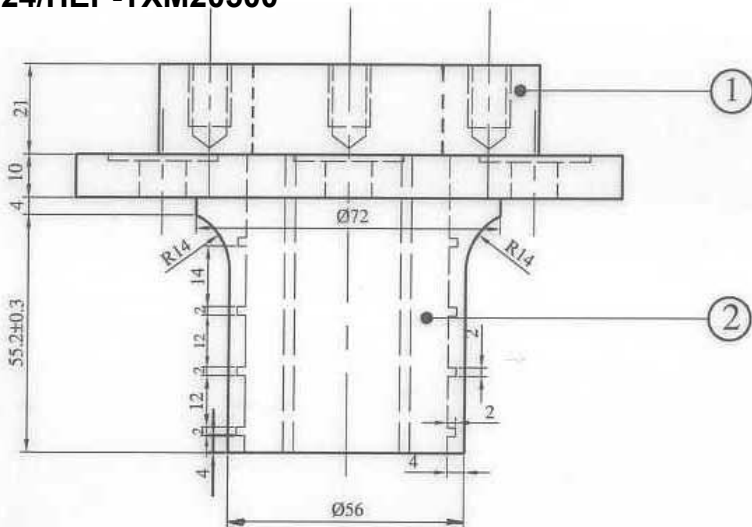
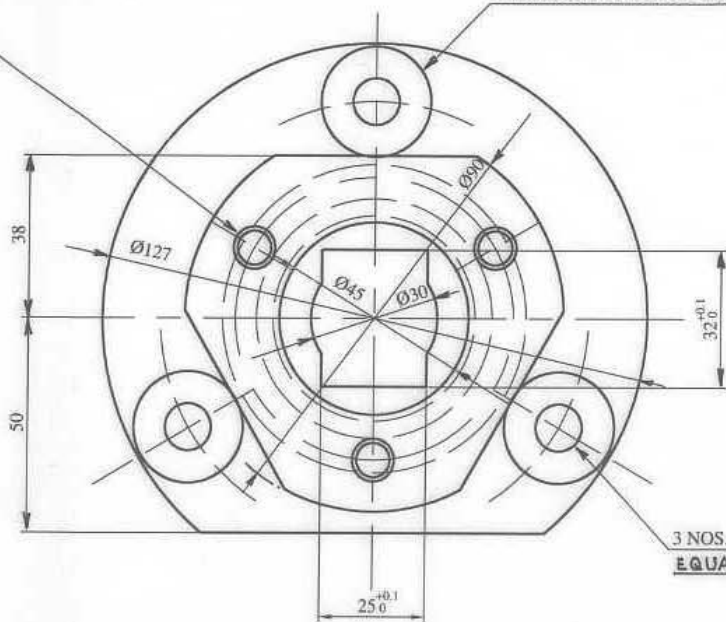


345483/2024/HEP-TXM20500



3 NOS. TAPPED HOLE M10 DEEP 16.5, HOLE DEPTH 19.5 ON 66 PCD.

3 NOS. COUNTER BORE HOLE Ø26, 1.5mm DEPTH.



3 NOS. HOLE Ø11 ON 101.6 PCD. EQUALLY SPACED.

| SURFACE ROUGHNESS VALUE TO IS:3073 | GRADE NUMBER | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 |
|------------------------------------|--------------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|
| | Ra μ m | 0.025 | 0.05 | 0.1 | 0.2 | 0.4 | 0.8 | 1.6 | 3.2 | 6.3 | 12.5 | 25 | 50 |
| SYMBOL | | | | | | | | | | | | | |

| ALT. NO. | AUTHORITY | DESCRIPTION | INITIAL | DATE |
|----------|------------|---|---------|--------|
| 1 | DY.CEE/TMD | MATL. SPECN. AGAINST REF.1 CORRECTED AND MATL. AGAINST HOUSING WITHDRAWN. REF. L/NO.EL/TM/2013, DT. 23.9.03 | | 14-10- |

NOTE :-

- M.S.HOUSING'S BORE TO BE SERRATED BEFORE CASTING BRONZE BUSH.
- BRONZE CASTING TO BE CAST IN M.S.HOUSING.
- ALL STEEL PART TO BE ZINC PLATED BEFORE ASSLY.

