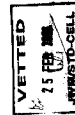
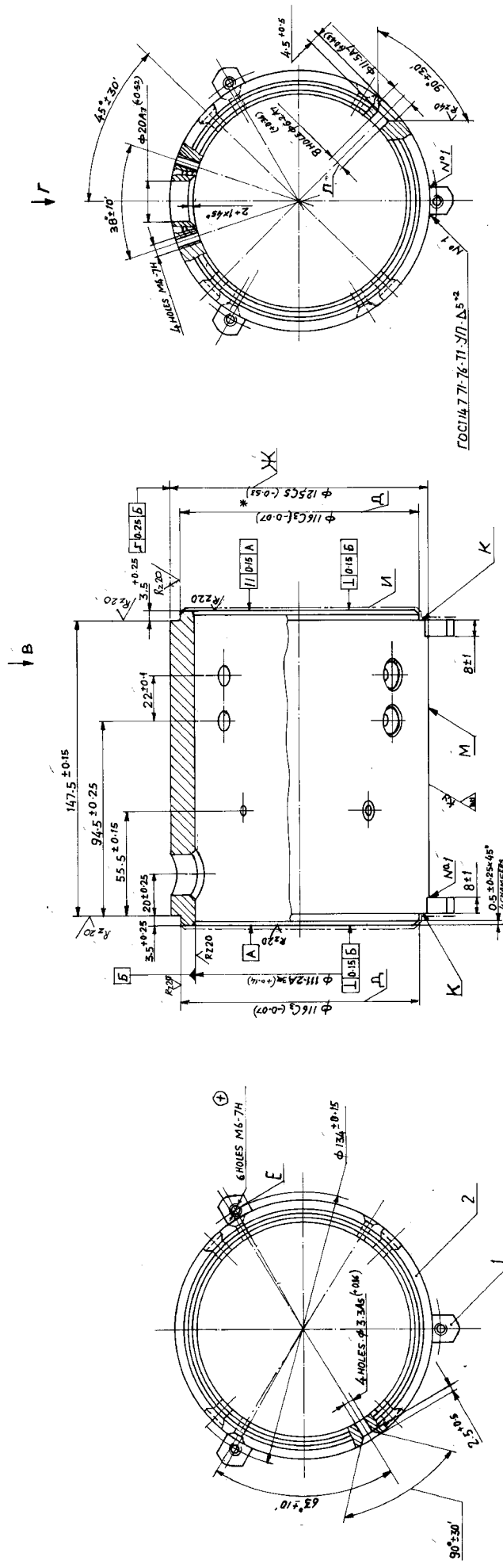


FIRST ANGLE PROJECTION

[illegible][illegible]

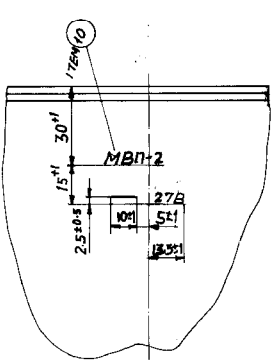
|  |   |                                    |
|--|---|------------------------------------|
|  | 2 | Traced from GQA (KV) original Drg. |
|--|---|------------------------------------|



View A

View B

View C



View D

View E

1. Limit deviation between the hole E is in angle  $\pm 10^\circ$  and hole F, in angle  $\pm 30^\circ$ .
2. Blunt sharp edges of the drilling holes with chamfering not exceeding 0.5mm and  $45^\circ$ .
3. While machining diameter A, position of tool to a depth and width upto 1mm on surface K is allowed.
4. Weld the lugs Ref No. 1 with deviation at an angle  $\pm 30^\circ$ .
5. Displacement of holes E with respect to the contour of lugs Ref No. 1 should not exceed 1mm.
6. Local black spots of 1/3 of the diameter on surface M is allowed.
7. Ovality  $\pm 0.035$ mm above tolerance is allowed on diameter A. In this case half of the total of maximum and minimum dimensions should be in the tolerance limit on diameter A.

8. Coating: Zinc-plated, 15 microns thick, chromated, primer B01-02, GOST 12707-77 (1), enamel M0-12, black, GOST 9754-7612, III M0, except for surface M composition of the substance is as per M-252-78.
9. Marking: MBN-2,  $\pm 0.2$ mm with type 5mm as per H0.010.007; And arrow mark with depth, not less than 0.5mm. Distance between the letters and figures is 1.5mm.
10. Marking should be done
11. Marking should be done
12. Dimensions marked (\*) sign are before enamel coating

# FIRST ANGLE PROJECTION

For all drawings the first angle projection is used. The object is placed in front of the observer and the projection is taken from the front. The object is placed in front of the observer and the projection is taken from the front. The object is placed in front of the observer and the projection is taken from the front.

| BODY (ASST. DRG.) |     |      |        | MASS (kg) |     |      |        |
|-------------------|-----|------|--------|-----------|-----|------|--------|
| Part              | Qty | Unit | Weight | Part      | Qty | Unit | Weight |
| 1                 | 1   | kg   | 1.00   | 2         | 1   | kg   | 1.00   |
| 3                 | 1   | kg   | 1.00   | 4         | 1   | kg   | 1.00   |
| 5                 | 1   | kg   | 1.00   | 6         | 1   | kg   | 1.00   |
| 7                 | 1   | kg   | 1.00   | 8         | 1   | kg   | 1.00   |
| 9                 | 1   | kg   | 1.00   | 10        | 1   | kg   | 1.00   |
| 11                | 1   | kg   | 1.00   | 12        | 1   | kg   | 1.00   |
| 13                | 1   | kg   | 1.00   | 14        | 1   | kg   | 1.00   |
| 15                | 1   | kg   | 1.00   | 16        | 1   | kg   | 1.00   |
| 17                | 1   | kg   | 1.00   | 18        | 1   | kg   | 1.00   |
| 19                | 1   | kg   | 1.00   | 20        | 1   | kg   | 1.00   |
| 21                | 1   | kg   | 1.00   | 22        | 1   | kg   | 1.00   |
| 23                | 1   | kg   | 1.00   | 24        | 1   | kg   | 1.00   |
| 25                | 1   | kg   | 1.00   | 26        | 1   | kg   | 1.00   |
| 27                | 1   | kg   | 1.00   | 28        | 1   | kg   | 1.00   |
| 29                | 1   | kg   | 1.00   | 30        | 1   | kg   | 1.00   |
| 31                | 1   | kg   | 1.00   | 32        | 1   | kg   | 1.00   |
| 33                | 1   | kg   | 1.00   | 34        | 1   | kg   | 1.00   |
| 35                | 1   | kg   | 1.00   | 36        | 1   | kg   | 1.00   |
| 37                | 1   | kg   | 1.00   | 38        | 1   | kg   | 1.00   |
| 39                | 1   | kg   | 1.00   | 40        | 1   | kg   | 1.00   |
| 41                | 1   | kg   | 1.00   | 42        | 1   | kg   | 1.00   |
| 43                | 1   | kg   | 1.00   | 44        | 1   | kg   | 1.00   |
| 45                | 1   | kg   | 1.00   | 46        | 1   | kg   | 1.00   |
| 47                | 1   | kg   | 1.00   | 48        | 1   | kg   | 1.00   |
| 49                | 1   | kg   | 1.00   | 50        | 1   | kg   | 1.00   |
| 51                | 1   | kg   | 1.00   | 52        | 1   | kg   | 1.00   |
| 53                | 1   | kg   | 1.00   | 54        | 1   | kg   | 1.00   |
| 55                | 1   | kg   | 1.00   | 56        | 1   | kg   | 1.00   |
| 57                | 1   | kg   | 1.00   | 58        | 1   | kg   | 1.00   |
| 59                | 1   | kg   | 1.00   | 60        | 1   | kg   | 1.00   |
| 61                | 1   | kg   | 1.00   | 62        | 1   | kg   | 1.00   |
| 63                | 1   | kg   | 1.00   | 64        | 1   | kg   | 1.00   |
| 65                | 1   | kg   | 1.00   | 66        | 1   | kg   | 1.00   |
| 67                | 1   | kg   | 1.00   | 68        | 1   | kg   | 1.00   |
| 69                | 1   | kg   | 1.00   | 70        | 1   | kg   | 1.00   |
| 71                | 1   | kg   | 1.00   | 72        | 1   | kg   | 1.00   |
| 73                | 1   | kg   | 1.00   | 74        | 1   | kg   | 1.00   |
| 75                | 1   | kg   | 1.00   | 76        | 1   | kg   | 1.00   |
| 77                | 1   | kg   | 1.00   | 78        | 1   | kg   | 1.00   |
| 79                | 1   | kg   | 1.00   | 80        | 1   | kg   | 1.00   |
| 81                | 1   | kg   | 1.00   | 82        | 1   | kg   | 1.00   |
| 83                | 1   | kg   | 1.00   | 84        | 1   | kg   | 1.00   |
| 85                | 1   | kg   | 1.00   | 86        | 1   | kg   | 1.00   |
| 87                | 1   | kg   | 1.00   | 88        | 1   | kg   | 1.00   |
| 89                | 1   | kg   | 1.00   | 90        | 1   | kg   | 1.00   |
| 91                | 1   | kg   | 1.00   | 92        | 1   | kg   | 1.00   |
| 93                | 1   | kg   | 1.00   | 94        | 1   | kg   | 1.00   |
| 95                | 1   | kg   | 1.00   | 96        | 1   | kg   | 1.00   |
| 97                | 1   | kg   | 1.00   | 98        | 1   | kg   | 1.00   |
| 99                | 1   | kg   | 1.00   | 100       | 1   | kg   | 1.00   |



1. Check dimensions  $r$  as per the most sunk bar.
2. Turns in section - 4. Winding is wavy. Left or right coiling is allowed.
3. Insulate the lower section from each other with glass varnish cloth of width,  $14 \pm 0.5$  mm, Ref.No.14.
4. Upper sections from each other and lower sections are to be insulated with glass varnish cloth of width,  $14 \pm 0.5$  mm, Ref.No.14.
5. Solder/cocks with wire nCP (soldering Ag) Cadmium M23, Technical specifications 48 - I - 210 - 74.
6. Apply varnish MA - 0121, Technical specifications Ty 6-10-134-77, made as per insulation U-225-68 on binding, Ref.No. 12.
7. Binding should not project over diameter  $\Delta$  on length  $\star$  from the commutator.
8. Inpregnate with varnish E T - 988 GOST 6244-70 twice.
9. Coat the left section of armature iron and surface B using enamel  $\Gamma \phi - 92$  Xc. grey, GOST 9151-75, after grinding the armature iron.
10. Test the armature for over speeding at 7000 r.p.m. for 1 minute after which separate plates of commutator should not project more than 0.01 mm.
11. Test armature for breakdown for 1 minute with voltage, 550V of A.C. with frequency, 50 Hz.
12. Resistance of insulation should not be less than 50 ohms in cold condition.
13. Mark.
14. Pull the last section towards the shaft with the cold insulation tube, Ref.No. 13.

## FIRST ANGLE PROJECTION

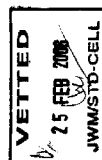
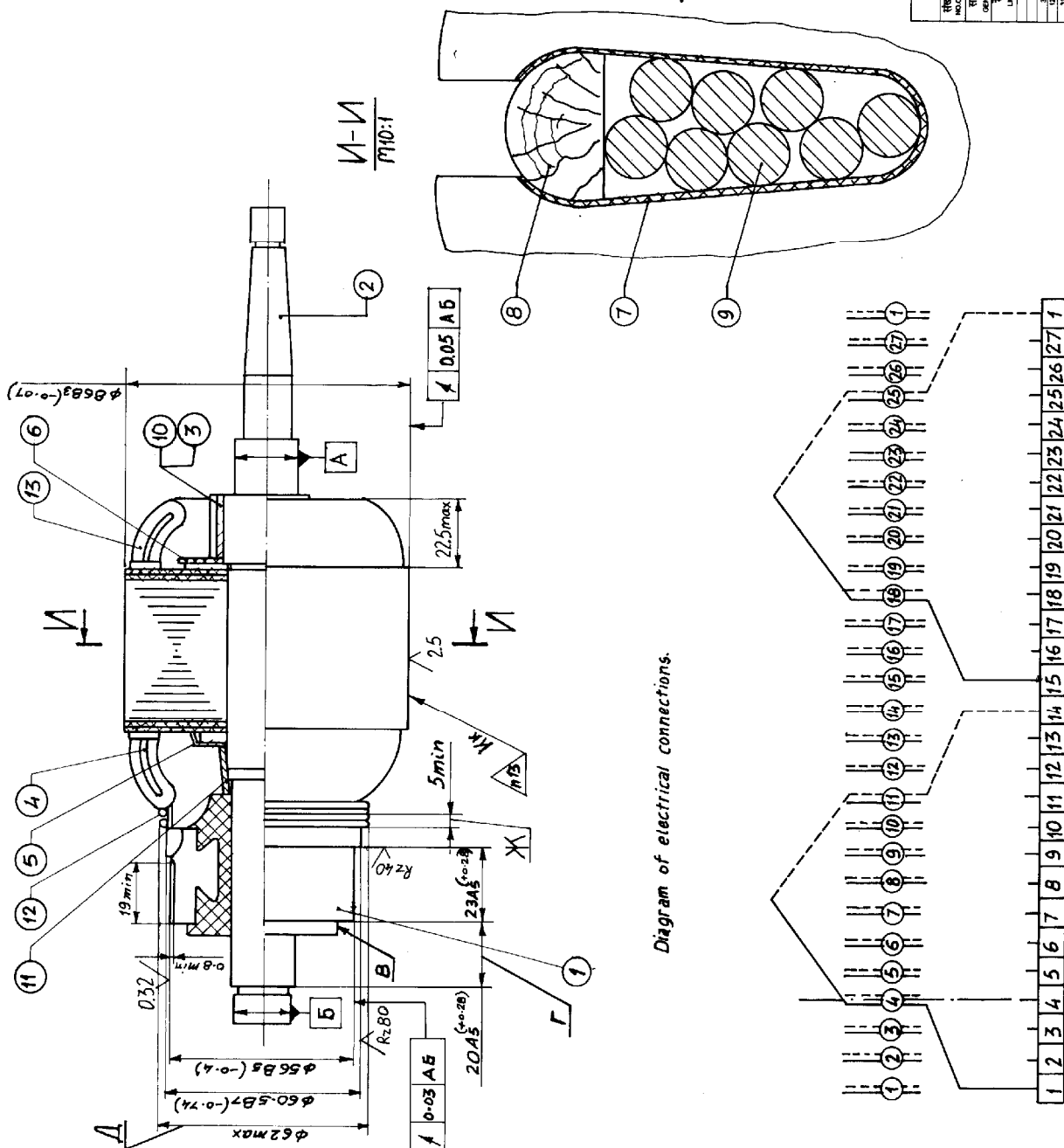
[illegible]

Diagram of electrical connections.

Centre of slot 4 should coincide with the central commutator plate.

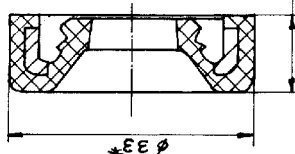
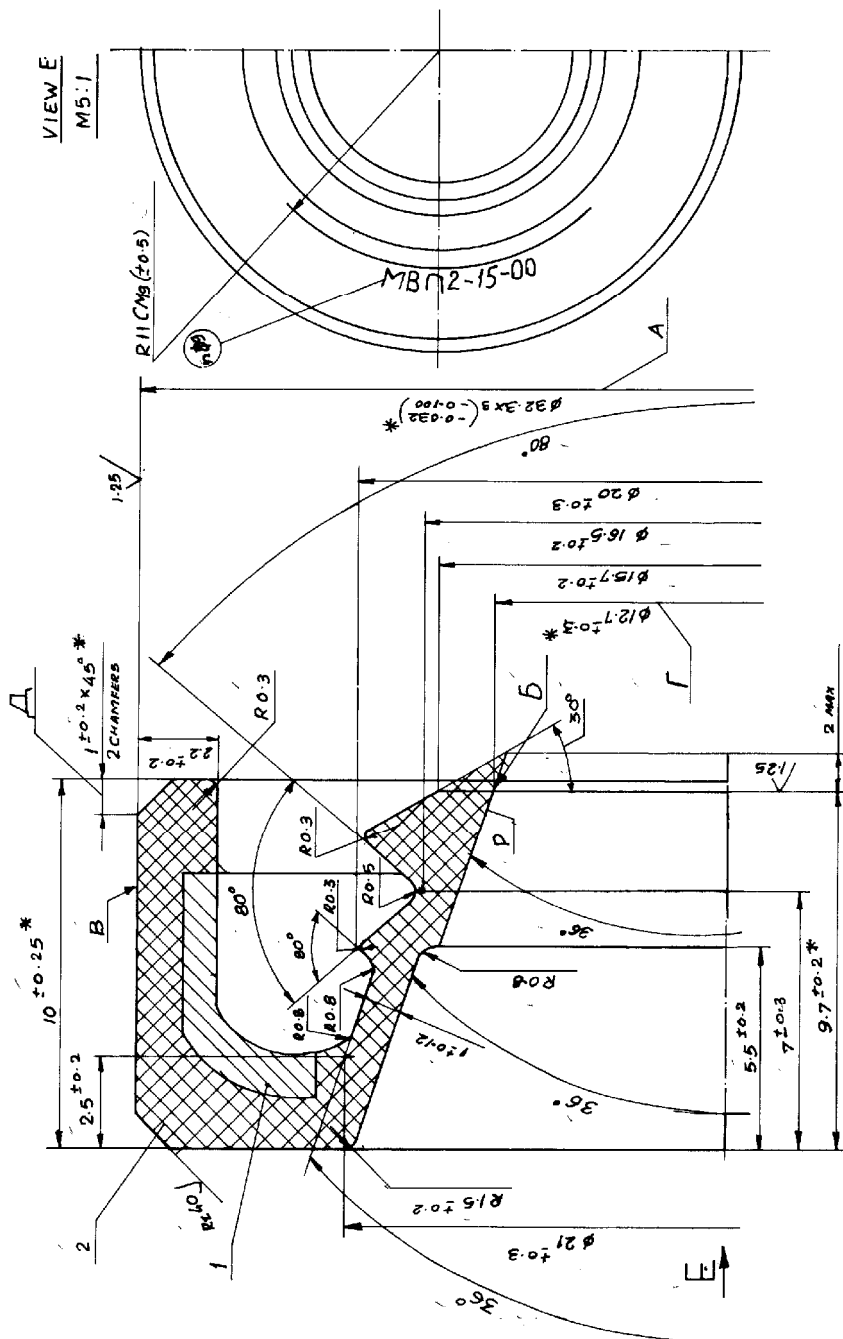
Slot pitch 1-8  
Commutator pitch 1-14  
No. of slots Z=27  
No. of commutator plates k=27

इन ओरछाणी तथा इसके साथ ही सम्पूर्ण समूची इस व्यवस्थाकार भारत सरकार तथा मंत्रालय की भारतीय अणुबल निधिपियों के पास है। भारतीय अणुबल निधिपियों के माध्यमिकी के सिद्धि अनुसंधान के लिए इनकी कल्पना या किसी भी रूप में इनके उद्देश्य या इनसे सम्बन्धित सूचना किसी अनधिकृत व्यक्ति को उपलब्ध नहीं कराई जानी चाहिये ।

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1. Unspecified limit deviations of radii are  $\pm 0.1 \text{ mm}$  and angular dimensions  $\pm 1^\circ$ .
2. \* Dimensions are to be obtained by machining in the customer's factory. Other dimensions are provided with tools.
3. Edge  $g$  should be sharp and uniform, hollow, tear-out burrs are not allowed. (For customer).
4. Play of surface B with respect to surface P should not exceed  $0.05 \text{ mm}$ . Provide checking of dimension A and play on the mandrel  $\varnothing 15 \pm 0.05 \text{ mm}$  in the factory of the customer.
5. Provide checking of dimensions A and  $g$  under a load of  $50 \text{ grms}$ . in customer's factory.
6. Part is supplied with allowance not more than  $2 \text{ mm}$  on dimension  $P$ .
7. Removal of the chamfers  $A$  and finishing upto dimension  $g$  and A are carried out in customer's factory.
8. Sag of rubber on the armature surface is allowed.
9. Mark with type print 3 as per H0.010.007.
10. Other technical requirements are as per TY005.216-75.
12. Surface P should be smooth, without burrs and traces of mould joints.
13. Roughness of surfaces should be accepted as per standard piece.

