



SUPPLY CONDITION -  
 TRACES OF PARTING LINE NOT PERMITTED.

- NOTE: 1) ALL LOCATING, RESTING AND CLAMPING POINTS TO BE CLEAN, SMOOTH, FLAT AND CYLINDRICAL.
- 2) ALL THE TOLERANCES TO BE AS PER IS: 3469 (PART I TO III) - 1974 UNLESS OTHERWISE STATED.
  - 3) FORGING TO BE SUPPLIED AFTER APPLYING RED OXIDE PRIMER FOR RUST PREVENTION.
  - 4) SAMPLE TO BE APPROVED BEFORE BULK SUPPLY.
  - 5) GRAIN SIZE: - ASTM 5 OR FINER.
  - 6) INCLUSION RATING: - 3 ABCD FIN SERIES OR FINER AS PER IS: 4163 - 1967.

MATERIAL CONSTITUENTS

SN.	DETAILS	MARK IV
1	MATERIAL	EN 355
2	IS EQUIVALENT	822 M 17
J	TYPE OF STEEL	2% Ni Cr Mo CH Steel (Low Cr)
4	C	0.2 Max
5	Si	0.35 Max
6	Mn	0.4-0.7
7	Ni	1.8-2.2
8	Cr	1.4-1.7
9	Mo	0.15-0.25

ALL DIMENSIONS AND DRAFT ANGLE TAKEN TO SHARP CORNERS		
DRAFT ANGLE	EXT.	3°
ANGLE	INT.	
CORNER RADIUS		2
FILLET RADIUS		3

TOLERANCES	
DIE WEAR (TOTAL)	+2, -0.0
DIE THICKNESS	+1.5, -0.0
MIS MATCH	0.8
FLUSH EXTENSION	CLOSE TRIM
STRAIGHTNESS	0.8
CORNER & FILLET RADIUS	+50%, -25%
DRAFT ANGLE	+2°, -1°
ECCENTRICITY	-
SURFACE	0.5

MATERIAL	EN 355 FINE GRAIN	Locate
HEAT TREATMENT	ISO THERMAL ANNEALING PER IS: 1551 BE SUPPLIED IN SHOT BLASTED COND.	
HARDNESS	150-210 BHN	Rest
MICROSTRUCTURE	FINE FERRITE & PERLITE	
WEIGH		Clamp

INDEX	DESCRIPTION	NO. OF	BY	DATE	REMARKS
(R1)	NOTE AT S. NO. 10, 11 & 12 UNDER HEADING MATL. CONC. DELETED REF. IS: 10/11 (RR-10) L. No 451/901 4.2.13				
	FORGING DRAWING				
	LAY SHAFT				
	AGB - STLN/MARK - DE				
	DRG. NO. X 3303211				
	YEAR: 1974				
	FACTORY: JABALPUR				
	DRG. NO. X-3303211-3 (R1)				