MATERIAL FOR BUSH

BRONZE CASTING TO JIS:H5111 Gr. Bc-7
MATHOD OF CASTING- SAND MOULD CASTING
MATL. COMPOSITION

Cu - 86.0 to 90.0
Sn - 5.0 to 7.0
Zn - 3.0 to 5.0
Ph - 1.0 to 3.0

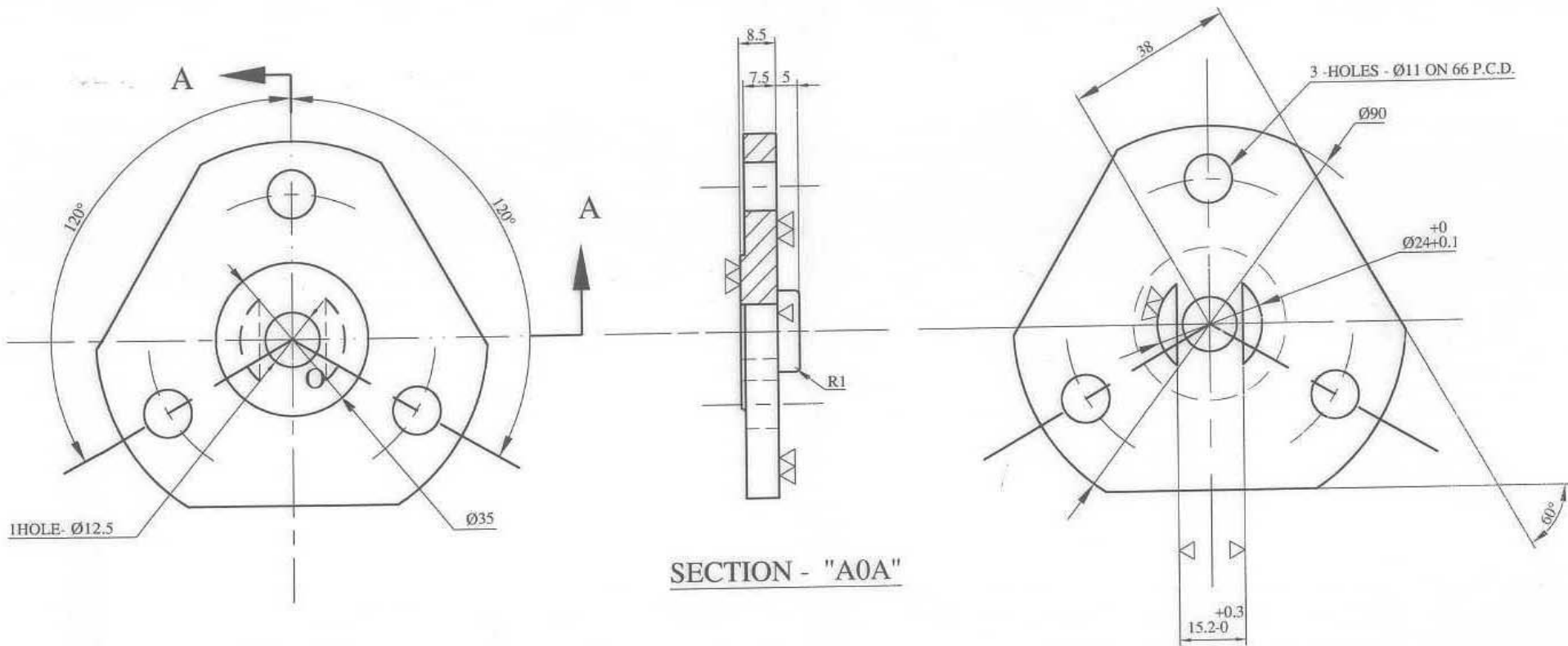
IMPURITIES - 1.5 max.

PHYSICAL PROPERTIES

TENSILE STRENGTH - 22Kgf/ mm² (min)
% ELONGATION - 18 (min)

| | | | | | | | | | |
|----------|----------------|--------------|-----------------------|----------------------------|-------------------------|--|--------------------|------------------|--|
| 5505/103 | 2 | --- | BUSH | 1 NO. | BRONZE | JIS:H5111 Gr.BC-7 | --- | | |
| 5505/102 | 1 | --- | STEEL HOUSING | 1 NO. | BRONZE STEEL | JIS:H5111 Gr.BC-7 | IS:206 Gr.B | | |
| 5505/101 | --- | --- | HOUSING | 1 NO. | STEEL | IS:2062 99 Gr.B | --- | | |
| C&D NO. | REF NO. | PART DRG NO. | DESCRIPTION | QTY./ TM. | MATL. | SPECN. | WT | | |
| DGN. | NAME | SIGN. | DATE | TRACTION MOTOR HS -15250 A | | CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL,INDIA. | | | |
| DRN. | B.k.Biswas | | 19-03-2002 | <h1>HOUSING</h1> | | | | | |
| TRD. | N.V.Rao | | 28-05-2002 | | | APPROVED: | | 1 | |
| CKD. | M.S.Pal | | 28-05-2002 | | | NAME- H.KHARE | | DATE- 02-07-2002 | |
| COMP. | SCALE :- 1 : 1 | | REF :- RDSO-SKEL-4590 | | DATE- 02-07-2002 | | NO. 3.TWD. 095 100 | | |
| ALTERA | | | | | | | | | |

| ALT. NO. | AUTHORITY | DESCRIPTION | INITIAL | DATE |
|----------|-----------|-------------|---------|------|
| | | | | |