## FIRST ANGLE PROJECTION

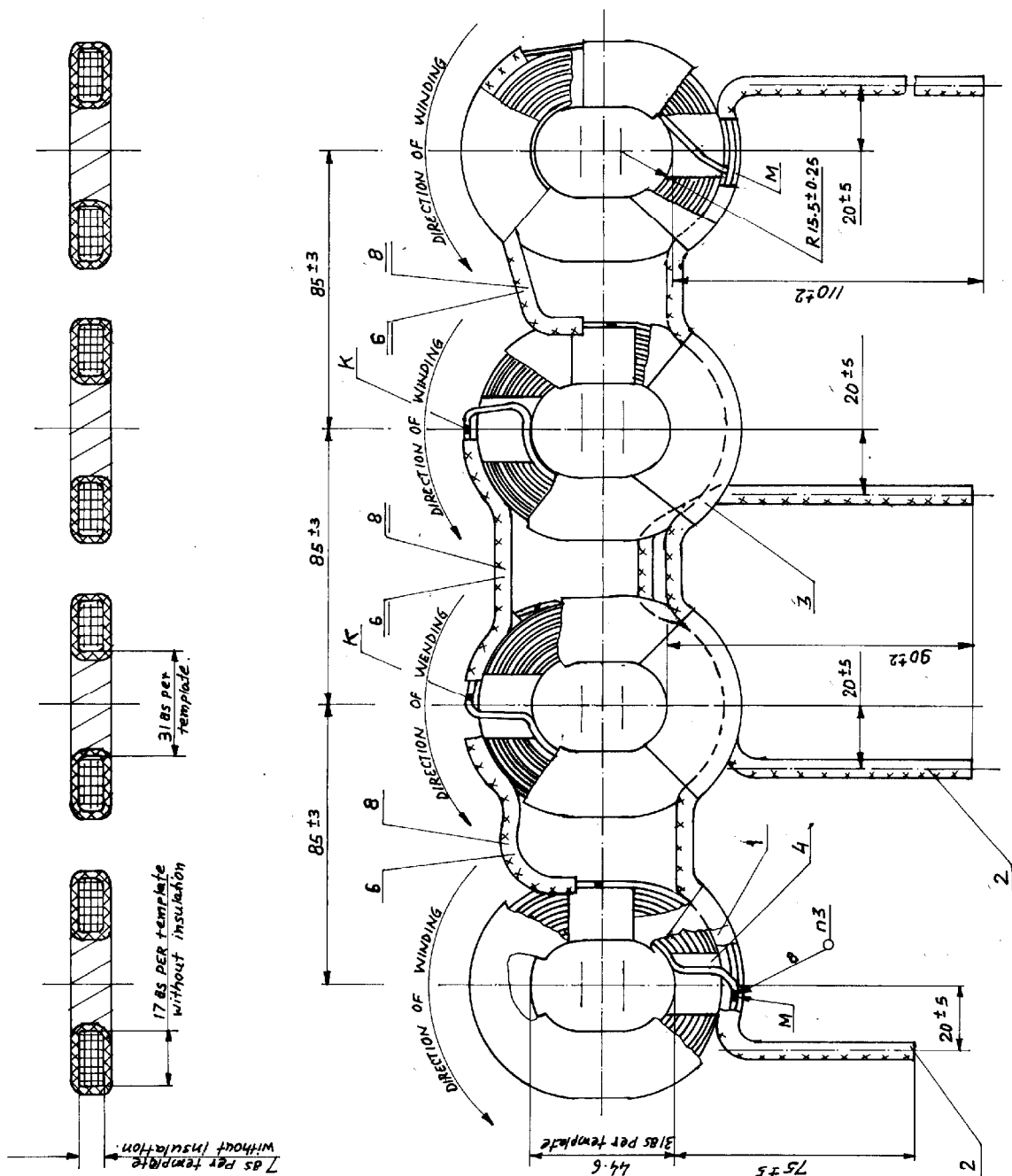
[illegible]

इन अधिकारों तथा इसके तहत की सम्पूर्ण सूचना को सार्वजनिकीय बात समझना या वाणिज्य अथवा निजीकरण के लक्ष्य में वास्तविक अथवा निजीकरण के माध्यमिक ही निहित उद्देश्यपूर्ण के लिए इसकी प्रस्ताव को प्रिजेंट की स्था में अपने अधिकार का अपने सम्पूर्ण सूचना प्रिजेंट सम्पूर्ण निजीकरण को उपलब्ध नहीं करनी चाहिए।

1. Windings should have 410 ± 3 turns coiled with wire Ref. No. 1.
2. Use the tape Ref. No. 7, for fastening the coils, in 4 places.
3. Dress the two ends of the coils and twist them with wire Ref. No. 2, and 6. Solder the place of twisting with solder nOCCY-40-2, GOST 21930-76. Insulate the soldering portion M, with varnish cloth Ref. No. 4 and cable paper Ref. NO. 9; soldering portion K with tube Ref. No. 8, and varnish cloth Ref. No. 4 and other portions with tube Ref. No. 8 and varnish cloth Ref. No. 5.
4. Insulate the coils by semiover lapping with varnish cloth.
5. 3 to 4 layers of insulation are allowed in some places.
6. Resistance of every coil should be 6.8±0.5 ohms.
7. Common resistances of coils are 26±2 (27.2±2 ohms) at 20°C.
8. Wire n3 B-2-0.5, GOST 7262-78 may be used.

**EQ. MATERIAL :-** Sn 40 sb to IS: 193-82

## FIRST ANGLE PROJECTION

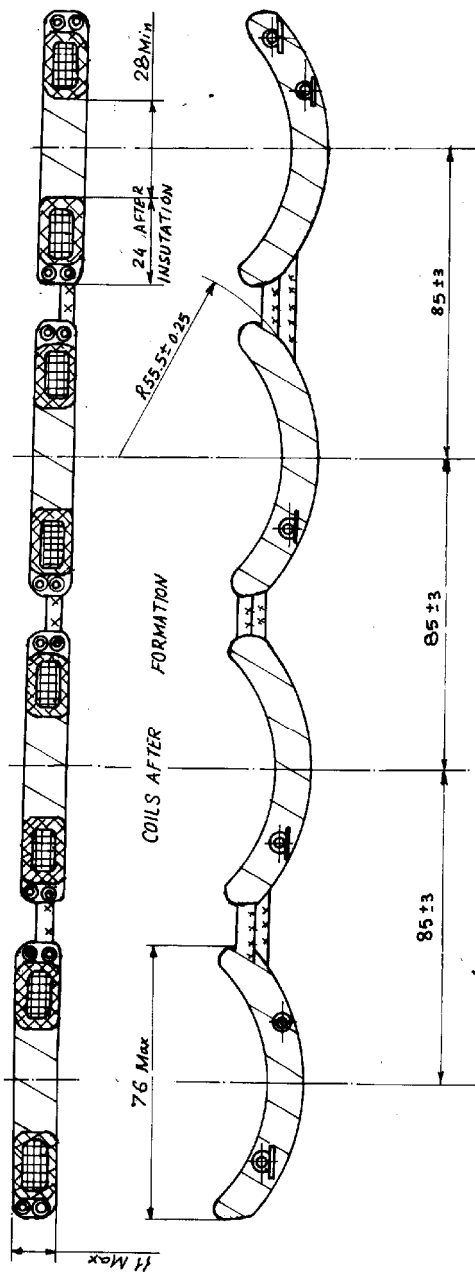


इन इन आँखों ने वह इतने तेज की संपूर्ण सारी का खराबिकार भारत सरकार का संभव की  
 भावनाओं और विचारों के लिए है। भारतीय आपस में मिलकर के व्यवस्थाओं की विधि  
 के लिए तेज नज़र से किसी भी चीज़ से लगे रहने का अपने समस्त सैन्य सैन्य सैन्य  
 के अंतर्गत ही किसी भी चीज़ को चकित।

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 RIZED PERSONS WITHOUT THE WRITTEN PERMISSION OF THE CHIEF GENERAL OF ORDNANCE  
 FACTORIES.

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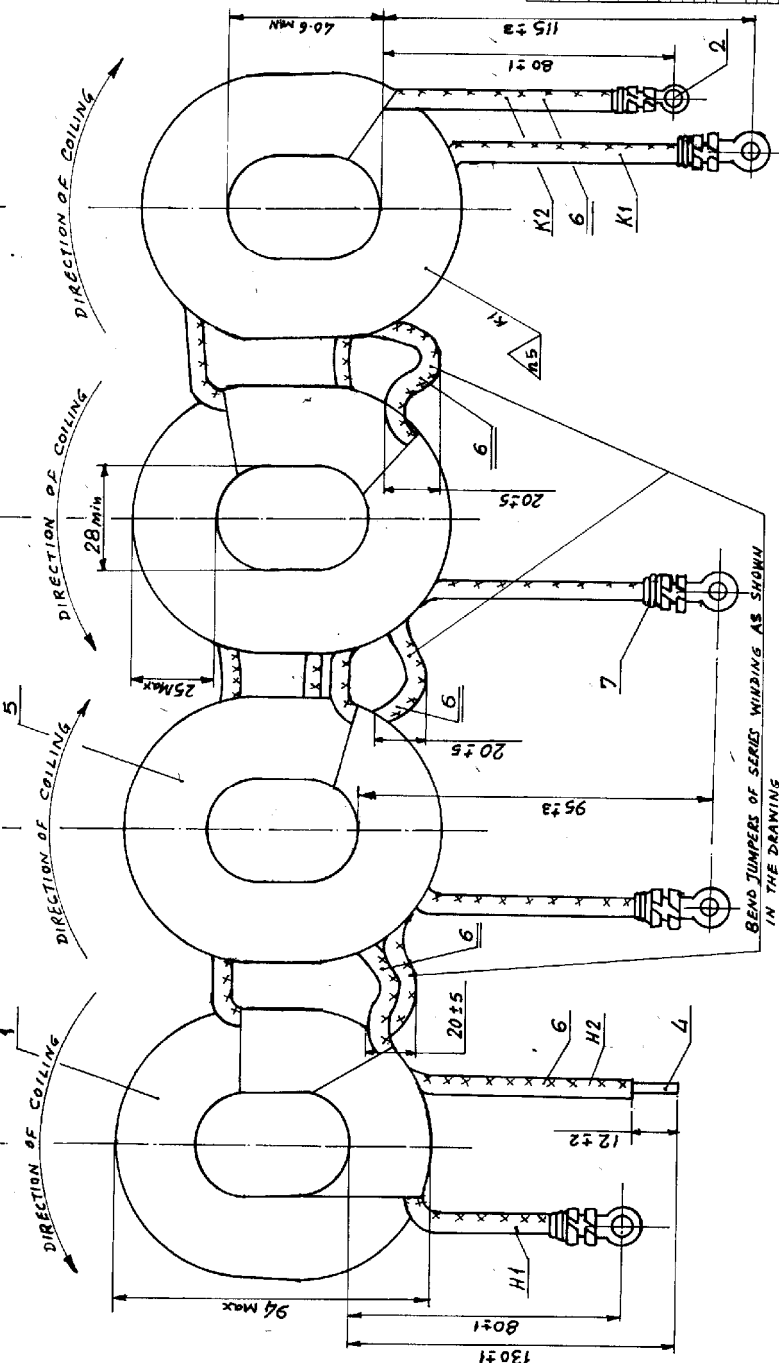
COILS BEFORE FORMATION



1. Series coil consists of 2 turns, winding is done with wire Ref. No. 4
2. Insulate the coils and the jumpers between the shunt coils by semi over lapping, using tape. Ref. No. 5.
3. Band the terminal with thread Ref. No. 7.
4. Impregnate <sup>the</sup> coils with varnish 5T-988, GOST 6244-70, and coat varnish T 6-95, GOST 8018-70.
5. Marking should be done.
6. Solder the series winding end with tin OCCY-40-2, GOST 21930-76.
7. Coat the band with varnish Hq - 286 TY 6-10-1290-78.

EQ. MATERIAL :- IS:350 Sn40Sb TO IS-193-82.

## FIRST ANGLE PROJECTION



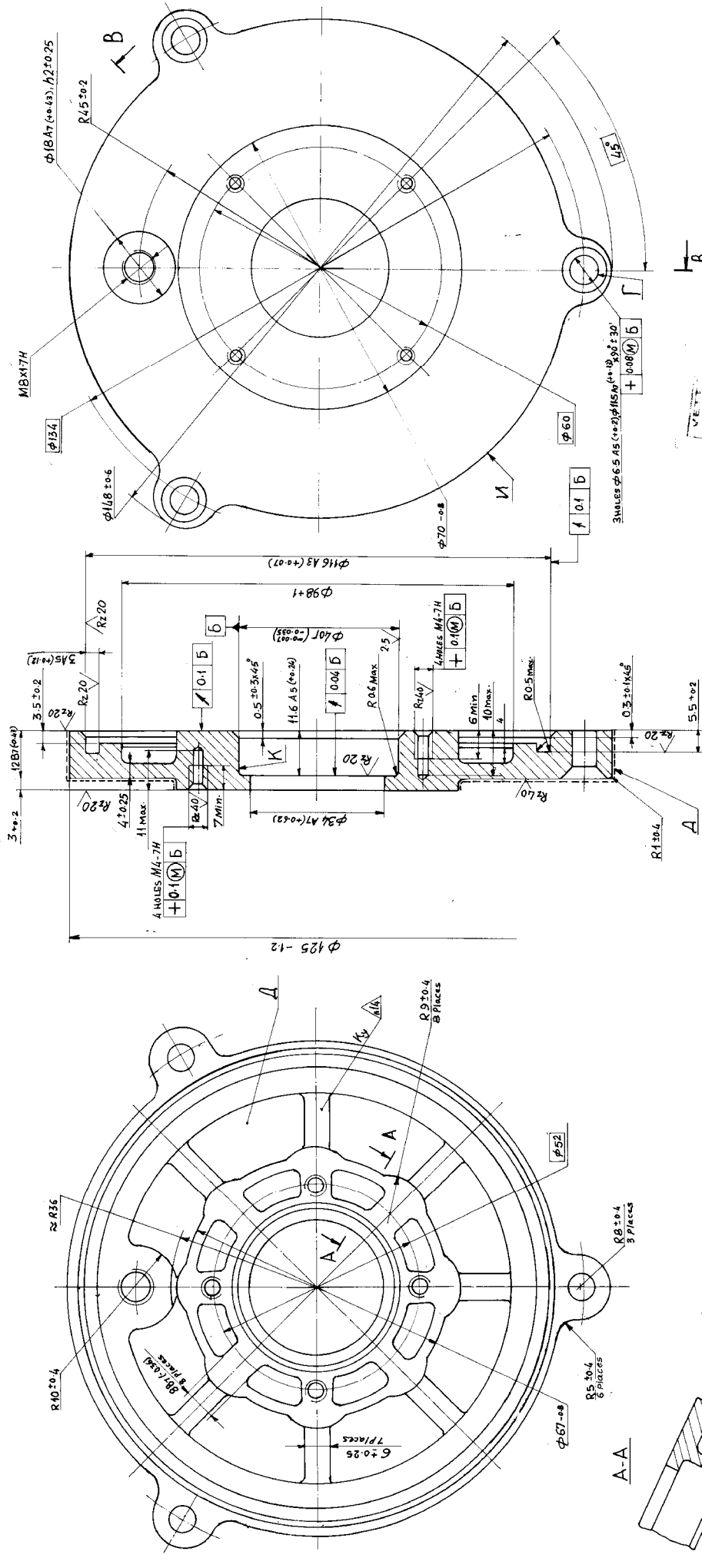
BEND JUMPERS OF  
IN THE DRAWING

[illegible]

है। आजीवन तथा इसके बाद की सम्पत्ति का स्वामित्व भारत सरकार तथा संसद की कार्यवाही अथवा निर्माणों के लिये है। भारतीय अणु विभाग के स्वायत्तता के लिये अनुमति के बिना इसकी नकल या प्रतिलिपि का प्रयोग नहीं किया जा सकता। इसी अनुमति के बिना इसकी नकल या प्रतिलिपि का प्रयोग करने वाले व्यक्ति को जेल और जुर्माने का आदेश दिया जा सकता है।







9. Return drafts are 2° towards decreasing of dimensions.
10. Alternate material is aluminium alloy AT 7, GOST 2486-75.
11. Unspecified casting ratio should not exceed 25:1.
12. Depression of gates due to pullers should not exceed 0.5 mm.
13. Depression of contour of gate should not exceed 0.5 mm on surface  $\Phi 4$ .
14. Check air-tightness by excess air pressure of 0.5 mm.
15. Displacement of hole  $\Phi$  with respect to the contour of lug

