NOTE:

DRG. NO.- CC-548

 BLANKS ARE TO BE PUNCHED/MACHINED OUT FROM ROLLED STRIPS, MANUFACTURED FROM HIGH GRADE MILD KILLED STEEL OF GRADE 11 IOA TO SPECIFICATION GOST B 19032-73, DEOXIDISED BY ALUMINIUM WITH FOLLOWING CHEMICAL COMPOSITION. (ESR QUALITY PREFERABLE)

C%	Mn%	Si%	P%	S%	Cr%	Ni%	Cu%	AI%
		NOT MORE THAN						
0.09-0.13	0.30-0.50	0.13	0.025	0.025	0.20	0.15	0.20	0.03-0.09

NITROGEN CONTENT 50 PPM MAX.

2) BLANKS ARE TO BE HEAT TREATED (HARDENED & TEMPERED) FOLLOWED BY PICKLING. PIN HOLES, CANTIES, LAMINATIONS, CRACKS, SCALES AND OTHER ROUGH DEFECTS ARE NOT ALLOWED ON THE SURFACE OF DISKS/STRIPS.

3) PROPERTIES OF BLANK:

TENSILE
= 34-41kgf/mm²
RELATIVE ELONGATION = 35%min.
IMPACT STRENGTH (AFTER MECHANICAL AGEING)
ALONG ROLLING NOT LESS THAN 15.0 kgfm/cm²
ACROSS ROLLING NOT LESS THAN 9.0 kgfm/cm²
IMPACT STRENGTH AS PER GOST 9454-78, MECHANICAL AGEING AS PER GOST 7268-67 WITH DEFORMATIONS DUE TO COMPRESSION.

PROVISIONAL 4) ULTRASONIC TESTING AS PER CQA(M) INSTRUCTION NO. MQA-2/UST/2/97.

- 5) INSPECTION OF THE MACRO STRUCTURE IS TO BE CARRIED OUT IN DISKS AND STRIPS, THE PRESENCE OF COARSE GRAINS IN THE SURFACE LAYER, BREAK IN THE CONTINUITY OF METAL IN THE FORM OF SEPARATION OF LAYERS, TRACES, SHRINKAGE POROSITY, BLOW HOLES AND OTHER ROUGH DEFECTS ARE NOT PERMITTED.
- 6) MICRO STRUCTURE OF STEEL SHOULD CONSIST OF EQUIAXIAL FERRITE GRAINS AND UNIFORMALY ARRANGED GRANULAR OR SORBITIC PEARLITE WITH COMPLETE ABSENCE OF WIDMANSTATTEN PATTERN OF FERRITE.

MAXIMUM GRAIN SIZE 0.07mm

FOLLOWING HEAT TREATMENT SCHEDULE IS SUGGESTED TO ACHIEVE THE MICRO STRUCTURE AND OTHER PROPERTIES— $\,$

- a) AUSTENITIZE AT 900°C
- b) QUENCH IN WATER
- c) TEMPER AT 680°C/700°C FOR AT LEAST 28 HOURS.

IT IS TO BE NOTED THAT THE ABOVE SCHEDULE IS ONLY FOR GUIDANCE OF MANUFACTURER /SUPPLIER & IT DOES NOT ABSOLVE THE MANUFACTURER/SUPPLIER OF THE RESPONSIBILITY OF GIVING CORRECT MICRO-STRUCTURE & OTHER PROPERTIES AS PER THE SPECIFICATION.

- 7) EVERY BLANK SHOULD BE MARKED WITH CAST NUMBER AT 'A' ON SMALLER DIA.
- 8) TOP & BOTTOM SURFACES OF BLANKSSHOULD BE CLEANED BY GRINDING/MACHINING SO AS TO OBTAIN EVEN & SMOCTH SURFACE.

SUITABLE PROTECTIVE COATING SHOULD BE APPLIED TO AVOID RUSTING & CORROSION DURING TRANSPORT & STORAGE.

- 9) FOR ALL OTHER CONDITIONS GOST B19032-73 IS PERTINENT.
- 10) BLANK SHOULD HAVE BLUE COLOUR PAINT MARK ON THE OPPOSITE SIDE OF CAST NO. FOR IDENTIFICATION.

SPECIAL NOTE:

- 1. THICKNESS LESS THAN SPECIFIED WILL NOT BE ACCEPTED.
- THE ANGLE AND CHAMFERED SHOWN IN THE DRG. IS ACTUALLY THE CLEARANCE BETWEEN
 THE DIE AND PUNCH PROVIDED FOR FACILITATING BLANKING OPERATION ONLY. AS SUCH
 THE ANGLE AND CHAMFER ARE NOT SPECIFICALLY MENTIONED & IS NOT IMPORTANT.
 STRAIGHT EDGES ARE ALLOWED.
- 3. ROUNDNESS 1mm (ASYMMETRICALLY) IS ALLOWED.
- INCOMPLETE SHAPE OF ROUND, TEARS, SWELLING ALONG THE CIRCUMFERENCE, ROUGH DENTS, RUPTURE, SEAMS OF METAL, DEEP SCRATCHES, BURRS ARE NOT ALLOWED.

WEIGHT OF BLANK = 8.35 kg(Approx).

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			DIMENSIONS ARE IN mm. THIRD ANGLE PROJECTION SCALE: 1:4			MATERIAL — STEEL 11 I—OA TO GOST B 19032-73/ ALTERNAINE STEEL FOR 2503	आडेनैन्स फैक्टरी अम्बाझरी	
		1	2016	NAME DATE NOMENCLATURE		DRG. NO :		
		1	DRAWN	Kent	25.04.16		CC-548	
		1	CHECKED	The	25.04.16.	SLUG		
			1	HOS/CDD	3/39	25.04.16] BLOG	SHEET NO 1
			1	JWM/CCS /			NO OF SHEETS- 1	
FV	DATE	DESCRIPTION	SIGN.	e HOS/CCS	Let	125 10111	M/C-	OPERATION NO -
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