SECTION - "A0A"

NOTE:-

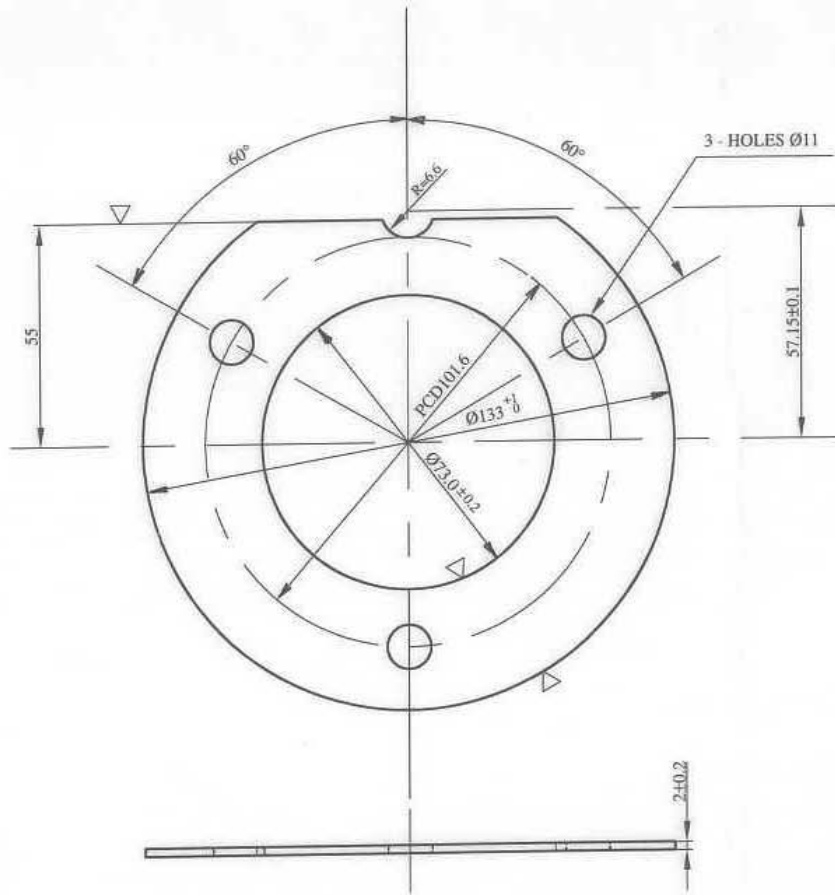
- 1. MATL. - STEEL AS PER IS:2062'99 Gr.B
- 2. TO BE ZINC PLATED

| SURFACE ROUGHNESS VALUE TO IS:3073 | GRADE NUMBER | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 |
|------------------------------------|--------------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|
| | Ra μ m | 0.025 | 0.05 | 0.1 | 0.2 | 0.4 | 0.8 | 1.6 | 3.2 | 6.3 | 12.5 | 25 | 50 |
| | SYMBOL | ▽ | | | ▽ | | ▽ | | ▽ | | ~ | | |

| 5505/104 | REF NO. | PART DRG NO. | | COVER | I NO. | SEE NOTE-1 | |
|-------------------------|------------|--------------------|------------|----------------------------|--|------------|--------|
| | | | | DESCRIPTION | QTY./TM. | MATL. | SPECN. |
| DGN. | NAME | SIGN. | DATE | TRACTION MOTOR HS -15250 A | CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL,INDIA. | | |
| DRN. | B.k.Biswas | <i>[Signature]</i> | 08.03.2002 | COVER |  APPROVED- <i>[Signature]</i> NAME- H. KHARE. DATE- 02-07-2002 NO. 3.TWD. 095-101 | | |
| TRD. | | | | | | | |
| CKD. | N.V.Rac. | <i>[Signature]</i> | 28.05.2002 | | | | |
| COMP. | M.S.Pal | <i>[Signature]</i> | 28.05.2002 | SCALE :- 1 : 1 | ALTER | | |
| REF :- RDSO. SKEL. 4585 | | | | | | | |

345483/2024/HEP-TXM20500

| ALT. NO. | AUTHORITY | DESCRIPTION | INITIAL | DATE |
|----------|-----------|-------------|---------|------|
| | | | | |