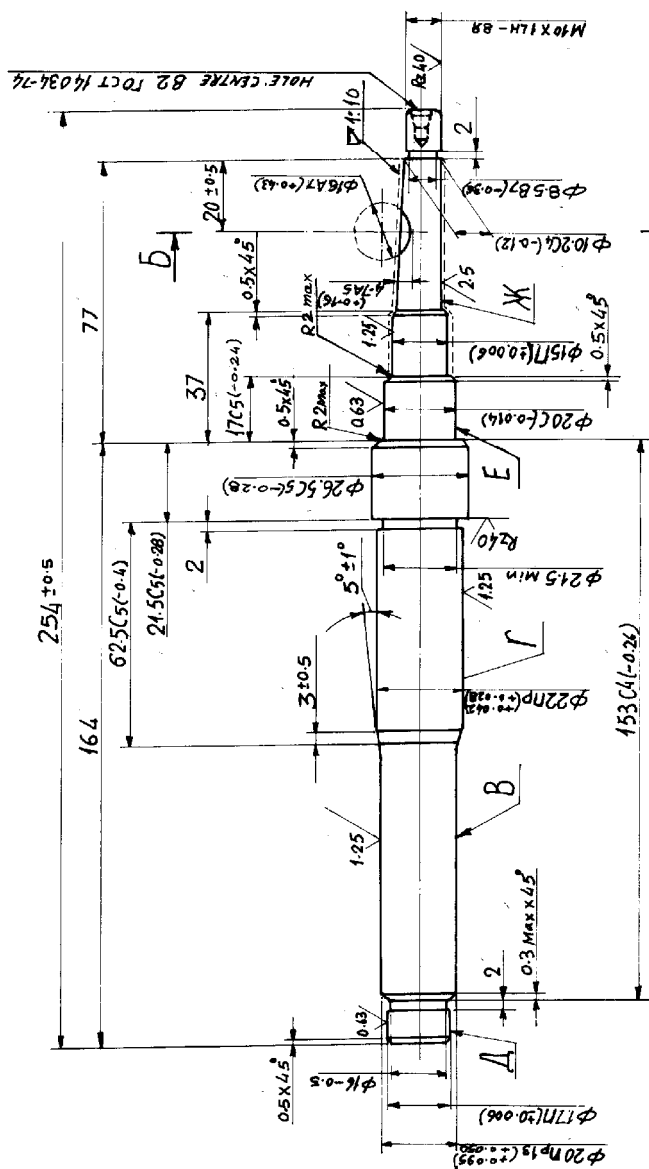
13. Mark. FIRST ANGLE PROJECTION

[illegible]

1  
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TRACED FROM COA ACTS ORIGINAL PRO

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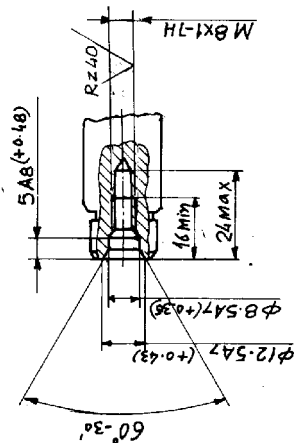
12

$\checkmark$  (✓)  $R_{Z80}$ 

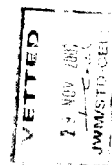
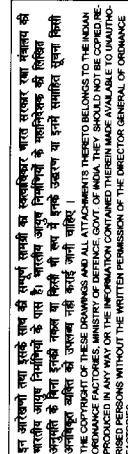
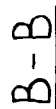
**EQ. MATERIAL :-** C40, IS : 2073 - 70 OR EN8, BS : 970.

## FIRST ANGLE PROJECTION

★ STEEL 40, GOST 1050-74

[illegible][illegible]

TRACED FROM CQA (ICV) ORIGINAL DRG.



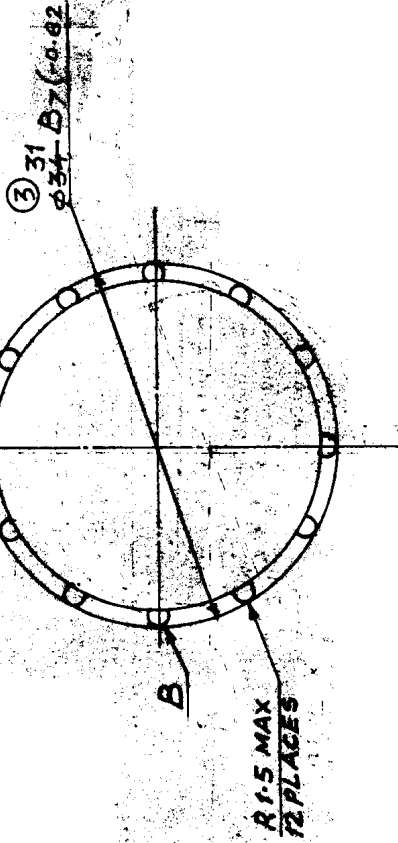
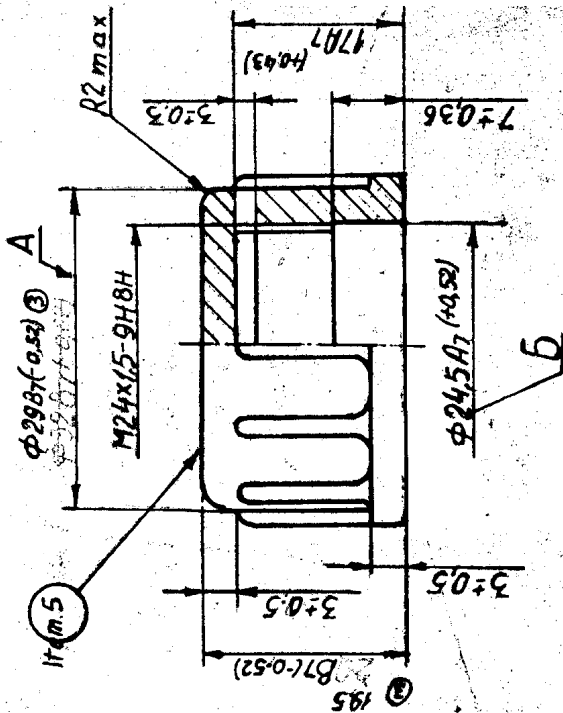
**EQ. MATERIAL :- GRADE 4600 to IS : 617-75**

## FIRST ANGLE PROJECTION

[illegible]

TRACED FROM CQA 9ICV) ORIGINAL DRG.

3



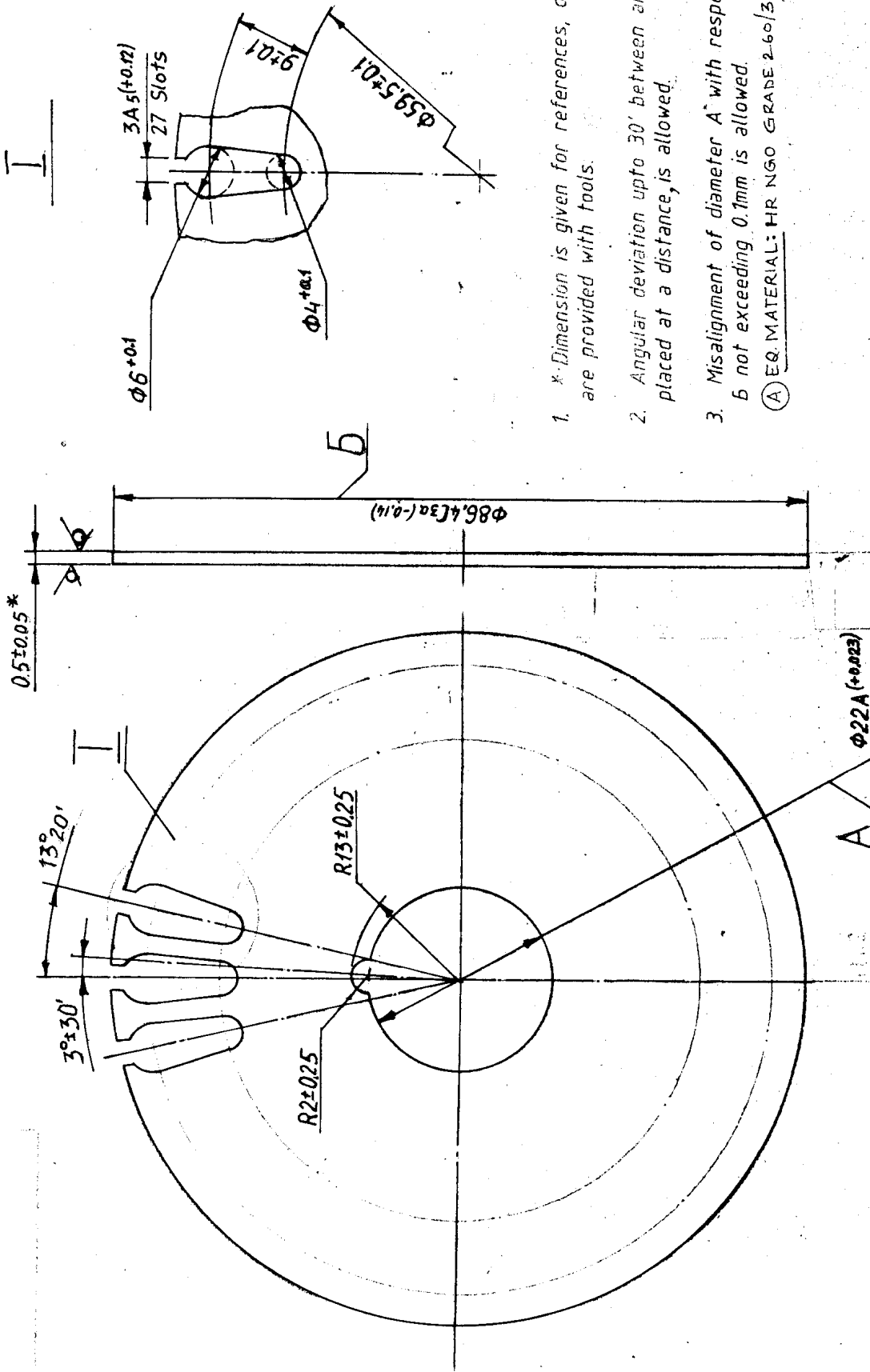
1. Alternate material:-Phenoplast Y4-080-02  
GOST 5689-73
2. Tapering of 1° towards decreasing of dimension A  
and 4° towards the increasing dimension B are allowed.
3. Unspecified radii should not exceed 1mm.
4. Angle displacement of ribs B  $\pm 1^\circ$  from the true  
position is allowed.
5. Mark socket number of mould and the designation  
of part by embossed type as per H0.010.007.
6. Other requirements are as per OST B-84-1602-78.

VETTED  
 29 NOV 2007  
 JMW/STD-CELL

D-571  
 ECKA  
 146

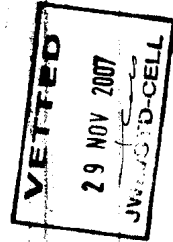
X9-10945

|                      |       |         |
|----------------------|-------|---------|
| DESIGNED             | 1     | W000024 |
| CONTROLLER           |       |         |
| TRANSPORTING         |       |         |
| CAP                  |       |         |
| Phenoplast 03-010-02 |       |         |
| black OCT 5689-73    |       |         |
| WEIGHT               | 12.89 | 2:1     |
| SCALE                |       |         |
| SHT                  | 146   | 146     |
| SPTS                 |       |         |



1. \* Dimension is given for references, other dimensions are provided with tools.
2. Angular deviation upto  $30'$  between any two slots placed at a distance, is allowed.
3. Misalignment of diameter A' with respect to diameter B not exceeding  $0.1\text{mm}$  is allowed.

(A) EQ. MATERIAL: HR NGO GRADE 260/300 To IS: 648



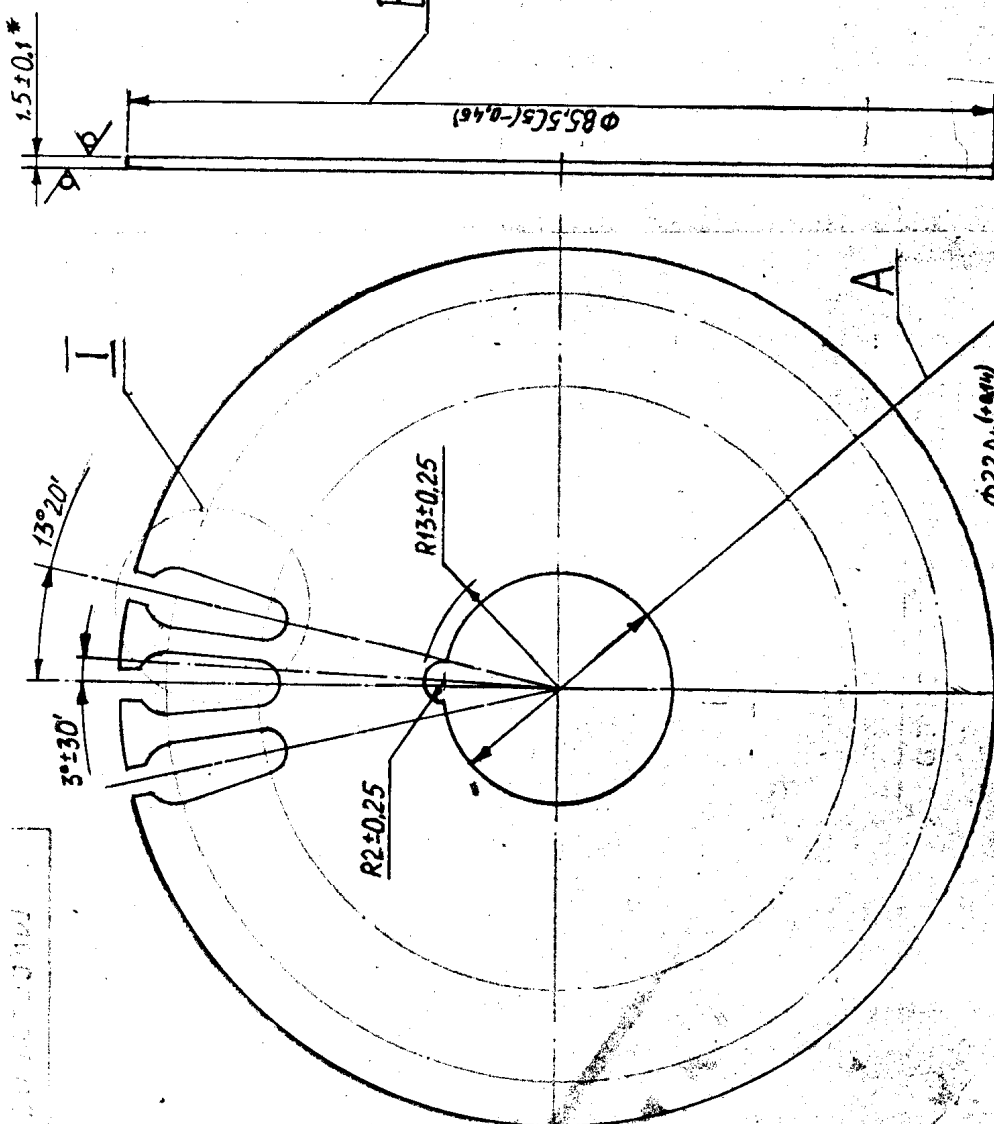
MB 60-07-04

IRON SHEET OF  
ARMATURE

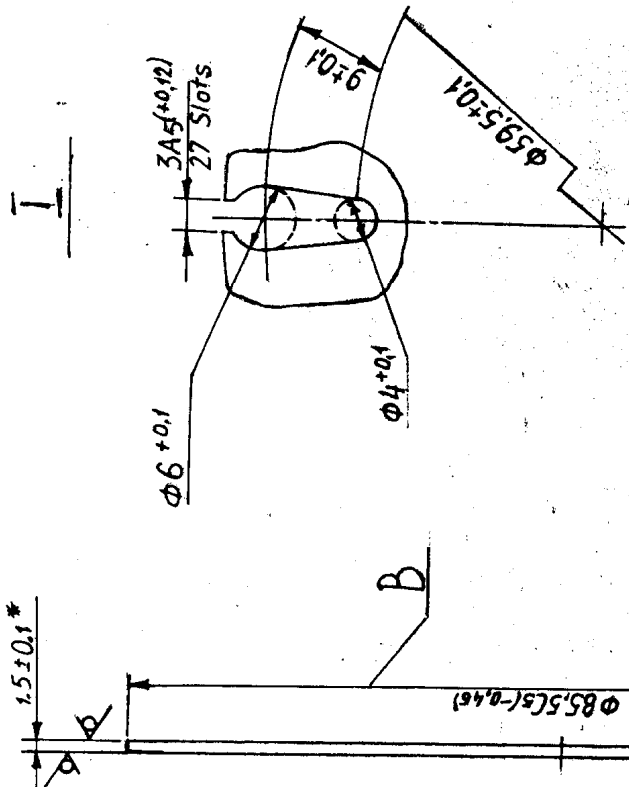
138 2:1

Sheet 0-5-H-1-HT-1212  
GOST 21427 3-75

115/116



**VETTED**  
29 NOV 2007  
TRUSTD-CELL



1. \* Dimension is given for references, other dimensions are provided with tools.
2. Angular deviation, between any two slots placed at distance, upto 30' is allowed.
3. Misalignment of diameter A with respect to diameter B not exceeding 0.1mm is allowed.

