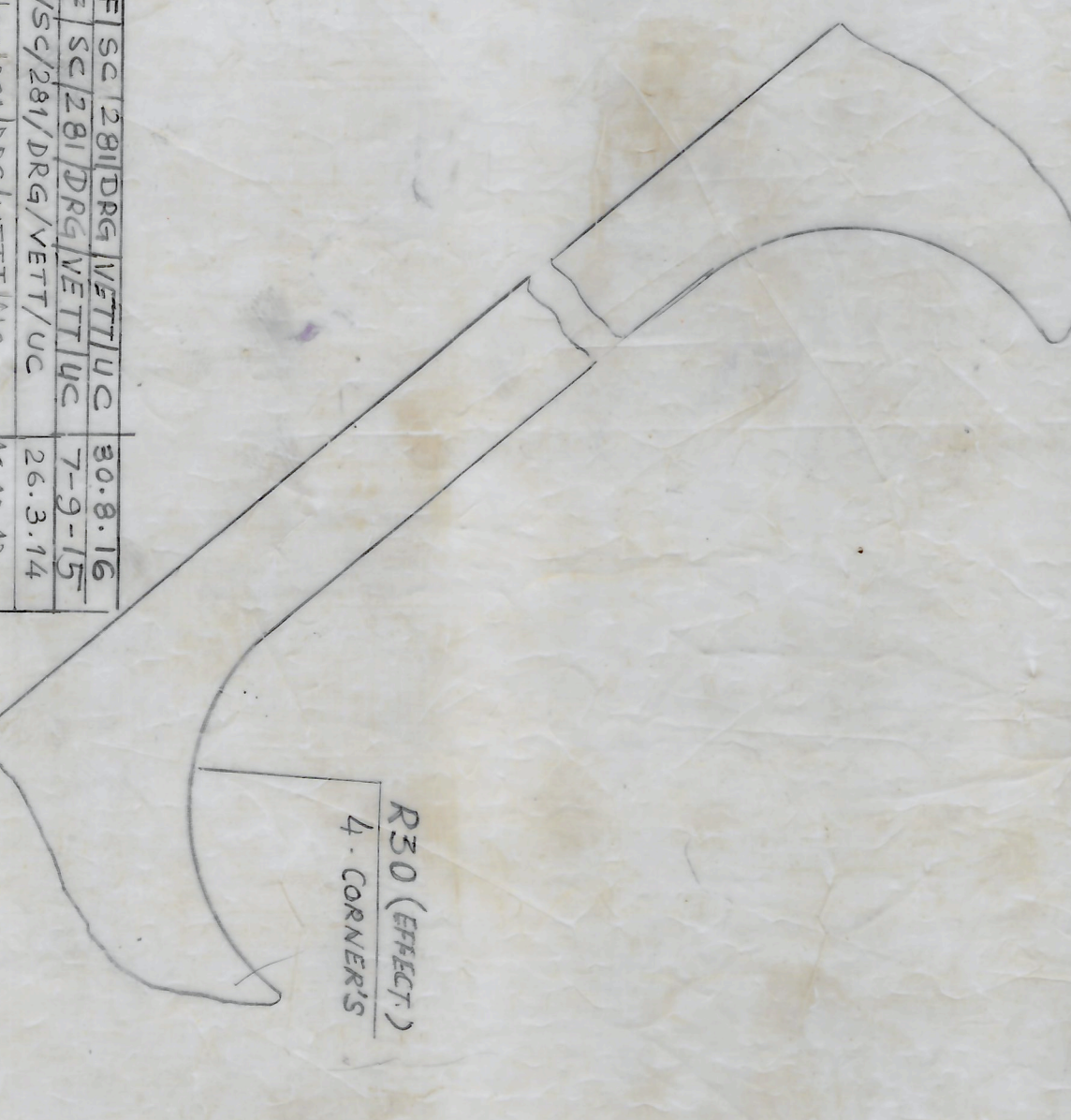


NOTE:-

- THIS DOCUMENT IS THE PROPERTY OF THE GOVT. OF INDIA M. OF D. & IS ISSUED FOR THE PURPOSE OF DEVELOPING/MANUFACTURING STORES REQUIRED FOR DEFENCE USE. IT MUST NOT BE REPRODUCED, DISCLOSED TO ANY THIRD PARTY OR USED FOR ANY CIVIL PURPOSE.
- IT MUST BE RETURNED TO THE ISSUING AUTHORITY WHEN THE PURPOSE OF ITS ISSUE HAS BEEN SERVED.
- DRAWINGS ARE SUBJECT TO CHANGE WITHOUT NOTICE AND WITHOUT APPROVAL FOR BULK MANUFACTURE WILL BE ACCORDED ON SATISFACTORY MACHINING TRIAL & ACCEPTANCE OF FINISH SAMPLES.

1	DESIGNER	DRG/VE/T/UC	18-08-16
2	CHECKER	DRG/VE/T/UC	18-08-16
3	APPROVER	DRG/VE/T/UC	18-08-16
4	DESIGNER	DRG/VE/T/UC	18-08-16
5	CHECKER	DRG/VE/T/UC	18-08-16
6	APPROVER	DRG/VE/T/UC	18-08-16
7	DESIGNER	DRG/VE/T/UC	18-08-16
8	CHECKER	DRG/VE/T/UC	18-08-16
9	APPROVER	DRG/VE/T/UC	18-08-16
10	DESIGNER	DRG/VE/T/UC	18-08-16
11	CHECKER	DRG/VE/T/UC	18-08-16
12	APPROVER	DRG/VE/T/UC	18-08-16



NOTE:-

- MARK AS PER IS-10000-1988
- PROVIDE CASTING DIMENSIONS AS PER ACCURACY CLASS II GOST 2009-85
- UNSPECIFIED CASTING RUM - 5 mm

14. (D) RADIOGRAPHIC TEST SHALL BE CARRIED OUT AS PER ASTM-E-193 WITH THE FOLLOWING ACCEPTANCE STD. LEVEL 5 FOR GAS HOLES AND FOREIGN MAT. LEVEL 3 FOR SHRINKAGE OF ALL TYPES, CRACKS, HOT TEARS, COLD SHRINKS ARE NOT ACCEPTABLE.