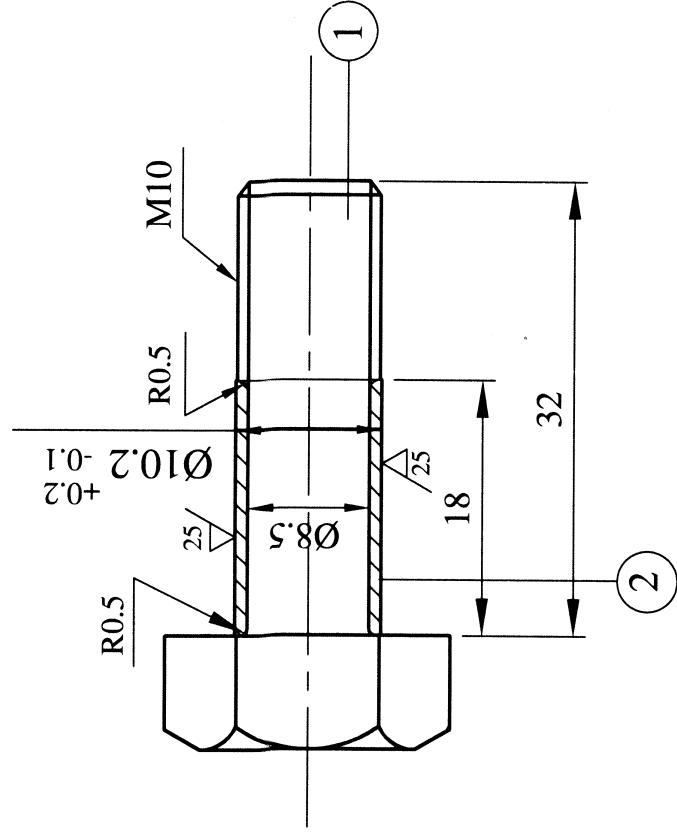


NOTE :-

1. COAT MACHINED FACE WITH EPOXY VARNISH, AND DRY IT FOR 12 HOURS AT 120°C
2. MATERIAL: EPOXY RESIN BONDED GLASS FIBRE (WOVEN FABRIC) SHEET TO Gr.EP-3 OF IS:10192'82

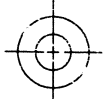
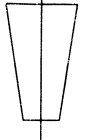
| SURFACE ROUGHNESS VALUE TO IS:3073 | GRADE NUMBER | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 |
|------------------------------------|--------------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|
| | Ra μ m | 0.025 | 0.05 | 0.1 | 0.2 | 0.4 | 0.8 | 1.6 | 3.2 | 6.3 | 12.5 | 25 | 50 |
| SYMBOL | | | | | | | | | | | | | |

| | | | | | | |
|-----------------------|------------|--------------|-------------------------|--|------------|--------|
| 5505/106 | -- | ---- | INSULATING PLATE | 1 NOS. | SEE NOTE-2 | -- |
| C&D NO. | REF NO. | PART DRG NO. | DESCRIPTION | QTY./TM. | MATL. | SPECN. |
| DGN. | NAME | SIGN. | DATE | CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL, INDIA. | | |
| DRN. | B.k.Biswas | | 11.03.2002 | APPROVED- NAME- H.KHARE DATE- 02.07.2002 NO. 3 .TWD. 095 .103 | | |
| TRD. | N.V.Rao | | 28.05.2002 | | | |
| CKD. | M.S.Pal | | 28.05.2002 | ALTER. | | |
| SCALE :- 1:1 | | | INSULATING PLATE | | | |
| REF :- RDSO.SKEL.4586 | | | | | | |



NOTE:-

1. DIMENSIONS OF THREADED BOLT AS PER IS:1364(Pt-1)'92 CLASS 8.8 - AND MATERIAL OF THE SAME STEEL TO IS:2062'99 Gr.A.
2. WIND ITEM NO.(1) BOLT WITH EPOXY GLASS SHEET (APPLY VARNISH OR ADHESIVE CEMENT).
3. TO BE ZINC PLATED

| 5505/109 | 2 | --- | INSULATOR | 3 NOS. | SEE NOTE-2 | |
|----------------|-----------|---------------|------------------------|---|-------------|-------------|
| 5505/108 | 1 | --- | THREADED BOLT | 3 NOS. | SEE NOTE-1 | |
| 5505/107 | - | --- | INSULATING BOLT ASSLY. | 3 NOS. | - | |
| C&D. NO. | REF. | PART DRG. NO. | DESCRIPTION | QTY./ | MATL. SPECN | WT. OF EACH |
| DGN. | DATE | NAME | TRACTION MOTOR | CHITTARANJAN | | |
| DRN. | 16.05.02 | B.K.Biswas | HS-15250A | LO COMOTIVE WORKS | | |
| TRD. | | | INSULATING | WEST BENGAL, INDIA | | |
| CKD. | 28.05.02 | N.V.Rao | BOLT |  | | |
| COMP | 28.05.02 | M.S.Pai | ASSEMBLY |  | | |
| SCALE :- 2 : 1 | | | APPROVED- <i>Hle</i> | | | |
| REF | RDSO-SPEL | 4587 | NO.4TWD. 095-104 | | | |
| ALT. NO. | | | | | | ALTER. NO. |