CUKUL

D-571

MB60-07-05

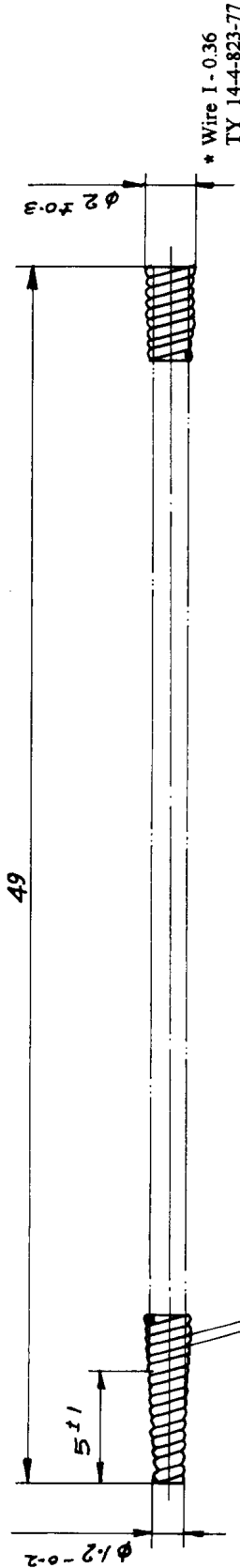
**EXTREME  
INSULATING SHEET**

CONTROLLED  
INSPECTION

Card board 381.5  
T0CT 2824-75

116/146

- VETTED**  
29 NOV 2007  
JWHS/STD-CELL



## FIRST ANGLE PROJECTION

इन आरेखों तथा इसके साथ की सम्पूर्ण सामग्री का स्वामित्व भारत सरकार तथा मंत्रालय की भारतीय आपूर्ति विभागों के पास है। भारतीय आपूर्ति विभागों के स्वामित्व की शिक्ता अनुमति के बिना इनकी नकल या किसी भी रूप में इसके उद्धरण या इनसे सम्बंधित सूचना किसी अनधिकृत व्यक्ति को उपलब्ध नहीं कराई जानी चाहिए।

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    |                                                                                                                                                                                    |                      |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|
| संख्या<br>NO. OFF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | विवरण<br>DESCRIPTION | *                                                         | पदार्थ<br>MATERIAL | मानक<br>STANDARD                                                                                                                                                                   | परिमाण<br>DIMENSIONS | 0.8g           |
| <div style="display: flex; justify-content: space-between;"> <div> <p>सामान्य सहिष्णुता<br/>GENERAL TOLERANCE</p> <p>रेखिक परिमाण<br/>LINEAR DIMENSION</p> <p>0-6                      &gt;6.1</p> <p>6-30                    &gt;30.2</p> <p>30-120                &gt;120.3</p> <p>120-316              &gt;316.4</p> <p>316-1000            &gt;1000.5</p> <p>1000-2000          &gt;2000.6</p> <p>कोणिक परिमाण<br/>ANGULAR DIMENSION</p> <p>1°-10'                &gt;10' 31"</p> <p>10-50'               &gt;50' 50"</p> <p>50-180'              &gt;180' 51"</p> </div> <div> <p>मानक "चू एन" में<br/>VALUE IN "IN"</p> <p>0                      &gt;25</p> <p>25                     1.54</p> <p>1.54                  0.025-1.5</p> <p>1.54                  &gt;1.54</p> </div> </div> |                      |                                                           |                    |                                                                                                                                                                                    |                      |                |
| <p><b>SPIRAL RING SHAPED</b></p> <p><b>SPRING FOR RUBBER</b></p> <p><b>SEALING RING</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      |                                                           |                    |                                                                                                                                                                                    |                      |                |
| संख्या<br>NO. OFF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      | संबंधित पूर्वांक आरेख क्र.<br>Dwg. NO. OF ASSOCIATED PART |                    | सूचक<br>INDEX                                                                                                                                                                      | संशोधन<br>ALTERATION | दिनांक<br>DATE |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    | 2003                                                                                                                                                                               | आरेखित<br>DRAWN      | 21/1/03        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    | 5:1                                                                                                                                                                                | जाँचा<br>CHECKED     | 6/1/03         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    |                                                                                                                                                                                    | अनुमोदित<br>APPROVED |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    | द्वारा बदला<br>REPLACED BY                                                                                                                                                         |                      |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    | द्वारा बदला<br>REPLACED FOR                                                                                                                                                        |                      |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                           |                    | <p>मशीनी औजार आदिसुप फैक्टरी, अम्बरनाथ<br/>MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH</p> <p>कार्यालय<br/>OFFICE</p> <p>आरेख क्र. <b>DRAWING NO.</b><br/><b>MB/71 - 04 - 05</b></p> |                      |                |

सूत्रमाप व अन्वयोजन  
NOMINAL SIZE & FIT

विवरण  
DEVIATION

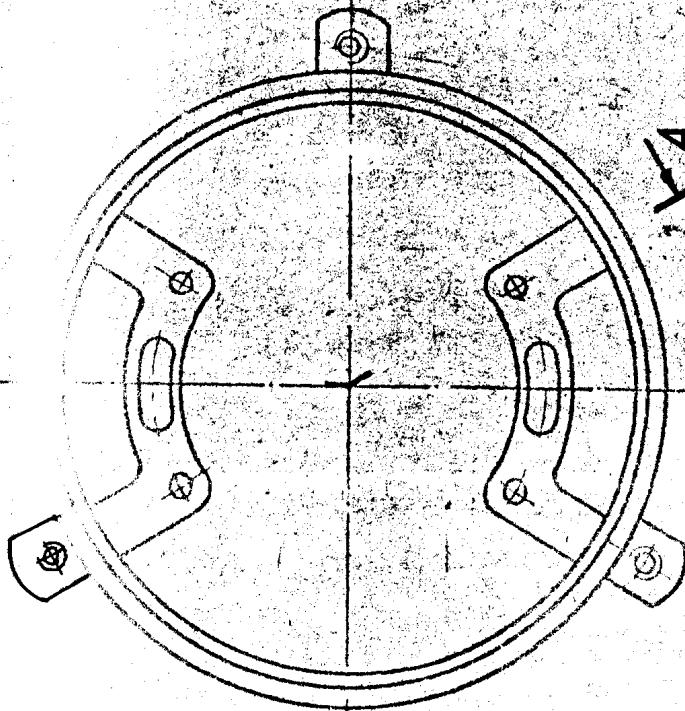
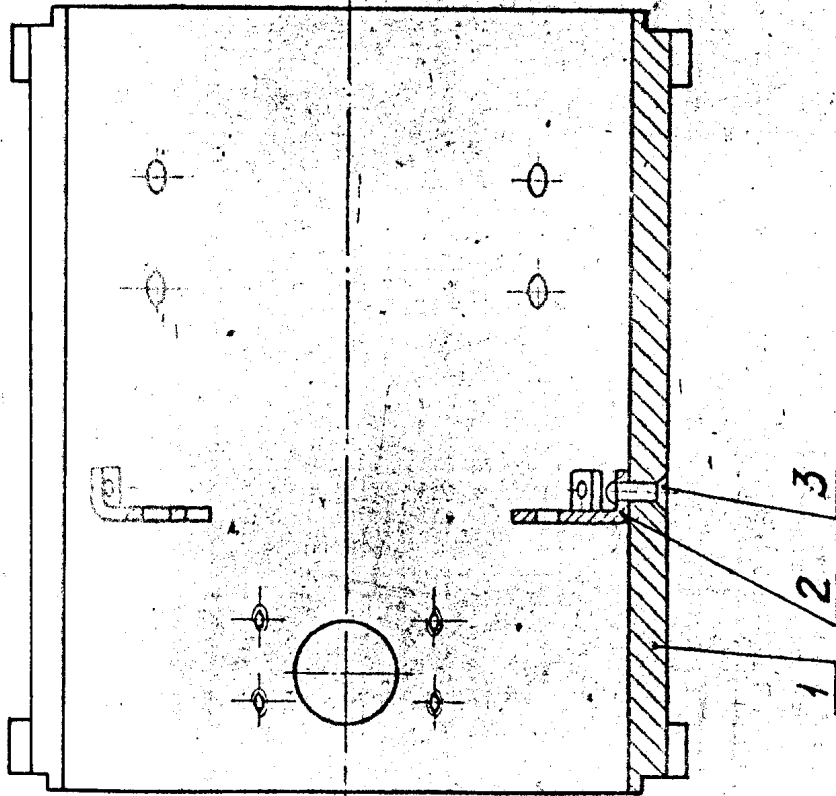
TRACED FROM CQA (ICV) ORIGINAL DRUG.

[illegible]

|                                            |  |              |       |
|--------------------------------------------|--|--------------|-------|
| CONTROLLERATE<br>OF<br>INSPECTION<br>(100) |  | MBN 2-000 BC |       |
| MBN-2<br>ELECTRIC MOTOR                    |  | WEIGHT       | SCALE |
|                                            |  | SHT          | SHTS  |
|                                            |  | 100/100      |       |



A-A



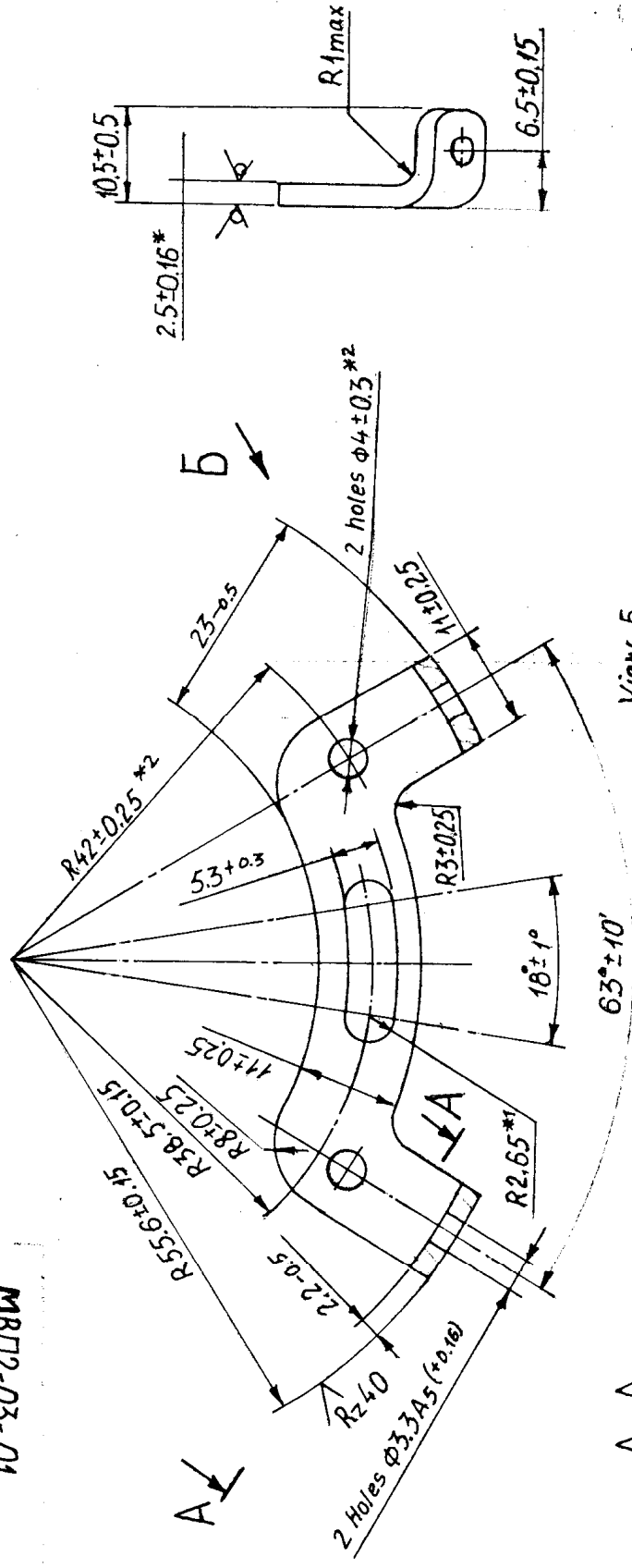
1. Secure rivet Ref. No. 3 with the sealant Y-30M GOST 13489-79 and rivet over flush with surface of body.

**VERIFIED**  
 25 FEB 2008  
 JWM/STD-CELL

|                                         |  |              |      |
|-----------------------------------------|--|--------------|------|
| MBN2-03-00C5                            |  | WEIGHT SCALE |      |
| BODY WITH ANGLE<br>PIECES<br>(Assy DTG) |  | 2.935        | 1:1  |
|                                         |  | SHT          | SHTS |
|                                         |  |              |      |

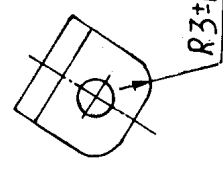
MBT2-03-01

R280 ✓(✓)



A-A

View B



**VETTED**  
29 NOV 2007  
JWINGSTO-CELL

- 1 \* Dimensions are given for references.
- 2 #1 Dimensions are provided with tools.
- 3 #2 Technical dimensions.
- 4 Blunt sharp edges  $R \approx 0.3mm$ .
- 5 Coating: Zinc-plated, 21 microns thick, chromized.  
Chromization solution is as per 14252-78.

Ⓐ EO MATER AL GRADE D IS: 513-86

D-571

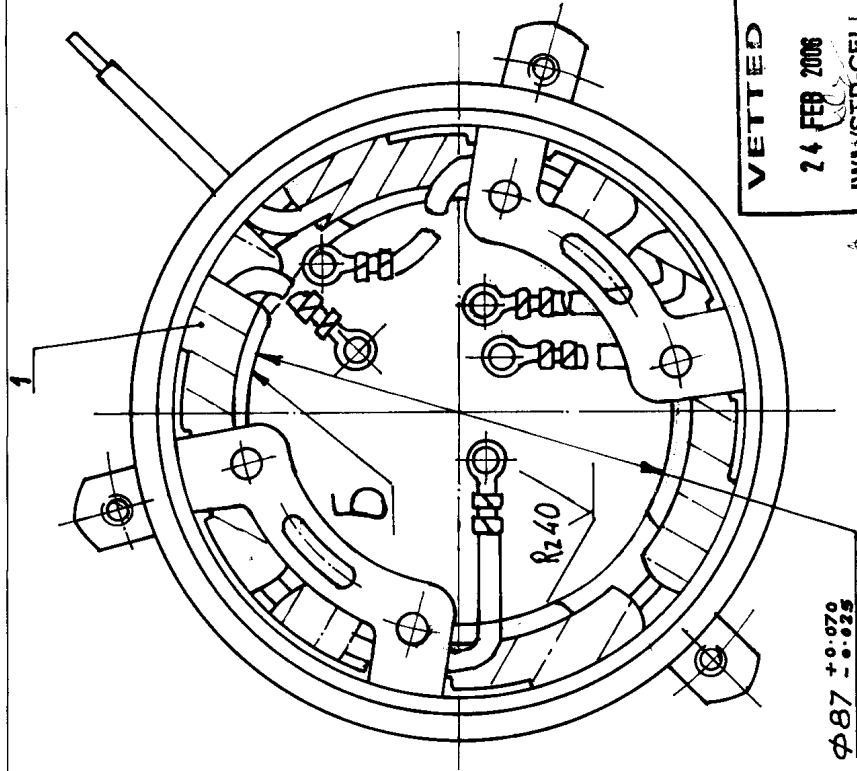
MBT2-03-01

ANGLE PIECE

158 2:1

Sheet B 2.5 OCT 19904-74  
II-BF-08 KN OCT 9045-70

108/106



# VETTED

24 FEB 2006

**JWM/STD-CELL**

$$\phi 87 \quad +0.070$$

|                                                                                      |                             |                                                            |       |                                                      |
|--------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------|-------|------------------------------------------------------|
| संख्या                                                                               | विवरण                       | BODY (ASSY. DRG.)                                          | 4.1 - | MASS (Kg)                                            |
| संख्या<br>NO. OFF.                                                                   | विवरण<br>DESCRIPTION        |                                                            |       |                                                      |
| सामान्य सहिष्णुता                                                                    |                             |                                                            |       |                                                      |
| GENERAL TOLERANCE                                                                    |                             |                                                            |       |                                                      |
| रेखिक परिमाण                                                                         |                             |                                                            |       |                                                      |
| LINEAR DIMENSION                                                                     |                             |                                                            |       |                                                      |
| D4                                                                                   | 40.1                        |                                                            |       |                                                      |
| 6-30                                                                                 | 40.2                        |                                                            |       |                                                      |
| 30-120                                                                               | 40.3                        |                                                            |       |                                                      |
| 120-150                                                                              | 40.8                        |                                                            |       |                                                      |
| 315-1000                                                                             | 40.8                        |                                                            |       |                                                      |
| 1000-2000                                                                            | 41.2                        |                                                            |       |                                                      |
| संख्या                                                                               | संश्लिष्ट पुर्णक आरेखन क्र. | संशोधन                                                     | 2003  | दिनांक                                               |
| NO. OFF.                                                                             | DRG. NO. OF ASSOCIATED PART | ALTERATION                                                 |       | DATE                                                 |
| कोणिक परिमाण                                                                         |                             |                                                            |       |                                                      |
| ANGULAR DIMENSION                                                                    |                             |                                                            |       |                                                      |
| 1-10                                                                                 | ±1°                         |                                                            |       |                                                      |
| 10-30                                                                                | ±0°                         |                                                            |       |                                                      |
| 30-60                                                                                | ±0°                         |                                                            |       |                                                      |
| 60-100                                                                               | ±10°                        |                                                            |       |                                                      |
| मापक 'यू एच' से                                                                      |                             |                                                            |       |                                                      |
| VALUE IN "mm"                                                                        |                             |                                                            |       |                                                      |
| 7                                                                                    | >25                         |                                                            |       |                                                      |
| 7                                                                                    | 8-25                        |                                                            |       |                                                      |
| 77                                                                                   | 1.8-4                       |                                                            |       |                                                      |
| VVV                                                                                  | 0.025-1.8                   |                                                            |       |                                                      |
| VVVVV                                                                                | <0.025                      |                                                            |       |                                                      |
| मशीनी औजार आदिरूप फैक्टरी, अम्बरनाथ                                                  |                             | कार्यालय                                                   |       | REPLACED<br>FOR<br>DRAWING NO.<br>MBD 2 - 04 - 00 CB |
| MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH                                            |                             | OFFICE                                                     |       |                                                      |
|  |                             | मापफल<br>SCALE<br>1:1                                      |       |                                                      |
|                                                                                      |                             | आरेखित<br>DRAWN<br>जोधा<br>CHECKED<br>अनुमोदित<br>APPROVED |       |                                                      |
|                                                                                      |                             | पुनरा बरता<br>REPLACED<br>BY                               |       |                                                      |

TRACED FROM CQA (ICV) ORIGINAL DRG.