- 100% OF THE ADVANCE SAMPLES SHALL BE SUBJECTED TO RADIOGRAPHIC TEST.
- RADIOGRAPHIC TEST OF ADVANCE SAMPLES SHALL BE CARRIED OUT BY COATED-EMULSION ON THE AREA QUALITY ASSURANCE OFFICER CONCERNED SHOULD GET THE RADIOGRAPHIC TEST DONE IN HIS PRESENCE AND FORWARD THE FILMS ALONG WITH RADIOGRAPHIC TEST CERTIFICATE TO COATED/EMULSION FOR SENTENCE AND APPROVAL OF THE MOLD.
- IN CASE OF NONCONFORMANCE OF ANY CASTING OF FIRST LOT OF ADVANCE SAMPLES TO THE SPECIFIED ACCEPTANCE STANDARDS, FRESH LOT OF ADVANCE SAMPLES SHALL BE MANUFACTURED AND SUBJECTED TO RADIOGRAPHIC EXAMINATION TILL THE ENTIRE LOT IS FOUND SATISFACTORY AND BULK PRODUCTION CLEARANCE IS GIVEN.
- FOR BULK COMPONENTS 5% OF EACH CAST/HEAT SELECTED AT RANDOM SHOULD BE SUBJECTED TO RADIOGRAPHIC TEST FAILURE OF ANY SAMPLE WOULD RENDER THE LOT UNACCEPTABLE. SENTENCE MAY BE AWARDED BY AREA QUALITY ASSURANCE OFFICER BASED ON THE STANDARD OF ADVANCE SAMPLES APPROVED BY COA (VET).
- ANY HEAT REJECTED FOR RADIOGRAPHIC TEST MAY BE WELDED OUT/TOTAL RADIOGRAPHY AT PRODUCER'S COST IF HE SO DESIRES.
- OTHER TECHNICAL DETAILS AS PER CAD(METRIC)RUPUR INSTRUCTION NO. MDA-1/9A-1/12.

