

NOTE:-

- 1) MATERIAL:- 25MoCr4E BTS : 0053
- 2) HEAT TREATMENT :- ISOTHERMAL ANNEALING.
- 3) HARDNESS :- 152 - 190 BHN.
- 4) REDUCTION RATIO : 6 MIN.
- 5) JOMINY VALUE :-

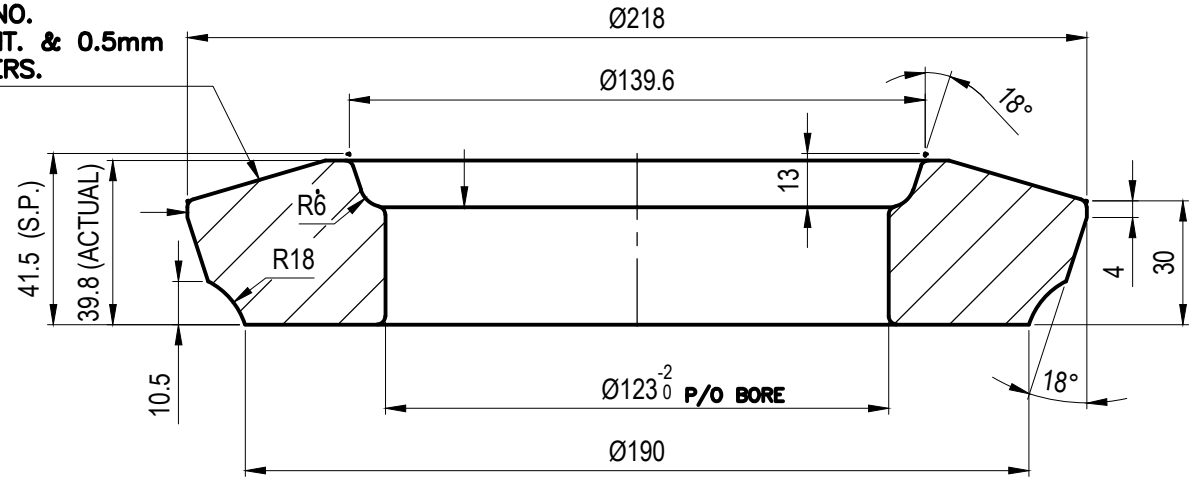
| HARDENABILITY<br>(DISTANCE IN mm) | 1.5 | 3  | 5  | 7  | 11 | 15 | 20 | 25 | 30 |
|-----------------------------------|-----|----|----|----|----|----|----|----|----|
| MIN. - HRC                        | 44  | 42 | 41 | 40 | 36 | 33 | 30 | 28 | 27 |
| MAX. - HRC                        | 49  | 49 | 48 | 47 | 44 | 41 | 39 | 37 | 36 |

- 6) GRAIN SIZE:- 5 ~ 8 ASTM E 112 : PI IV
- 7) INCLUSION RATING :- IS 4163 . ASTM E45A

| INCLUSION<br>RATING | A   |     | B   |     | C   |     | D   |     |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                     | T   | H   | T   | H   | T   | H   | T   | H   |
| MAX.                | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 |

- 8) MICROSTRUCTURE :- UNIFORMLY DISTRIBUTED EQUIAXED GRAINS OF FERRITE & PEARLITE WITHOUT BANDING & INTERMEDIATE PHASE.
- 9) UNSPECIFIED DIMENSIONS. :-  
CORNER RADII : 2R + 50%, - 25%      FILLET RADII: 6R, + 50%, - 25%  
DRAFT ANGLE : AS SHOWN,    TOL. ON THICKNESS = +1.3, -0.7  
TOL. ON LENGTH, WIDTH & DIA.: +1.9, - 0.9  
MISMATCH = 1 MAX.  
STRAIGHTNESS = 0.9
- 10) FORGING SHOULD BE SUPPLIED AS PER - BT / LAB / MAT / STD.001
- 11) RAW MATERIAL TO BE PROCURED FROM APPROVED STEEL SOURCES & SHOULD BE OF INGOT ROUTE ONLY.
- 12) SUPPLY & DELIVERY CONDITION AS PER DBL : 4531.00
- 13) DIA. 218 SHOULD BE TRIMMED & SHOULD BE FLASH FREE.
- 12) FLASH ON LOCATIONS POINTS MARKED BY '†' - SHOULD BE THOROUGHLY GROUND.
- 14) FORGING TOL. AS PER EUROFORGE DIN : 7526
- 15) FORGING TO BE SHOT BLASTED.
- 16) FORGING SHOULD FREE FROM DEFECTS SUCH AS CRACKS, SCALES PITS Etc.
- 17) ALL DIMENSIONS ARE AT CROSSING POINT.

MANUFACTURER'S SYMBOL  
& PART NO, ED5451 &  
HEAT CODE NO.  
WITH 5mm HT. & 0.5mm  
RAISED LETTERS.



COMPOSITION (25MoCr4E)  
AS PER STD. BTS 0053

| %    | C    | Mn   | Si   | P     | S     | Cr   | Mo   | Al    | Ca     |
|------|------|------|------|-------|-------|------|------|-------|--------|
| MIN. | 0.19 | 0.70 | 0.15 | 0.00  | 0.020 | 0.65 | 0.40 | 0.020 | 15 PPM |
| MAX. | 0.23 | 1.00 | 0.40 | 0.035 | 0.035 | 1.00 | 0.50 | 0.050 | 25 PPM |

| CRITICAL | CHARACTERISTIC |
|----------|----------------|
| EECD     | CUSTOMER       |
| B        |                |

|   |  |  |  |                                    |       |          |         |            |
|---|--|--|--|------------------------------------|-------|----------|---------|------------|
|   |  |  |  | ALL DIMENSIONS ARE IN MILLIMETERS  |       |          |         |            |
|   |  |  |  | DO NOT SCALE, IF IN DOUBT, PL. ASK |       |          |         |            |
|   |  |  |  | MACHINE                            |       |          |         |            |
|   |  |  |  | MATERIAL                           |       |          |         |            |
|   |  |  |  | SEE NOTE                           |       |          |         |            |
| REVISIONS                                     |  |  |  | PRPD                               | CHKD  | APRD     | DATE    | SCALE      |
|   |  |  |  | NAME                               | SIGN  | DATE     | N. T.S. | HARDNESS   |
|   |  |  |  | PRPD                               | MW    | 18.08.15 | NT. WT. | SEE NOTE   |
|   |  |  |  | CHKD                               | SDP   |          | 6.2     | PROJECTION |
|   |  |  |  | APRD                               | BLEVA |          | Kg.     |            |
| COMP - ED 5441 ( 08 686 353 00 12 )           |  |  |  |                                    |       |          |         |            |
| VE COMMERCIAL VEHICLES LIMITED.               |  |  |  | SHT. 01                            |       |          |         |            |
| ( A UNIT OF EICHER MOTORS LTD. ) DEWAS (M.P.) |  |  |  | SL.NO. 3-11453                     |       |          |         |            |
| DESIGN & DEVELOPMENT DEPTT.                   |  |  |  | DRG. NO. ED 5451 / F               |       |          |         |            |
| CAD DRG. (FILE) NAME :                        |  |  |  | REV. 00                            |       |          |         |            |
|   |  |  |  | SIZE : A3, (297 x 420 mm)          |       |          |         |            |