1. Coat the lateral surfaces of the pole with enamel XB - 124, grey GOST 10144-74 before assembling.

2. Secure screw Ref. No. 5 with sealant Y-30, M,GOST 13489-79.

3. Radial play of the surface **B** with respect to surface A should not exceed 0.15mm.

4. After assembling the body with the poles, surface 5 should be coated with enamel XB - 124, grey, GOST 10144-74.

5. Presence of enamel paints on the coils of surface B is permissible.

## FIRST ANGLE PROJECTION

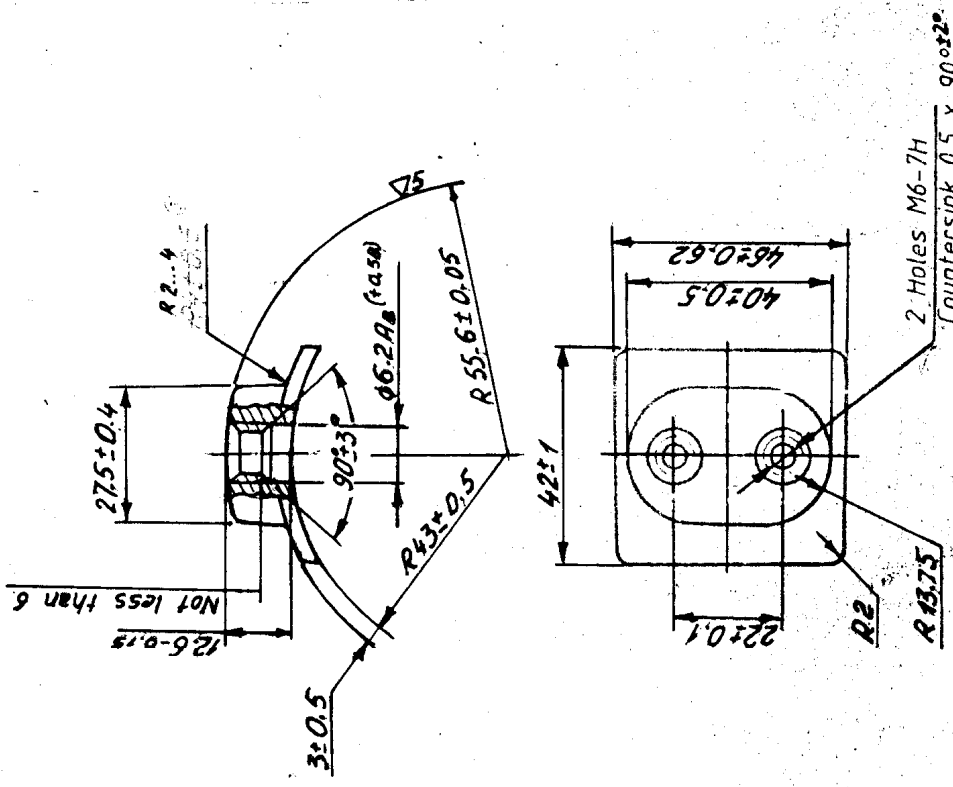
इन आरेखों तथा इसके साथ ही सम्पूर्ण सामग्री का स्वतन्त्राधिकार भारत सरकार तथा मंत्रालय की भारतीय आयुर्विज्ञानियों के पास हो। भारतीय आयुर्विज्ञानियों के महाविद्यालयों की शिक्षा अनुसंधान के बिना हमकी नकल या किसी भी रूप में इनके उद्धरण या इनमें समाहित सूचना किसी अन्यथा अधिकार के उपयोग नहीं कराई जानी चाहिए।

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[illegible]

10-1-2007

2 ALL

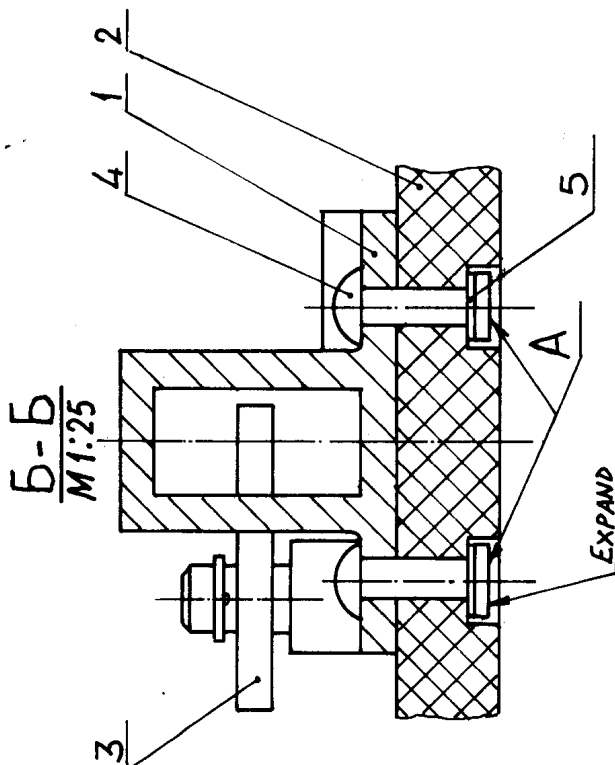


1. Taper should not exceed 3° towards decreasing of dimension.
  2. Rounding off of sharp edges  $R_1$  is allowed.
  3. Permissible displacement of dimension is  $27.5 \pm 0.4$ .
  4. May be made by through cutting of thread M6-7H.
  5. Burrs are not allowed.
- Ⓐ EQ. MATERIAL: C10 IS: 2073-70 OR  
EN 1A EN 18 BS: 970

**VETTED**  
29 NOV 2007  
JWALUSTO-CELL

|            |       |                      |
|------------|-------|----------------------|
| 100804-14  | Ⓐ     | EQ. MATERIAL ADDED   |
| 30-08-2000 | ISSUE | NATURE OF AMENDMENTS |
| DATE       |       |                      |

|                            |        |       |
|----------------------------|--------|-------|
| MBN2-04-01                 | WEIGHT | SCALE |
| POLE                       | 125 g  | 1:1   |
| Steel 10 OCT 1050-74       | 110    | 146   |
| CONTROL RATE OF INSPECTION |        |       |



| मूलमाप व अन्वयोजन<br>NOMINAL SIZE & FIT | विचलन<br>DEVIATION |
|-----------------------------------------|--------------------|
|                                         |                    |
|                                         |                    |
|                                         |                    |

- VETTED**  
**24 FEB 2006**  
**JWM/STD-CELL**

## FIRST ANGLE PROJECTION

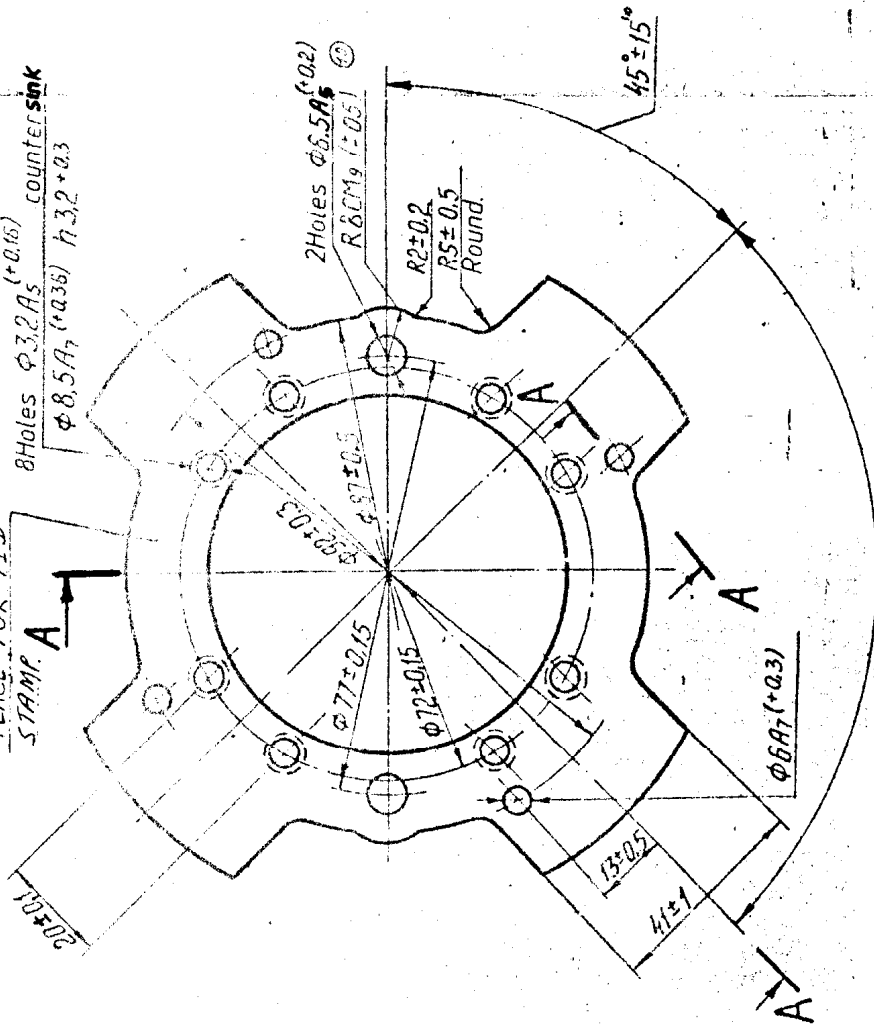
|                                                                           |                      |                                                                                      |                     |                  |                       |                            |                |             |
|---------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------|---------------------|------------------|-----------------------|----------------------------|----------------|-------------|
| BRUSH ARM<br>(ASSY. DRG.)                                                 |                      |                                                                                      |                     |                  |                       |                            |                | 0.09        |
| संख्या<br>NO OFF                                                          | विवरण<br>DESCRIPTION | पुर्जा क्र.<br>PART NO                                                               | पदार्थ<br>MATERIAL  | मानक<br>STANDARD | परिमाणु<br>DIMENSIONS | अव्यक्त<br>MASS (kg)       | REMARKS        |             |
| सामान्य सहिष्णुता<br>GENERAL TOLERANCE                                    |                      |                                                                                      |                     |                  |                       |                            |                |             |
| रेखक परिमाण<br>LINEAR DIMENSION                                           |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 0 - 6                                                                     |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 6 - 30                                                                    |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 30 - 120                                                                  |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 120 - 315                                                                 |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 315 - 1000                                                                |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 1000 - 2000                                                               |                      |                                                                                      |                     |                  |                       |                            |                |             |
| कोणिक परिमाण<br>ANGULAR DIMENSION                                         |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 1 - 10                                                                    |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 10 - 50                                                                   |                      |                                                                                      |                     |                  |                       |                            |                |             |
| 50 - 100                                                                  |                      |                                                                                      |                     |                  |                       |                            |                |             |
| > 100                                                                     |                      |                                                                                      |                     |                  |                       |                            |                |             |
| मापोंक म्य एम. म<br>VALUE IN μm                                           |                      |                                                                                      |                     |                  |                       |                            |                |             |
| ~                                                                         | > 25                 |                                                                                      |                     |                  |                       |                            |                |             |
| ▽                                                                         | 8 - 25               |                                                                                      |                     |                  |                       |                            |                |             |
| ▽                                                                         | 16 - 8               |                                                                                      |                     |                  |                       |                            |                |             |
| ▽                                                                         | 0.025 - 1.6          |                                                                                      |                     |                  |                       |                            |                |             |
| ▽                                                                         | > 0.025              |                                                                                      |                     |                  |                       |                            |                |             |
| संख्या संशोधित पुर्जाका आरक्षण क्र.<br>NO OFF DRG. NO. OF ASSOCIATED PART |                      | सूचक<br>INDEX                                                                        | मशोधन<br>ALTERATION | मापमान<br>SCALE  |                       | आरक्षित<br>DRAWN           | दिनांक<br>DATE | नाम<br>NAME |
| BRUSH ARM<br>(ASSY. DRG.)                                                 |                      |                                                                                      |                     |                  | 1:1                   | जोचा<br>CHECKED            | 20.1.03        | AS          |
|                                                                           |                      |                                                                                      |                     |                  |                       | अनुमोदित<br>APPROVED       |                |             |
|                                                                           |                      |                                                                                      |                     |                  |                       | द्वारा बदला<br>REPLACED BY |                |             |
|                                                                           |                      |                                                                                      |                     |                  |                       | हनु बदला<br>REPLACED FOR   |                |             |
|                                                                           |                      |                                                                                      |                     |                  |                       | आरक्षण क्र.<br>DRAWING NO  |                |             |
|                                                                           |                      |                                                                                      |                     |                  |                       | कार्यालय<br>OFFICE         |                |             |
|                                                                           |                      |                                                                                      |                     |                  |                       | VMT                        |                |             |
|                                                                           |                      | मशीनी औजार आदिरूप फैक्टरी, आम्बरनाथ<br>MACHINE TOOL PROTOTYPE FACTORY, AMBARNATH     |                     |                  |                       | MBN 2-05-00C6              |                |             |
|                                                                           |                      |  |                     |                  |                       |                            |                |             |

Traced from CQA (ICV) original dty. Seal No. 2506  
Date 30-5-02

HR 77-05-01

PLACE FOR TID  
STAMP. A

8Holes  $\phi 3,2 A_5^{(+0,15)}$  counter **sink**  
 $\phi 8,5 A_7^{(+0,35)} h 3,2 + 0,3$



**VETTED**  
29 NOV 2007  
JW/STD-CELL

90° ± 15°

276

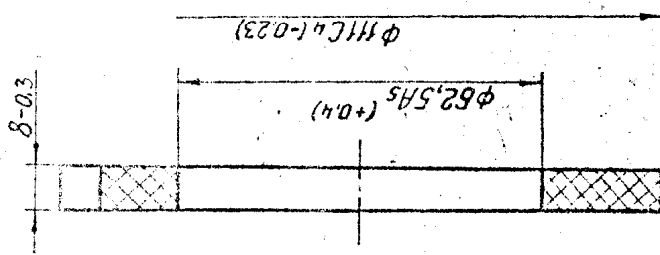
A-A

30452

A



151



1. Misalignment of diameter  $\phi 114(-0.23)$  with respect to  $\phi 62.5 A_5$  should not exceed 0.15mm.
2. Machine finish of surfaces of holes should not less than  $R_{a} 1.6$ .
3. Blunt all the sharp edges of holes.
4. Spot facing opening is allowed.
5. Melkód of marking should be non - impact.
6. Tapering towards decreasing of body should not exceed 0.05mm.

D-571

MBП 2-05-01

**BRUSH ARM**

Press-material AF-4C  
GOST 20437-75

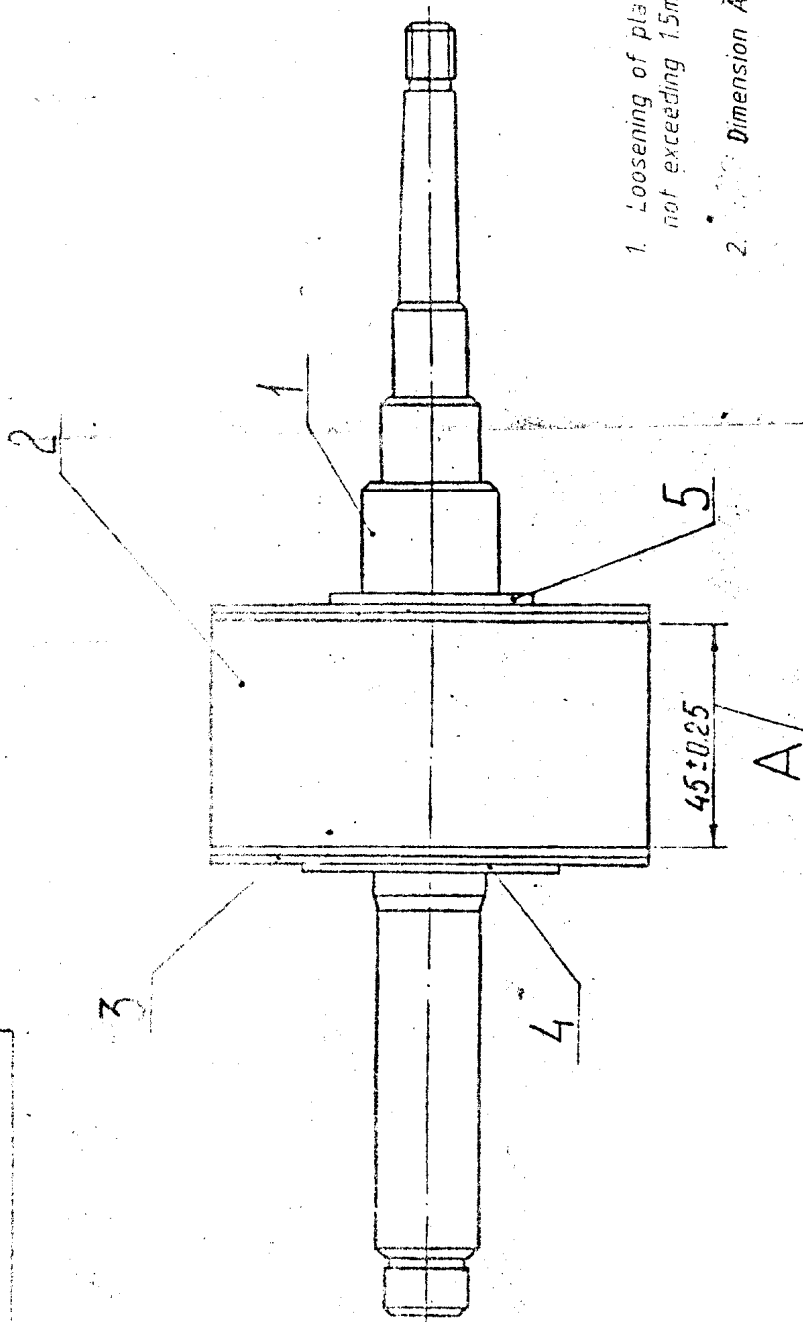
WEIGHT SCALE  
65g 1:1

33

113 1146



MBN2-10-0005



1. Loosening of plates along the external diameter not exceeding 15mm, above dimension A is allowed.
2. Dimension A is obtained by placing the necessary number of parts Ref. No. 2.

