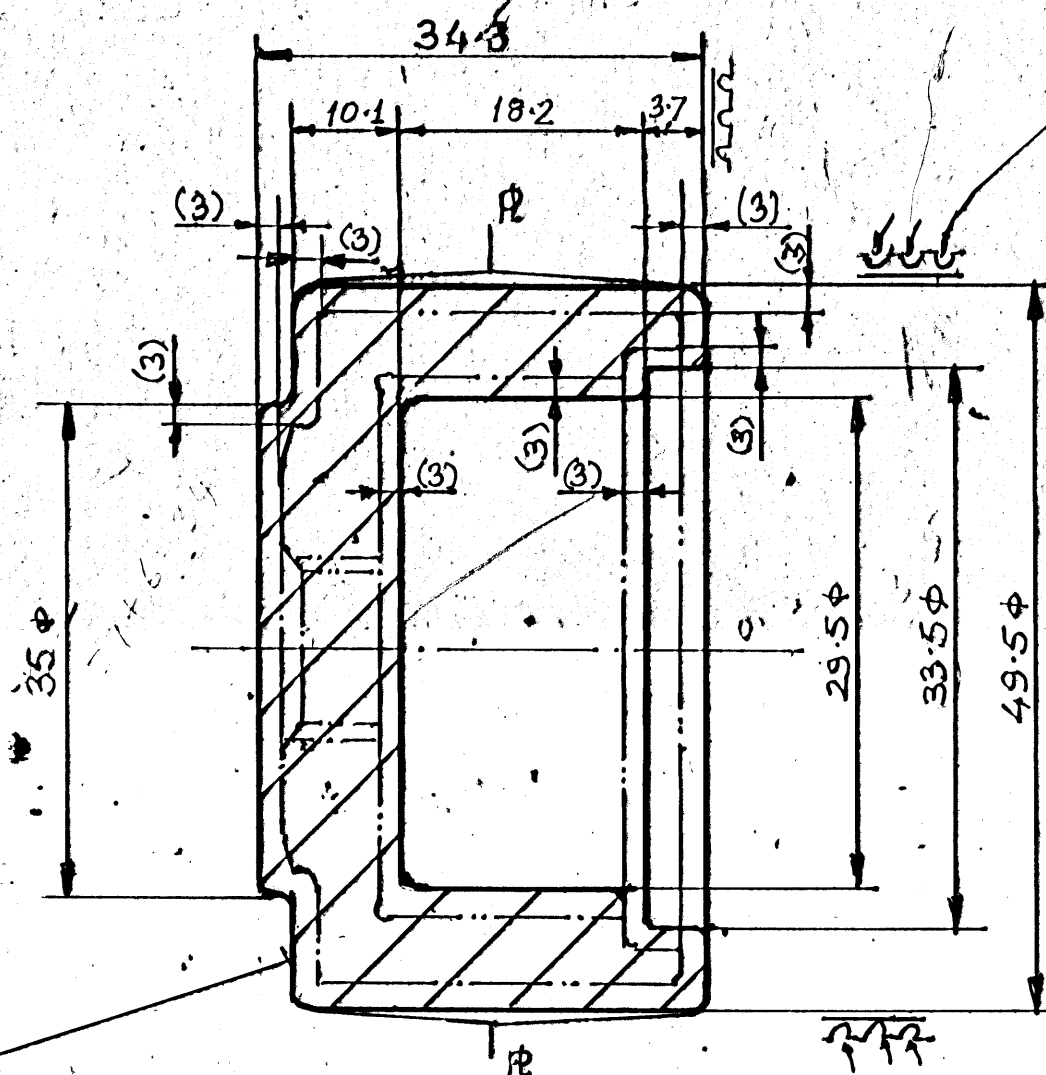


ALL DIMS. ARE IN M.M.

DRG. NO. SUPPLIER'S INITIAL
MFG. MONTH & YEAR TO BE RAISED.



CLAMPING FACE TO BE TRIMMED
FLAT & SMOOTH

NOTE:-

1. FORGING RIDGES TO BE TRIMMED CLEAN & SMOOTH FINISH ALL OVER
2. FORGING TO BE SHOT BLASTED.
3. FORGING TO BE COATED WITH RED OXIDE PRIMER TO ISS: 3-47-13 BY BRUSHING OR SPRAYING.
4. SAMPLE TO BE APPROVED BEFORE BULK SUPPLY.
5. DIM. IN BRACKET INDICATES MACHINING ALLOWANCE.
6. STEEL SHOULD BE FREE FROM CENTRE SEGREGATION PIPING FLAKES ETC.
7. DRAFT ANGLE - 3°
8. UNSPECIFIED RADII - 2.5R
9. ~~CLAMPING FACE & STOP FACE~~ FOR 1ST MACHINING OPERATION.

MATL: EN 353
BS 970

ALT. MATL.
EN 352

CHEMICAL COMPOSITION IN %

HEAT TREATMENT: ISO-THERMAL ANNEALED
HARDNESS: - 170-210 BHN
MICRO-STRUCTURE: ANNEALED STRUCTURE
GRAIN SIZE: - ASTM 5 OR FINER
INCLUSION RATING: 3A B C D THIN
SERIES OR FINER AS PER IS: 4163
1967. STEEL SHOULD NOT HAVE ANY
LARGE INCLUSIONS OR A CONGLOMERATION
OF INCLUSION.

FORGING TOL. AS PER IS: 3469-74

FORGING WEIGHT	ENVELOP WEIGHT	COMPLE XITY	INTRAC OF MATL	FORGING GRADE
APPROX. 0-39 kg	0-51 kg	S1	M1	NORMAL

KIND OF DIM.	TOL.	KIND OF DIM.	TOL.
LENGTH/DIA	+0.8 -0.4	RESIDUAL FLAT	±0.5
THICK.	+0.7 -0.3	TRIMMED FLAT	±0.5
MISMATCH	0.4	ANGULAR	+2° -1°
STRAIGHTNESS	0.6	RADII	+50% -25%
INTERNAL DIMS. REVERSE SIGN. + & -			

(A) DRG. NO. X1802215-3 CHANGED TO D9048415-3(A) AS PER B180M LATEST 8/3/2000

INDEX	ALTERATION	DATE	SIGN
K900			
DRN	TCD	CKD	JWM/TDO
	JWM/PR	WM/HT	DO/TPE

FORGING DRAWING
FOR:- NEEDLE HOUSING
FOR:- DOUBLE UJ.
FT. AXLE, SHAFT
STALLION

VEHICLE FACTORY JBP.

REF. DRG. No.
2:1 SCALE
M/C
T.D.O SECTION
4.9.99 DATE
DEMANDED BY
1/CTPE L/NO. 138/TPE/
P/145/11/4, DT. 24.8.99
1/1 SHEET

DRG. NO. D9045415-3(A)
~~X1802215-3~~

(FOR H.T. & HARDNESS Ref. DRG. NO. 3344411 LAY SHAFT, STALLION)

13/1-1118

31.2.107

A3