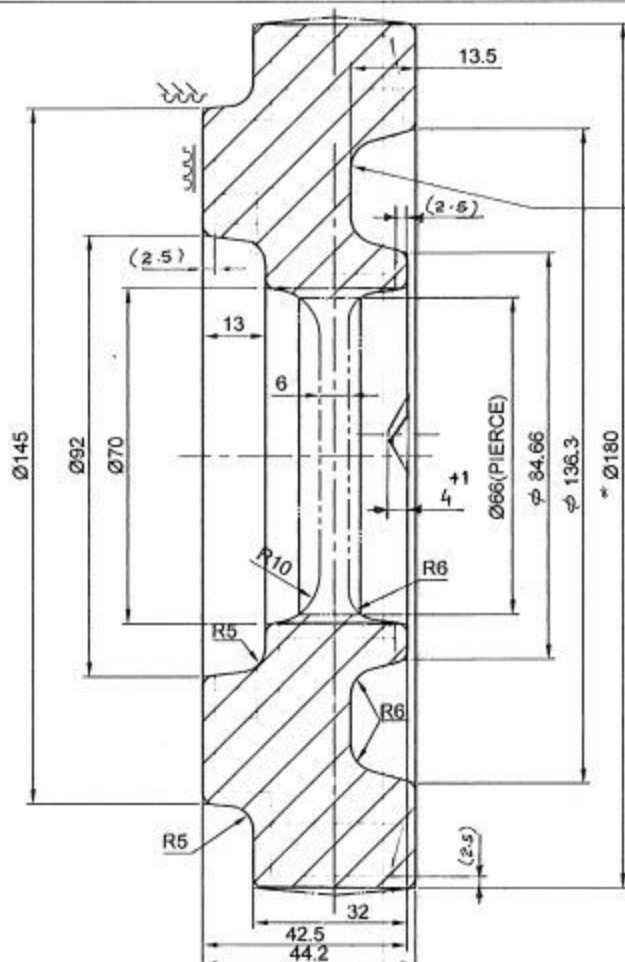


ALL DIMENSIONS ARE IN MM.



NOTE:

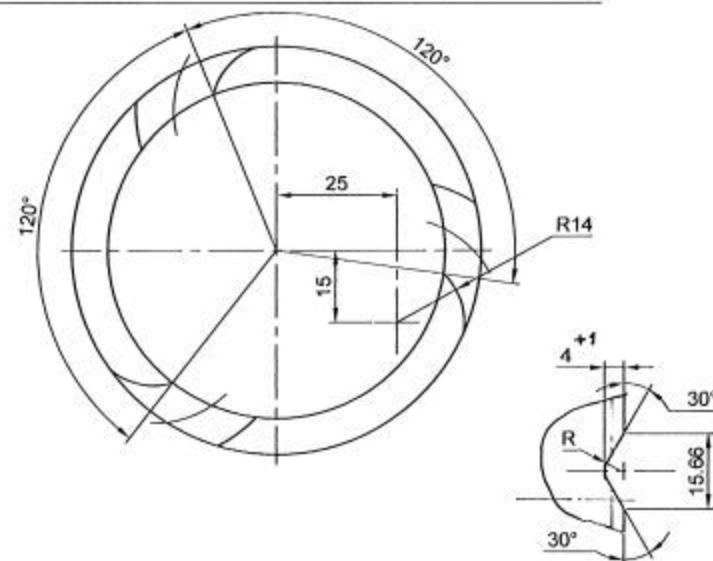
* SUPPLY CONDITION PRE-MACHINED

(1) $\phi 3$ DIA. 180/180.50

(2) $\phi 5$ DIA. 70/70.50

IF IN DOUBT PLEASE ASK

STAMP PART NO. SUPPLIER'S CODE & HEAT CODE RAISED TYPE



3 oil grooves

NOTE:

- FORGING RIDGES TO BE TRIMMED CLEAN & SMOOTH FINISH ALL OVER.
- FORGING TO BE SHOT BLASTED & SUPPLIED AFTER APPLYING RED OXIDE PRIMER TO JSS-3 - 47-13 BY BRUSHING OR SPRAYING.
- SAMPLE TO BE APPROVED BEFORE BULK SUPPLY.
- STEEL SHOULD BE FREE FROM CENTRE, SEGREGATION, PIPING, FLAKES ETC.
- DIMS. IN BRACKET INDICATES MACHINING ALLOWANCE.
- CLAMPING FACE FOR 1st MACHINING OPERATION.
- DRAFT ANGLE: INNER - 7°, OUTER - 5°
- UNSPECIFIED RADII: CORNER - 2R, FILLET - 3R

MATERIAL: 815 M17(En 353) OF BS-970

HARDENABILITY: JOMINY HARDENABILITY VALUE OF J 6/16: 35-39 HRC (FOR TEST PIECE)

COMP. OF EN353:
C 0.14-0.20, Si 0.35MAX, Mn 0.50-1.00, S 0.015-0.04, P 0.036MAX, Ni 1.0-1.5, Cr 0.75-1.25, Mo 0.08-0.15
PHYS. PROP.:

HEAT-TREATMENT: ISO THERMAL ANNEALING

HARDNESS: 150 - 210 BHN

MICRO STRUCTURE:

UNIFORM LAMELLAR PEARLITE & FERRITE BAINITE & INTERMEDIATE STRUCTURE 10% MAXIMUM. EXCESSIVE BANDING IS NOT ACCEPTABLE IF BANDING IS PRESENT, MINIMUM NUMBER OF BANDS SHALL BE 14 (WHEN VIEWED AT 100X MAGNIFICATION)

GRAIN SIZE: ASTM 5 - 8

INCLUSION RATING: 3A, 3B, 3C, 3D MAX. OF IS 4163

FORGING TOLERANCE AS PER IS: 3469 - 1974

FORGING WEIGHT (APPROX)	ENVELOP WEIGHT	COMPLE- XITY	INTRAC OF MATL.	FORGING GRADE
8 KG				NORMAL

KIND OF DIMS.	TOL.	KIND OF DIMS.	TOL.
LENGTH/DIA	+1.1 -0.4	RESIDUAL FLASH	
THICKNESS	+1.5 -0.0	TRIMMED FLAT	
MISMATCH	0.8	DRAFT ANGLE	+2° -1°
STRAIGHTNESS	0.7	RADII	+50% -25%

INTERNAL DIMS. REVERSE SIGN + & -

INDEX	ALTERATION	DATE	SIGN

FORGING DRAWING
FOR
REVERSE GEAR ON M/S.
STLN.MK-IV
VEHICLE FACTORY JABALPUR

RAJEEV DRN.	TCD.	DO/PROD
REF. DRG. 1668311	DDO SECTION	15/02/2014
DEMANDED BY		1/1
DRG. NO. F1668311-3		SHT. A3