VETTED  
25 FEB 2006  
INVESTIG-CELL

ECKT  
D:571

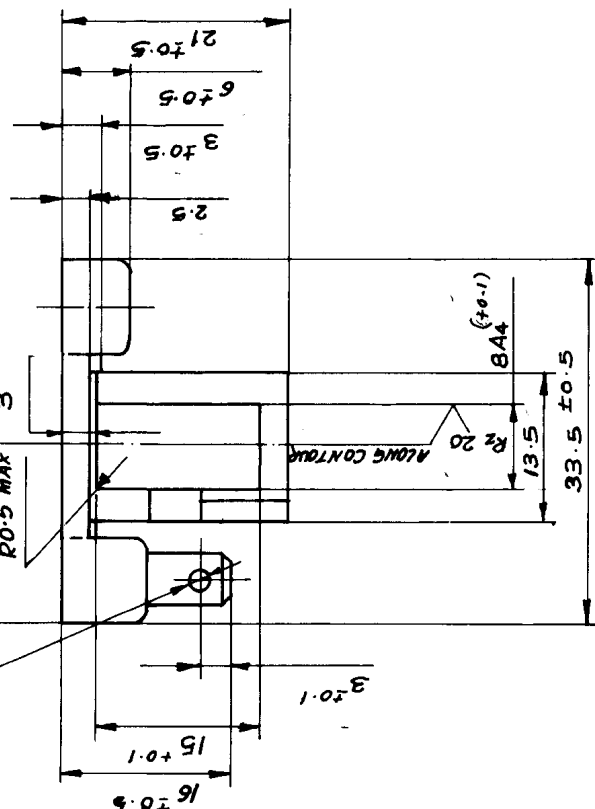
MBN2-10-0005

SHAFT WITH  
IRON ARMATURE  
(ASSY Dwg)

| WEIGHT | SCALE |
|--------|-------|
| 2.2    | 2:1   |
| SHT    | SHTS  |

77/46





- ## FIRST ANGLE PROJECTION

इन आदेशों तथा इसके साथ की सम्पूर्ण सामग्री का स्वतन्त्राधिकार भारत सरकार तथा मंत्रालय की भारतीय आरक्षक विभागों के पास है। भारतीय आरक्षक विभागों के महाविभाग की लिखित अनुमति के बिना इसकी नकल या किसी भी रूप में इसके उद्धार या इसमें संशोधन करना किसी अविधिकृत व्यक्ति को उपलब्ध नहीं कराई जानी चाहिए।

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**BRUSH HOLDER (Assy. Drg.)**

10g

मापक  
SCALE

2:1

संख्या  
NO. OFF

संशोधन  
NO. OF ASSOCIATED PART

संशोधन  
ALTERNATION

सूचक  
INDEX

संशोधन  
NO. OF ASSOCIATED PART

सूचक  
INDEX

संशोधन  
ALTERNATION

संख्या  
NO. OFF

संशोधन  
ALTERNATION

सूचक  
INDEX

संशोधन  
ALTERNATION

संख्या  
NO. OFF

संशोधन  
ALTERNATION

सूचक  
INDEX

संशोधन  
ALTERNATION

संख्या  
NO. OFF

संख्या  
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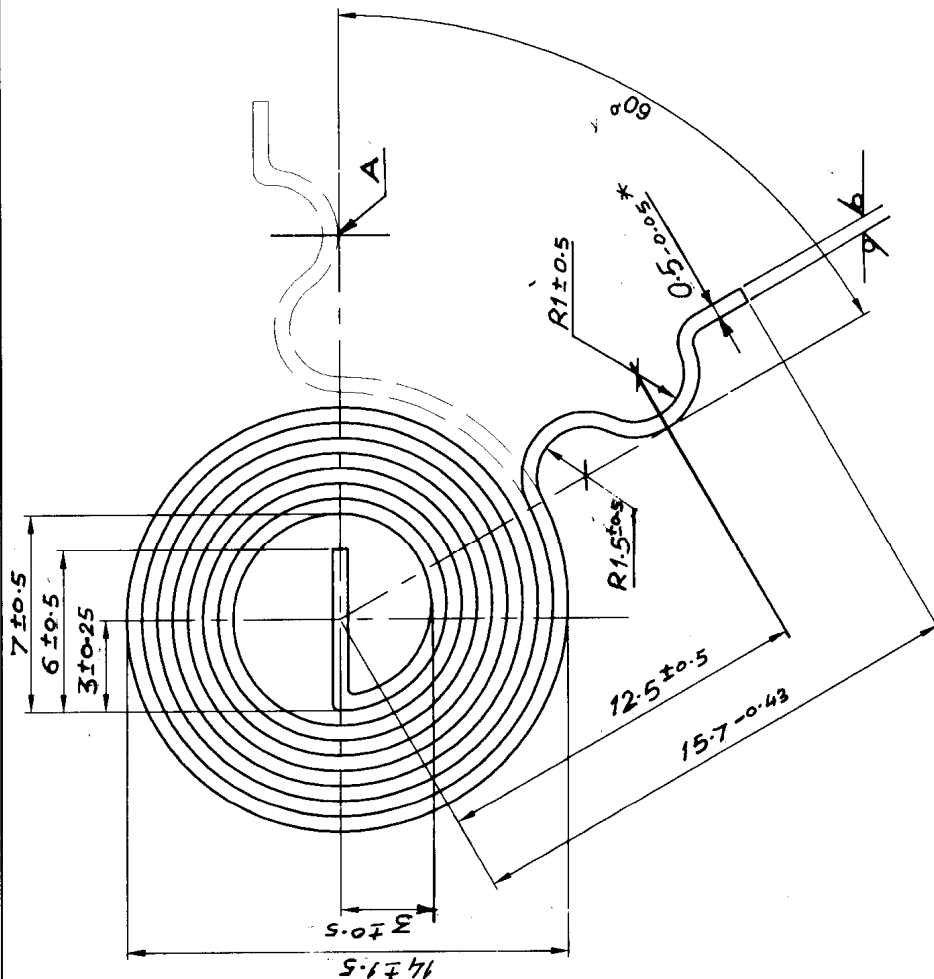
संशोधन  
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ALTERNATION

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NO. OFF

TRACED FROM CQA (ICV) ORIGINAL DRG.



1. H.R.A 72 ..... 75.
2. \* Dimensions is given for reference.
3. Number of working coils = 4.
4. Spring width may be increased, because of the projection of turns and deviation from the plane of the spring end may be upto 4mm.
5. Angle of twisting may be changed depending on the heat-treatment and the material when the spring is coiled.
6. After heat treatment, Contact of coils is not allowed.
7. Pressure of spring in point A should be  $P\ 300 + 150gf$ .
8. Coating :- Chemically oxidized / varnished  $\Gamma\ \varnothing - 95$ ,  
GOST 8018-70.

## FIRST ANGLE PROJECTION

EQ. MATERIAL :- SPRING STEEL STRIP 80C6 ; IS:2507-75.

**\* Band Y 8A-C-0-5  
GOST 2283-79**

[illegible]

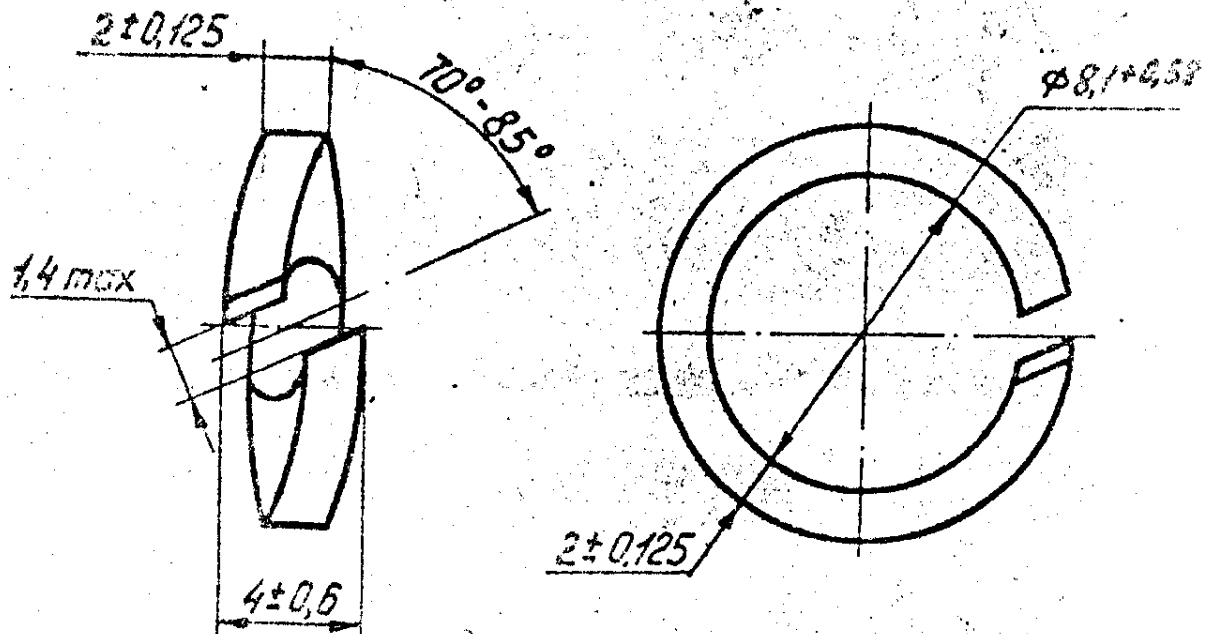
इन् आर्डर(ग)ों तथा इसके साथ की सम्पूर्ण सामग्री को स्वयंविधिकार भारत सरकार तथा मंत्रालय की भारतीय औद्योगिक विभागियों के पास है। भारतीय औद्योगिक विभागियों के प्रशासनिक की लिखित अनुमति के बिना इसकी नकल या किसी भी रूप में इसके उद्धार या इनसे सम्बंधित सूचना किसी अन्य व्यक्ति के हित में उपलब्ध नहीं कराई जानी चाहिए।

TRACED FROM COA (ICV) ORIGINAL DRG:



E904-X

2



| DESIGNATION | *  | COATING                         | PERMISSIBLE COATING                                            |
|-------------|----|---------------------------------|----------------------------------------------------------------|
| X-4069      | 06 | Chemically parkerised<br>oiled. | Chemically oxidised, oiled.<br>Zinc-plated 6 microns<br>thick. |

**VETTED**  
29 NOV 2007  
JW/M/D-CELL

22 NOV 2004

*Chips*  
JW/M/D-CELL

① EQ. MATERIAL : 75C6 IS: 2507-75

Technical requirements are as per GOST 6402-70.

|           |       |                      |
|-----------|-------|----------------------|
| 00504-100 | ④     | EQ. MATERIAL ADDED.  |
| 08.2000   |       |                      |
| DECISION  |       |                      |
| DATE      | ISSUE | NATURE OF AMENDMENTS |

D-571

ECKO

X-4069

WASHER 8-65T \*  
GOST 6402-70

0.998 5:1

INSPECTION

82

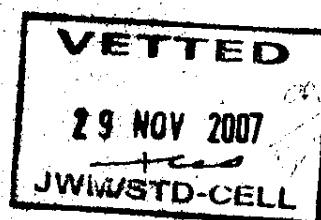
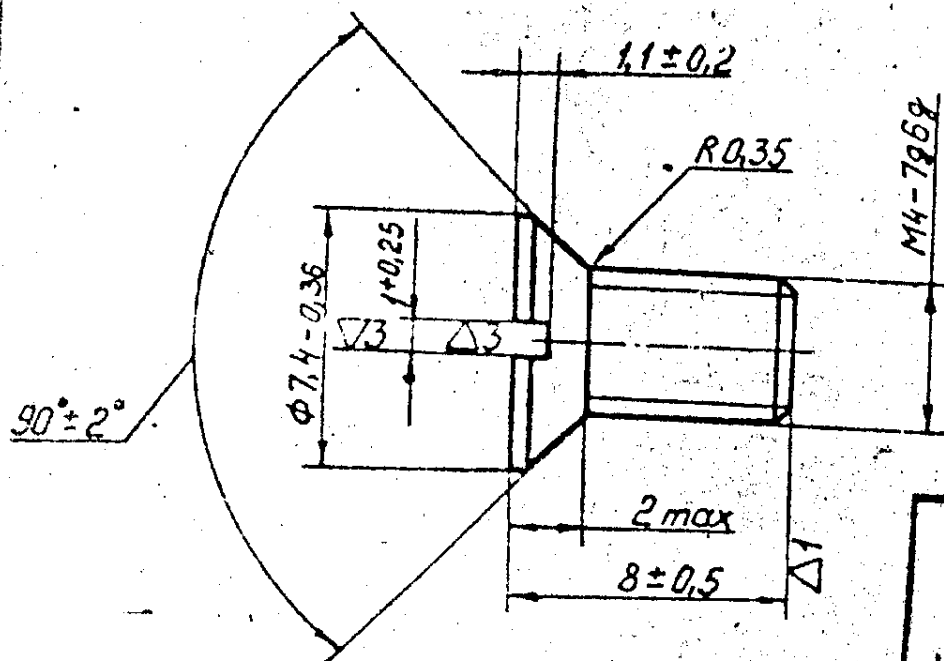
Steel 65T GOST 1050-74

136/46

1804-XL

V4(V)

MB7-2A



| DESIGNATION. | *   | COATING.                                                                               |
|--------------|-----|----------------------------------------------------------------------------------------|
| 7X-4081      | 016 | Zinc-plated 6 microns thick, chromatised. Solution for chromatisation as per V-252-78. |

1. Limit deviations from the alignment of axis heads and spline with respect to axis of bar is 0.3mm.

2. Technical requirements are as per GOST 1759-70.

22 NOV 2004

Duplicate copy is made with GOST 17475-72.

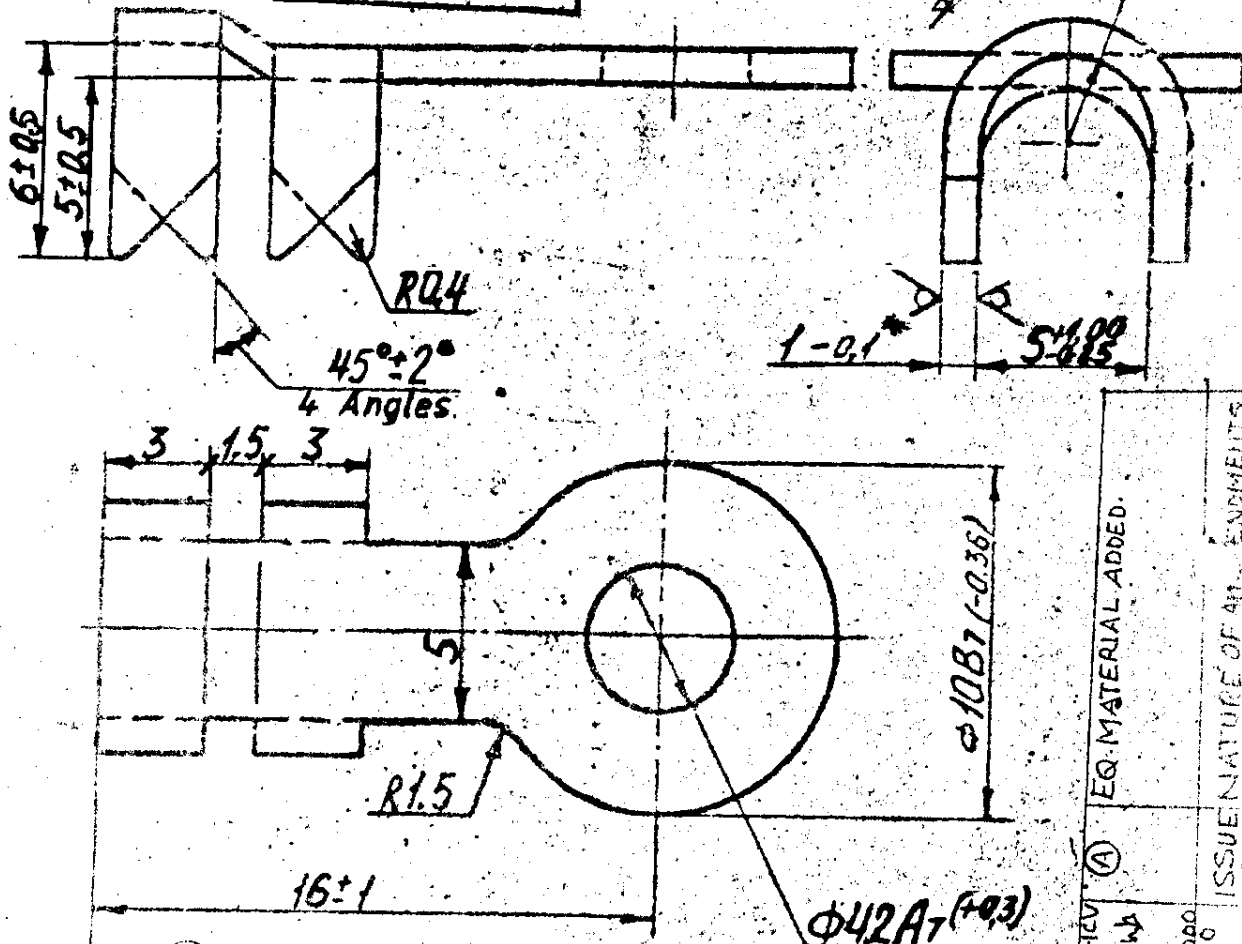
D-571

|                                                 |         |                       |       |
|-------------------------------------------------|---------|-----------------------|-------|
| APPROVED                                        | M. VASL | 7X-4081               |       |
| CHECKED                                         | M. Vasl | SCREW                 |       |
| CONTROLLERATE<br>OF<br>INSPECTION<br>(ICV) (76) |         | MA-7969 X 8-36 *      |       |
|                                                 |         | GOST 17475-72         |       |
|                                                 |         | Steel 10 GOST 1050-74 |       |
|                                                 |         | WEIGHT                | SCALE |
|                                                 |         | 0.84g                 | 5:1   |
|                                                 |         | SHT                   | SHTS  |
|                                                 |         | 130                   | 146   |

19901-LX

R280

**VETTED**  
29 NOV 2007  
A. WSTD-CELL



(A) EQ. MATERIAL: BRASS, CU ZN 37 IS: 410-77

- \* Dimensions are given for references.
- Provide unspecified limit deviations of dimensions with tolerance of  $\pm 0.25\text{mm}$ .
- Coating: -Tin- bismuth (99.8) 9 microns thickness.