(a) (IN PUT DRAWING)

(b) (FOR OUT PUT DRG. SEE GCF TM-275)

SALENT FEATURES OF MATERIAL:-

GRADE OF STEEL	CONTENTS OF ELEMENT IN %		PHOSPHORUS	SULPHUR
CEJL-3	0.05-0.10	0.005-0.025	0.025	0.025
CEJL-2	0.05-0.10	0.005-0.025	0.025	0.025

NOTE:-

APPROVED FOR MATERIAL ONLY W/OE I.O.F.A.  
L.No. IAJ/5384/30 MIN MTR/TC DT. 19-8-88.

RADIOGRAPHY EXAMINATION, DEPTH OF DECARBURIZATION AND OTHER TESTS SHOULD BE CARRIED OUT TO MEET REQUIREMENT SPECIFIED IN THE GIVING DRAWING SPECIFICATION OCT. 3. 43.65-73.

- UNSPECIFIED CASTING RUM = 5MM, MAXIMUM.
- CASTING DRAFTER - 2:
- CASTING SIZES - ACCORDING TO CL. II GOST 2009-85.
- CORRECTION BY WELDING-UP IS ALLOWED PRIOR TO POURING HEAT TREATMENT.
  - CASTING DEFECTS (CAVITIES, SOIL FOULING, LAMINATION, ETC.) UP TO 10% OF CASTING THICKNESS, DEPTH AT DEFECT LOCATIONS. PART GEOMETRIC CORRECTION BY BUILD-UP UP TO 25% OF CROSS-SECTION THICKNESS, AT PERFECT LOCATIONS.
  - AFTER HEAT TREATMENT IT IS ALLOWED TO CORRECT PARTS BY WELDING UP CAVITIES, PIN-HOLES AND OTHER DEFECTS NOT DEEPER THAN 5MM, AND WITH TOTAL AREA NOT EXCEEDING 3CM<sup>2</sup> PER MORE THAN 5 DEFECTS LOCATED NOT IN GROUPS.
- TOLERABLE ON UNMACHINED SURFACES WITHOUT CORRECTION:
  - SIEVE-LIKE POROSITY LOCATED NOT IN GROUPS, NOT DEEPER THAN 2MM, WITH TOTAL AREA NOT EXCEEDING 1% OF GIVEN SURFACE.
  - SINGLE CAVITIES, NOT EXCEEDING 1CM<sup>2</sup> AND NOT DEEPER THAN 2MM, LOCATED NOT LESS THAN 50MM FROM EACH OTHER AND NOT MORE THAN 2 ON ONE SURFACE.
  - SUBJECT CASTING TO HEAT TREATMENT.
  - RISER RESIDUE = 8MM, VIA MOLDING.
  - OTHER REQUIREMENTS - ACCORDING TO TT 25011.000005.
  - MARK PART NO. AND HEAT NO.
  - RISER BOTTOM SURFACE.
  - GATE AND SAMPLE RESIDUE TO 0 TO 2MM, RISER RESIDUE - UP TO 6MM.
  - MARKED (V) & ARE INITIAL MACHINING DATUM SURFACE.

MATERIAL:- STEEL CBN-2 GOST B 19184-73.  
(B) FOR PROCUREMENT OF CNC MACHINES ONLY.

NOTE:-  
1. DIMS. MARKED \* ADDED AND DIMS. MARKED @ AMENDED.  
2. DRAWING UPDATED ON 18-11-02.

NO.	REVISION	DATE	BY	CHKD	APPD	REMARKS
1	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
2	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
3	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
4	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
5	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
6	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
7	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
8	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
9	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
10	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
11	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
12	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	

\* 1005-560421  
\* 1005-560428

NO.	REVISION	DATE	BY	CHKD	APPD	REMARKS
1	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
2	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
3	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
4	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
5	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
6	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
7	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
8	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
9	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
10	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
11	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	
12	ISSUED FOR TENDER	18-08-16	DRG/VE/T/UC	DRG/VE/T/UC	DRG/VE/T/UC	