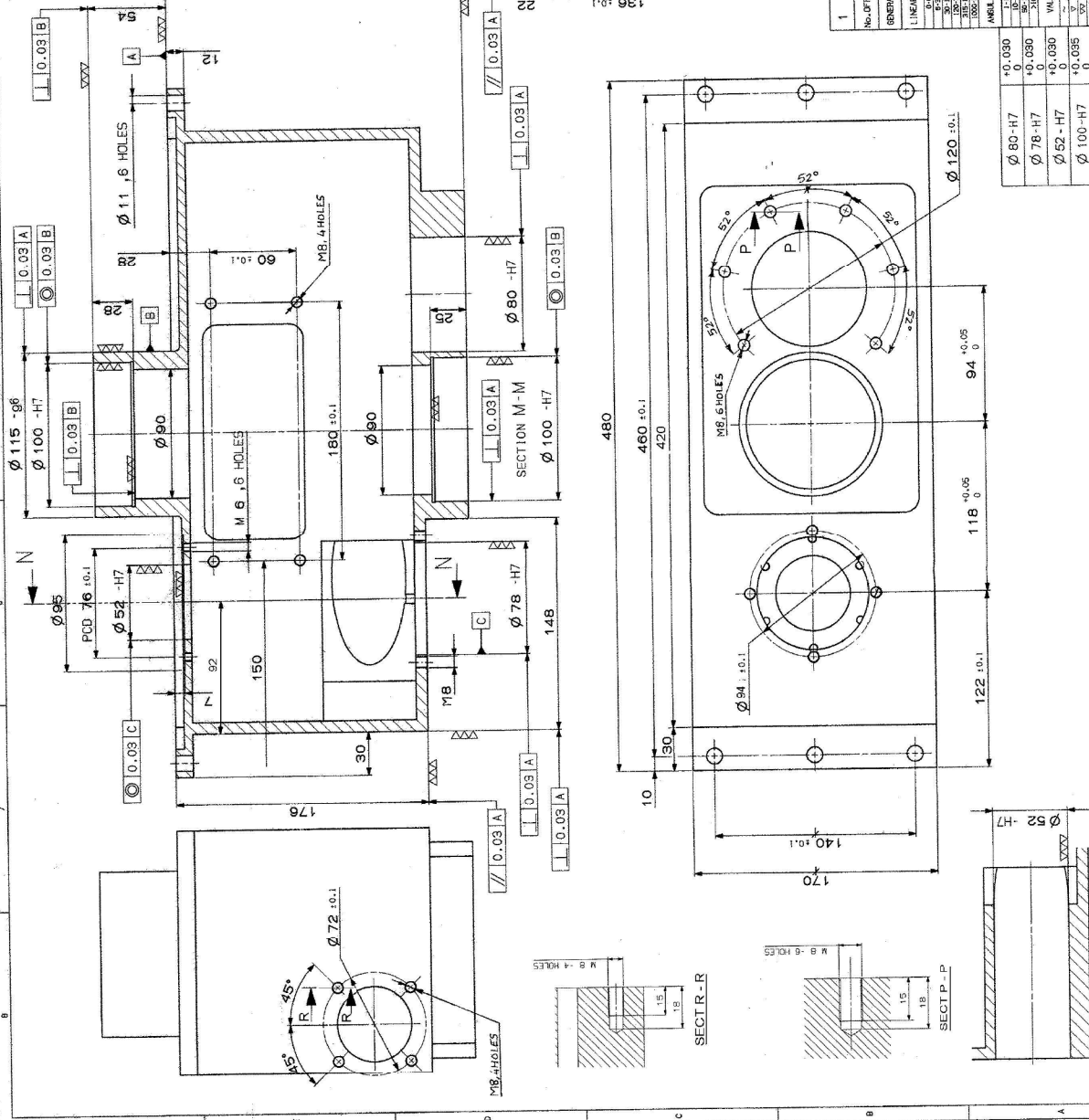
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**SECTION D-D**



APPROVED

**\*\* PAINTING :-**  
 1. PRE-TREATMENT PRIMER TO DEF STAN 90-15 (Pat. No. 8010-000116 & 8010-000117) AND PRIMER YELLOW ZINC CHROMATE TO IS-1874 (Pat. 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 DIA 52 - H7 DIA 78 - H7 DIA 100 - H7 AND CYLINDRICAL FACE DIA 115-g6



| NO. OF | DESCRIPTION | PART No. | MATERIAL | STANDARD | DIMENSIONS | REMARKS |
|--------|-------------|----------|----------|----------|------------|---------|
| 1      | HOUSING-11  |          | ** ** *  | ** ** *  | ** ** *    | ** ** * |

| GENERAL TOLERANCE | LINEAR DIMENSIONS | ANGULAR DIMENSIONS | NO. OF ASSOCIATED PART | INDEX | ALTERATION |
|-------------------|-------------------|--------------------|------------------------|-------|------------|
| 0.8               | 0.1               | 1'                 |                        |       |            |
| 0.5               | 0.05              | 30'                |                        |       |            |
| 0.3               | 0.03              | 15'                |                        |       |            |
| 0.2               | 0.02              | 10'                |                        |       |            |
| 0.1               | 0.01              | 5'                 |                        |       |            |
| 0.05              | 0.005             | 2.5'               |                        |       |            |
| 0.02              | 0.002             | 1.25'              |                        |       |            |
| 0.01              | 0.001             | 0.625'             |                        |       |            |
| 0.005             | 0.0005            | 0.3125'            |                        |       |            |
| 0.002             | 0.0002            | 0.15625'           |                        |       |            |
| 0.001             | 0.0001            | 0.078125'          |                        |       |            |

| SCALE | DRIVEN | SP. NO. | DATE | NAME |
|-------|--------|---------|------|------|
| 1:1   |        |         |      |      |

| NO. | DESCRIPTION              | DATE | NAME |
|-----|--------------------------|------|------|
| 1   | HOUSING-11               |      |      |
| 2   | WORM AND WORM WHEEL ASSY |      |      |
| 3   | ELEVATING DRIVE ASSY     |      |      |
| 4   | LEMR LAUNCHER            |      |      |
| 5   | KAVACH MOD-11            |      |      |

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DW-1108-4631-12