D-571

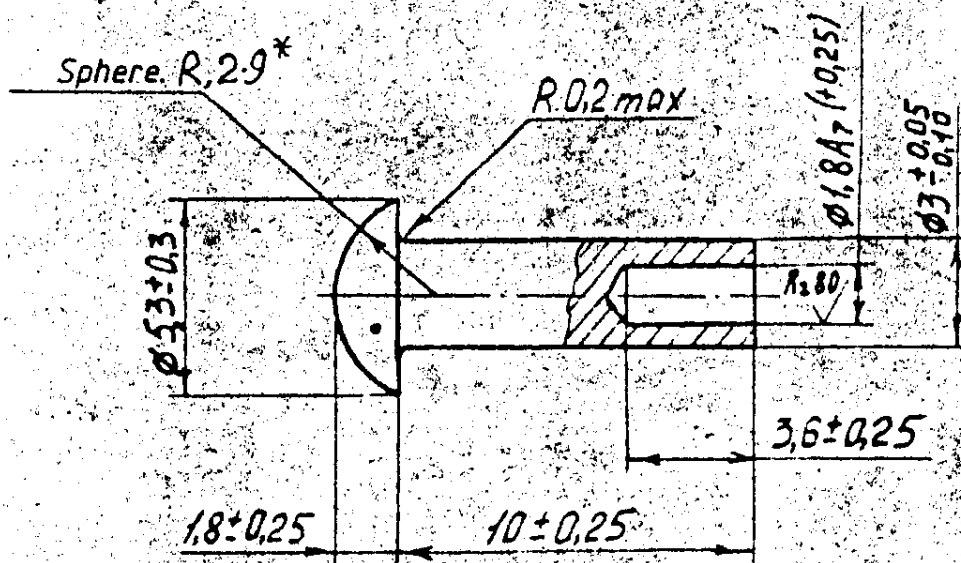
| EQ. MATERIAL ADDED. |     | ISSUE NATURE OF AM. ENDMENTS |            |
|---------------------|-----|------------------------------|------------|
| 19901-LX            | (A) | DATE                         | DATE       |
| 29-08-2000          | 10  | 29-08-2000                   | 29-08-2000 |

|                                            |              |          |         |
|--------------------------------------------|--------------|----------|---------|
| DESIGNED                                   | M. VASU      | X7-10661 |         |
| DRAWN                                      | H. M. SHARMA | LUG      |         |
| CONTROLLERATE<br>OF<br>INSPECTION<br>(ICV) |              | WEIGHT   | SCALE   |
| (90)                                       |              | 1.29g    | 5:1     |
| Sheet A7PM10J63<br>FOCT 931-78             |              | SHT      | SHTS    |
|                                            |              |          | 144/146 |

503-20

R240  
✓

MB7-2



| DESIGNATION | COATING                                                                                             |
|-------------|-----------------------------------------------------------------------------------------------------|
| 8X - 525    | Zinc-plated 6 microns thick, chromatized.<br>Solution for chromatization is as per<br>M - 252 - 78. |

1. \* Dimension is given for references.

2. Limit displacement of axis of bar -  
Axis of head - 0.2mm.  
Axis of hole - not exceeding 0.1mm.

3. Other Technical requirements are as per  
GOST 12644-67.

22 NOV 2004  
Eck

D-571

**VETTED**  
20 NOV 2004  
JWM/STD-CELL

ECKO

APPROVED M. VAGU  
CHECKED N. G. G. G.

CONTROLLERATE  
OF  
INSPECTION (ICV) (60)

8X-525  
RIVET  
Steel 10, GOST 1050-74

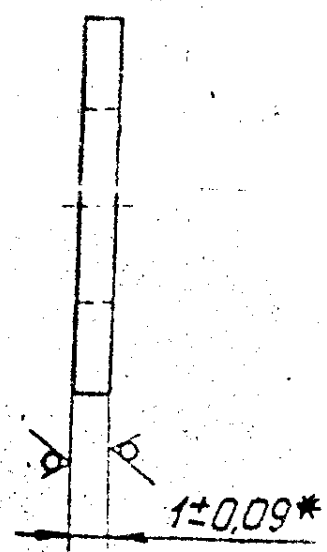
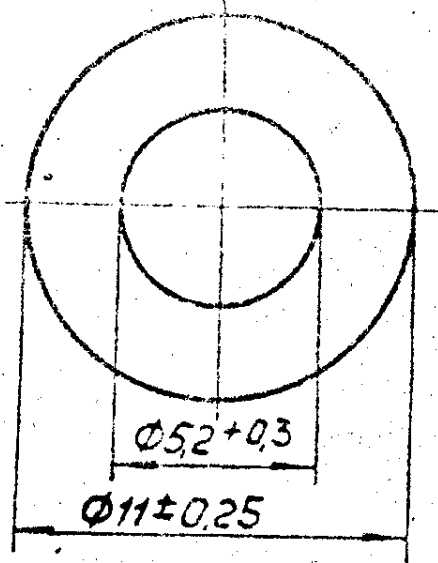
|         |       |
|---------|-------|
| WEIGHT  | SCALE |
| 0.6g    | 5:1   |
| SHT     | SHTS  |
| 114/146 |       |

1991-20

R200

✓(V)

PHD-2



| DESIGNATION. | COATING.                                                                              |
|--------------|---------------------------------------------------------------------------------------|
| 8X-1497.     | Zinc-plated 6 microns thick,<br>Solution for chromatzation is as per<br>VI- 252 - 78. |

| EQ. MATERIAL ADDED  | NATURE OF AMENDMENT |
|---------------------|---------------------|
| ①                   | ISSUE               |
| 00804-104<br>Sub up | 00804-104<br>DATE.  |

\* Dimension is given for references.

① EQ. MATERIAL: GRADE 'D' IS: 513 - 86

**VETTED**  
29 NOV 2007  
JAMES TO: CELL

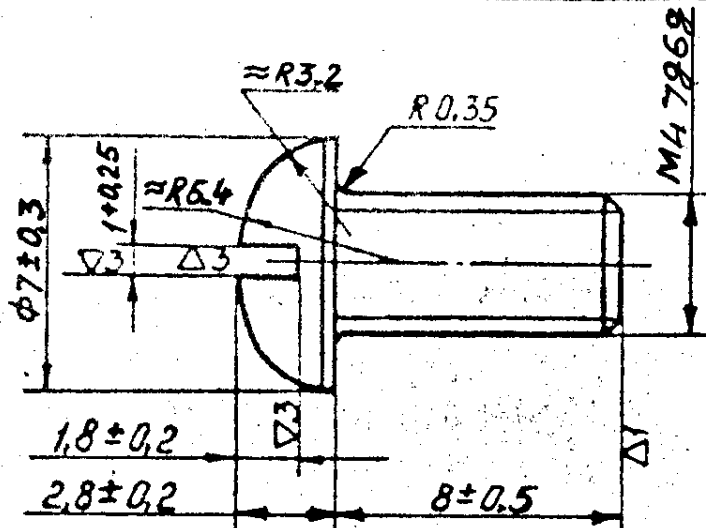
22 NOV 2004  
Chito 571  
JWA/CEG

|              |                       |
|--------------|-----------------------|
| APPROVED     | 8X-1497               |
| CHECKED      |                       |
| CONTROL RATE | WASHER                |
| INSPECTION   | 0.68 5:1              |
| (CVI)        | Sheet 10 OCT 19904-74 |
| (77)         | 4-11-10 OCT 16523 70  |
|              | 131/146               |



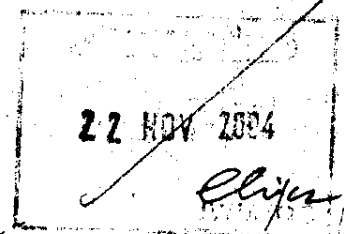
1151-X8

▽4(▽)



| DESIGNATION | *   | COATING.                                                                                    |
|-------------|-----|---------------------------------------------------------------------------------------------|
| 8X-1541     | 016 | Zinc-plated, 6 microns thick, chromated.<br>Solution for chromatization is as per M-252-78. |

- Limit deviations from the alignment of head axes and spline with respect to axis of bar is 0.3mm.
- Technical requirements are as per GOST 1759-70.



Duplicate copy is made with GOST 17473-72.

D-571



ECKE

8X-1541

SCREW  
M4-7969X8-36 \*  
ГОСТ 17473-72

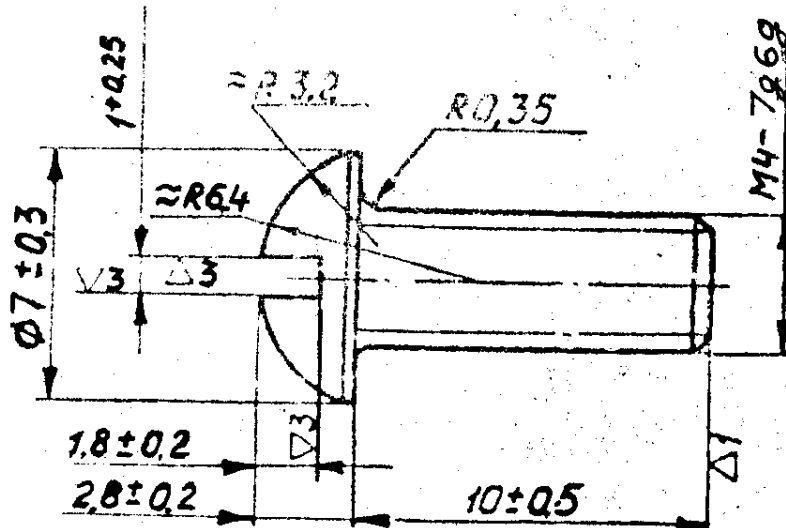
WIR 2.45-10 ГОСТ 5663-79

1/32/146

INSPECTION  
(78)

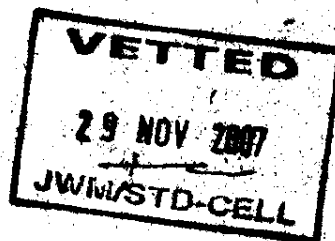
0451-X8

△4 (△)



| DESIGNATION. | COATING.                                 |
|--------------|------------------------------------------|
| 8X-1548.     | Zinc-plated, 6 microns thick, chromated. |

1. Limit deviations from the alignment of head axes and spline with respect to the axis of bar is 0.3mm.
3. Technical requirements are as per GOST 1759-70.



22.03.2004

Duplicate copy is made with GOST 17473-72.

D-571

8X-1548

SCREW

M4-7969 X 10-36 016

ГОСТ 17473-72

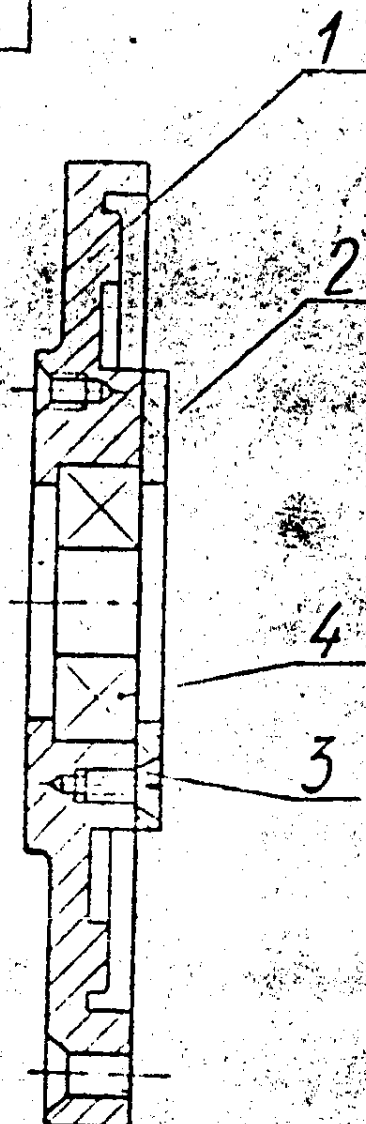
Steel 10, ГОСТ 1050-74

103418 5:1

133/146

79

55000027 920



**VETTED**  
25 FEB 2006  
JWM/STD-CELL

52  
10-57

Put screw Ref. No. 3 on enamel XB-124, grey, GOST 10144-74 and paint the screw head with the same enamel.

12

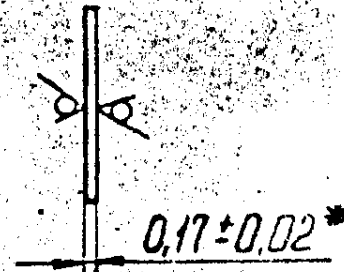
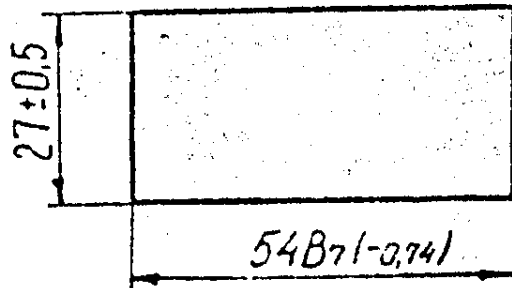
D. 571

|                                                 |                |                  |        |       |
|-------------------------------------------------|----------------|------------------|--------|-------|
| APPROVED                                        | <i>M. YAZ</i>  | B36.170 002 C5   |        |       |
| CHECKED                                         | <i>1/28.08</i> |                  |        |       |
| CONTROLLERATE<br>OF<br>INSPECTION<br>(ICV) (36) |                | COVER FROM THE   | WEIGHT | SCALE |
|                                                 |                | SIDE OF          | 0.4    | 1:1   |
|                                                 |                | COMMUTATOR       | SHT    | SHT.5 |
|                                                 |                | ASSEMBLY DRAWING | 90/146 |       |

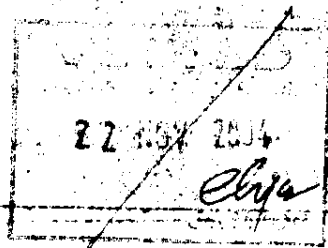
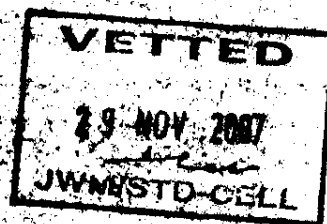
70-10-0000

MB55-01-02

MB55-01-02



\* Dimension is given for references.



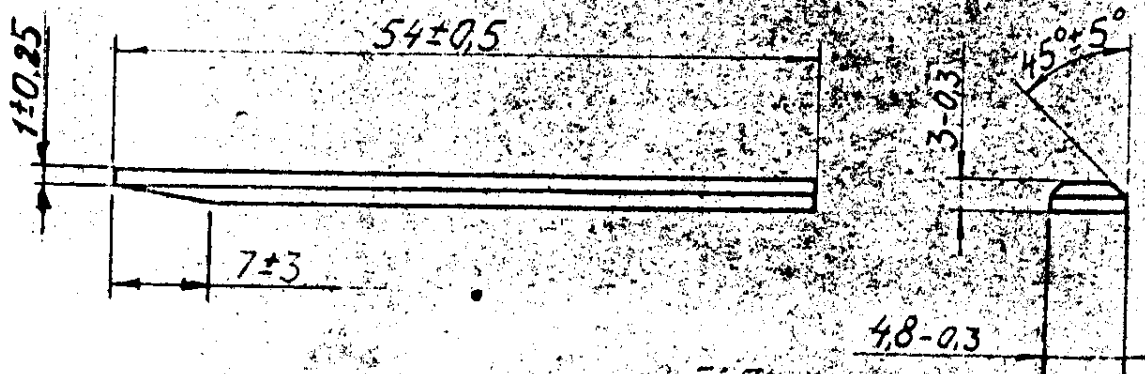
D-571

REC-10

|                                        |      |                                                           |       |
|----------------------------------------|------|-----------------------------------------------------------|-------|
| APPROVED                               |      | MB55-01-02                                                |       |
| CHECKED                                | DATE | INSULATION OF SLOT                                        |       |
| CONTROLLERATE OF INSPECTION (ICV) (46) |      | Fibre glass cloth<br>FTT-277-N3-969-0.17<br>TY16-50324-73 |       |
|                                        |      | WEIGHT                                                    | SCALE |
|                                        |      | 0.49ms                                                    | 1:1   |
|                                        |      | SHT                                                       | SHTS  |
|                                        |      | 100/146                                                   |       |

MB55-01-03

90



Moisture contents in wood should not exceed 15%.

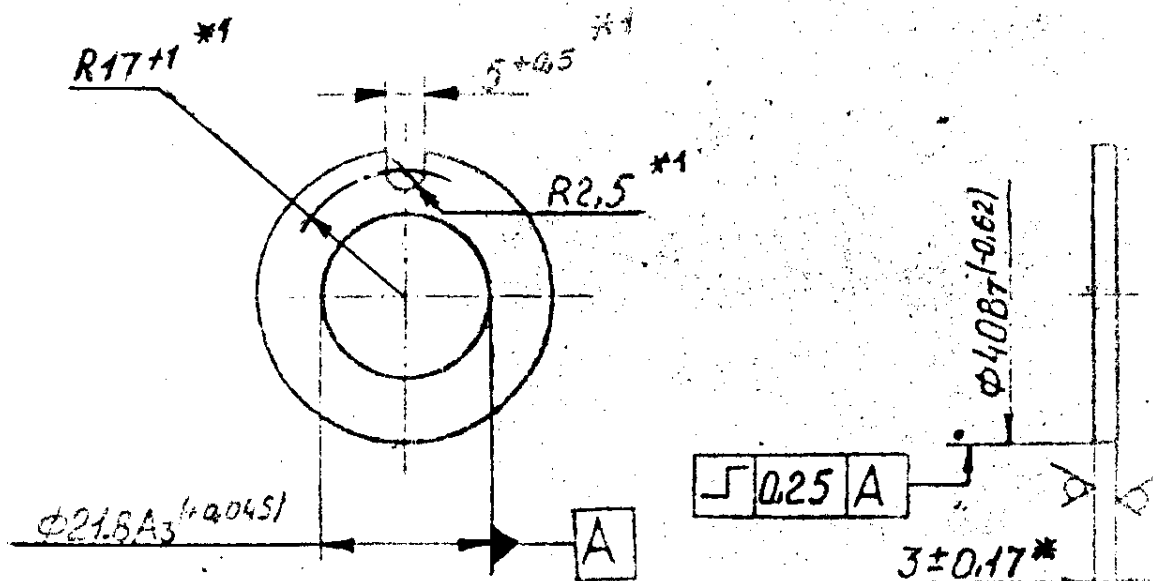
**VETTED**  
29 NOV 2007  
JWM/STO-CELL

22 NOV 2004  
*[Signature]*

D-571

|              |         |                                  |          |
|--------------|---------|----------------------------------|----------|
| APPROVED     | M. YAGU | MB 55-01-03                      |          |
| CONTROL RATE | OF      | WEDGE OF SLOT                    | WEIGHT   |
| INSPECTION   | (48)    |                                  | 2:1      |
| (HCY)        |         | Ply Wood, TYPE 2<br>ГОСТ 2695-71 | SHT SHTS |
|              |         |                                  | 102/146  |





1. \* Dimension is given for references.

2. \* Dimensions are provided with tools.

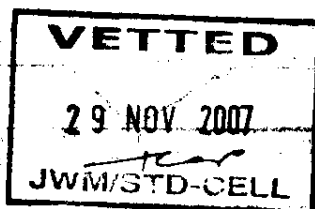
Coating:-

3.  $\Delta$  Zinc-plated, 21-microns thick, chromitized.

Solution of chromitization is as per

M- 252 - 78.

(A) EQ. MATERIAL: GRADE D IS : 513-86



|           |                    |
|-----------|--------------------|
| 00804-100 | EQ. MATERIAL ADDED |
| (A)       |                    |

ISSUE DATE

D-571

ECK

MB 60-07-06

WASHER

Sheet 6 3 OCT 19904-74  
4-II-10 OCT 16523-70

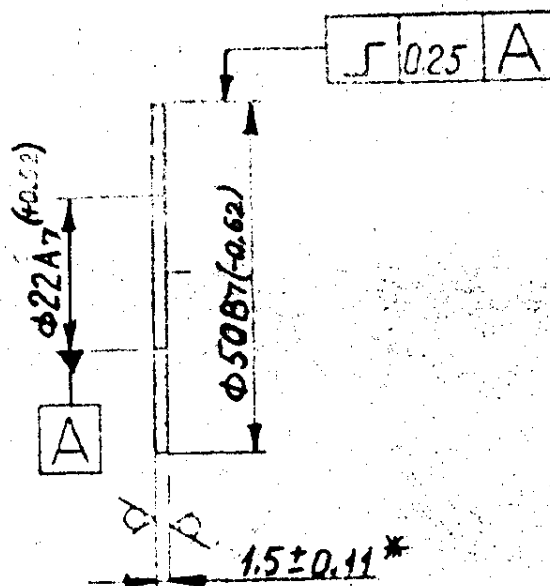
20 g 1:1  
SMT SMTS

117/146

63

MB60-07-07

R200 ✓(✓)

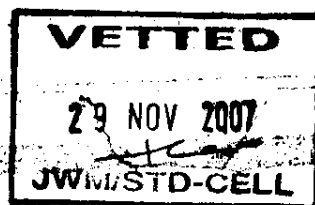


| EQ. MATERIAL ADDED. | ISSUE | NATURE OF AMENDMENTS |
|---------------------|-------|----------------------|
| ①                   |       |                      |
| 00804-10V           |       |                      |
| 00804-10V           |       |                      |
| 00804-10V           |       |                      |

- \* Dimension is given for references.
- Coating:-Zinc-plated, 21 microns thick, chromitized.

Solution for chromitization is as per M - 252 - 78.

① EQ. MATERIAL: GRADE D IS: 513-66



22 104

D-571

MB 60-07- 07

WASHER OF  
ARMATURE

WEIGHT 169ms 1:1

Sheet 5 1-5 OCT 19904-74  
4- II-10 OCT 16523-70

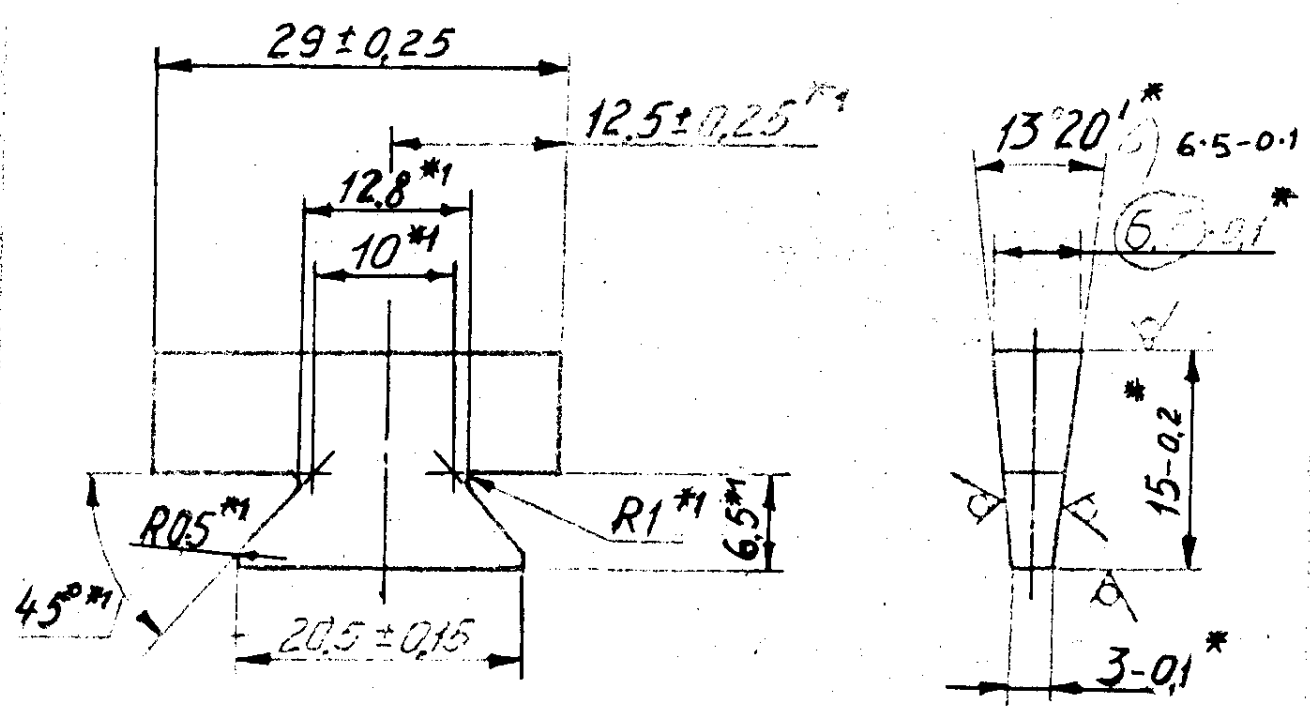
118/1146



17-80-095.1

R2160

✓



1.  $\ast$  Dimensions are given for references.
2.  $\ast 1$  Dimensions are provided with tools.
3. Unspecified limit deviations of dimensions —  $\pm 0.1\text{mm}$ , angular deviations —  $\pm 30'$ .

**VETTED**  
29 NOV 2007  
JWN/STD-CELL

22 NOV 2004

Chis D-571

MB 60-08-01

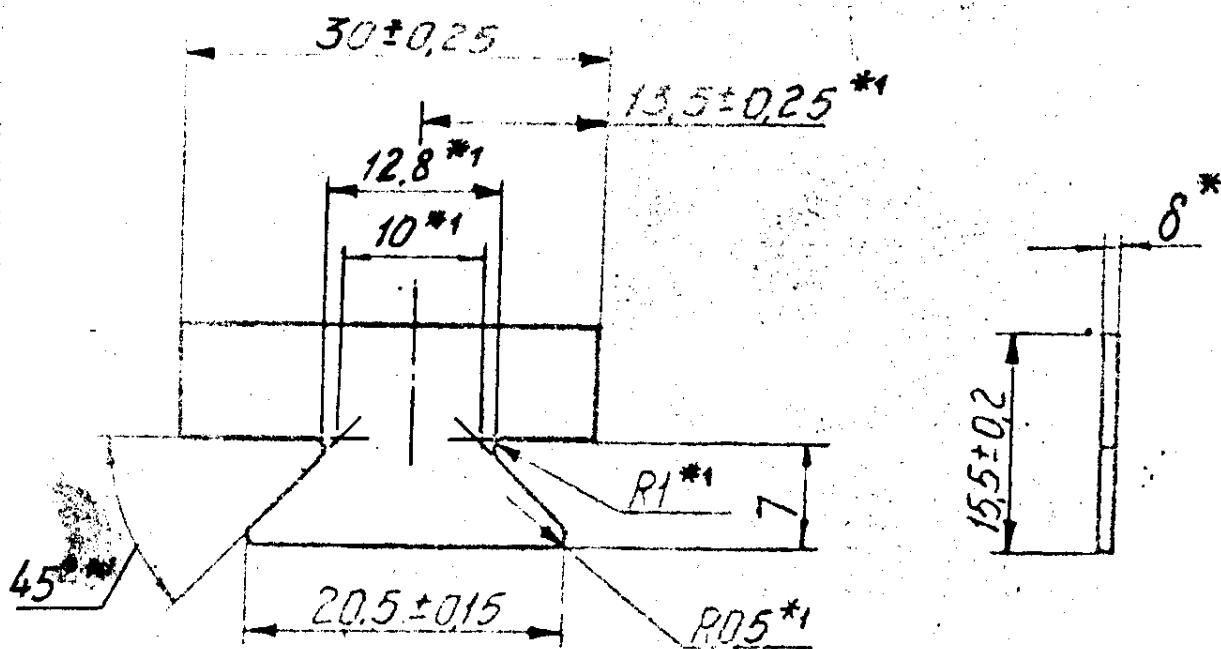
**PLATE  
COMMUTATOR**

commutator profile nkm-  
6-5x3x15-H-13° 2a'  
MI GOST 3588-70

|         |     |     |
|---------|-----|-----|
| WEIGHT  | 158 | 2:1 |
| SIT     | 201 |     |
| 119/116 |     |     |

65

MB60-08-02

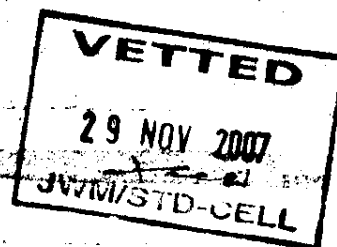


| DESIGNATION. | DIMENSION $\delta$ , MM. | MASS g. |
|--------------|--------------------------|---------|
| MB 60-08-02  | $0.7 \pm 0.08$           | 0.8     |
| -01          | $0.8 \pm 0.08$           | 0.85    |
| -02          | $0.6 \pm 0.07$           | 0.75    |

- \* Dimension is given for references.
- \*<sup>1</sup> Dimensions are provided with tools.
- Unspecified limit deviations of dimensions —  $\pm 0.1$ mm, angular deviation —  $30^\circ$ .

22

elija



MB 60-08-02

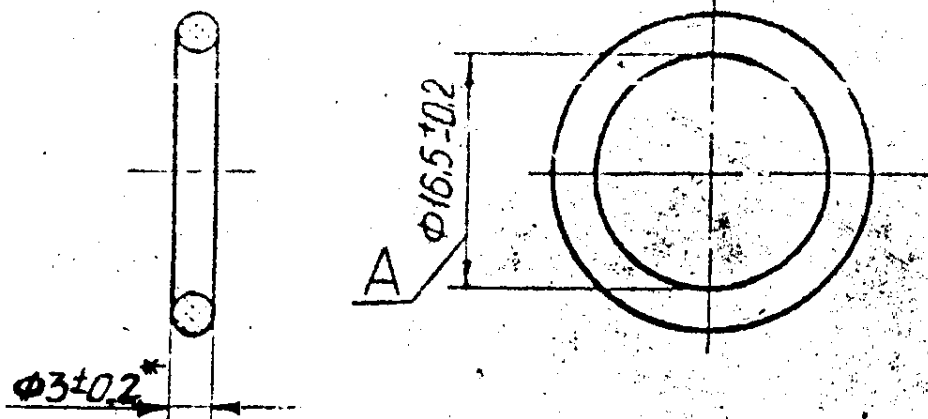
INSULATION PLATE

See Table 2:1

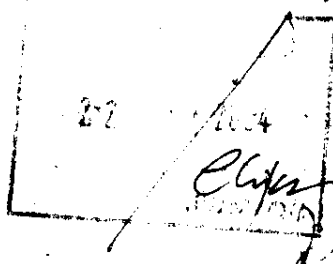
Mica nite k  $\phi$  W  $\delta$   
GOST 2196-75

120 1146

MB63-124



1. \* Dimensions are subjected to compulsory checking, but dimension A is provided with tool, and should be checked periodically at least once per 3 months.
  2. Other Technical requirements are as per Technical Specifications 005 216-75.
  3. Alternate material is rubber H0-68-1 Technical Specifications 005 216-75.
- ④ EQ. MATERIAL: NITRILE RUBBER BA-70 BS: 2751-82.



|           |       |                      |
|-----------|-------|----------------------|
| 00804-111 | ④     | EQ. MATERIAL ADDED   |
| 3006-2000 |       |                      |
| DECD NO   | ISSUE | NATURE OF AMENDMENTS |
| DATE      |       |                      |

D-571

VETTED

29 NOV 2007

JWM/STD-CELL

MB63-124

APPROVED

CHECKED

CONTROL DATE

INSPECTION

50

RING

Rubber 98-1  
TY 005 216-75

WEIGHT SCALE

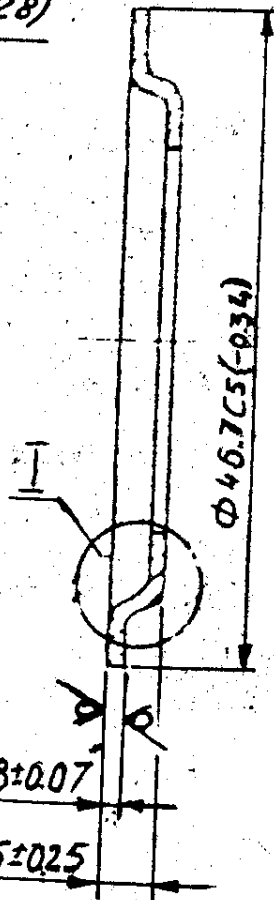
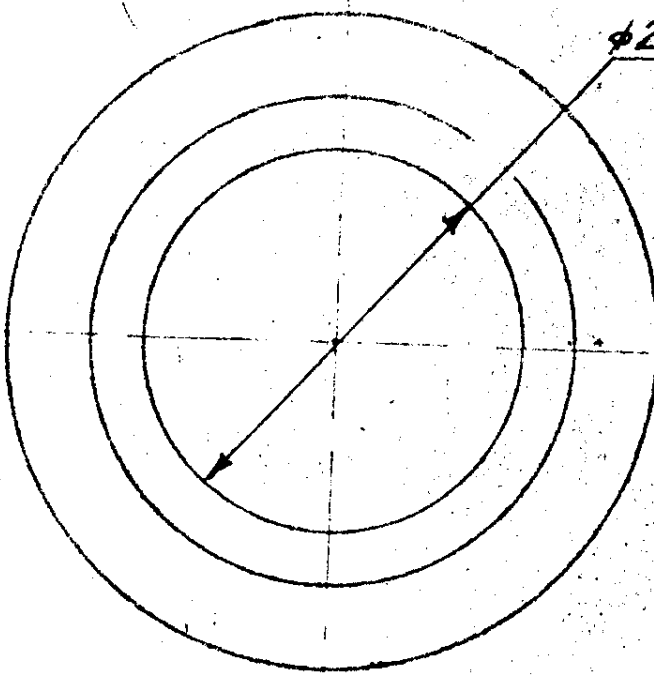
0.433g 2:1

SIT SIT

104/146

ECKA

12-221-0W



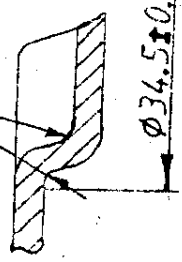
I  
M5:1

**VETTED**  
29 NOV 2007  
JWM/STD-CELL

| DATE       | ISSUE | NATURE OF AMENDMENT |
|------------|-------|---------------------|
| 08-08-2009 | 1     | EQ. MATERIAL ADDED. |

$R0.5 \pm 0.25$

22 NOV 2004



| DESIGNATION | COATING                                                                             |
|-------------|-------------------------------------------------------------------------------------|
| MB-177-31   | Zinc-plated, 21 microns thick chromitized. Solution for chromitization is V-252-78. |
| -01         | Cadmium-21 microns thick, chromitized.                                              |

\* Dimension is given for references.

④ EQ. MATERIAL: GRADE IS: 513-86

D-571

**MB-177-31**

**WASHER OF THE BEARING**

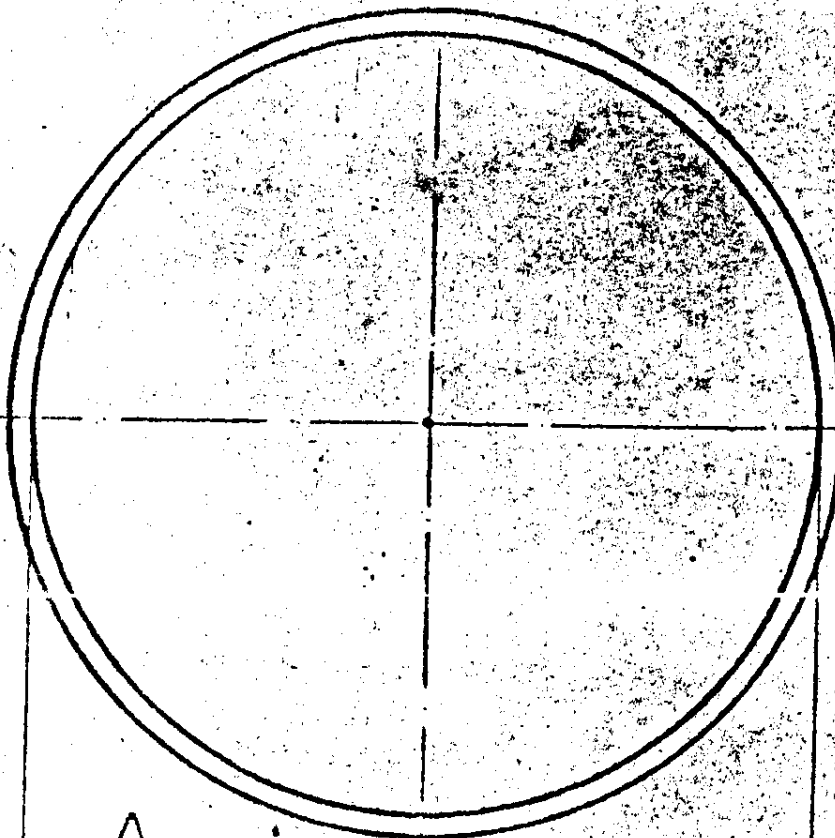
Sheet 60-8 GOST 19904-74  
II-BF-08 Kn GOST 9045-70

127/146

73

50 33 110W

$\Phi 3 \pm 0.5$



A

$\Phi 11 \pm 2^*$

EQ. MATERIAL ADDED.

④

00804-15W

2.0.00

0082000

DATE

ISSUE NATURE OF AMENDMENT.

- \* Dimension is provided with tools.
  - Alternate material is rubber 633 TY 005 216-75.
  - Other Technical requirements are as per TY 005 216-75.
- ④ EQ. MATERIAL: CHLOROPRENE/NITRATE RUBBER C60 BS 2752-82

0122

0571

VETTED

12 NOV 2007

JWM/STD-CELL

|                                            |  |                             |                           |
|--------------------------------------------|--|-----------------------------|---------------------------|
| APPROVED                                   |  | MB-11-00-04                 |                           |
| CHECKED                                    |  |                             |                           |
| CONTROLLERATE<br>OF<br>INSPECTION<br>(ICV) |  | RING                        | WEIGHT SCALE<br>5 gms 1:1 |
| (40)                                       |  | Rubber 640<br>TY 005 216-75 | SHT SHTS<br>94/146        |