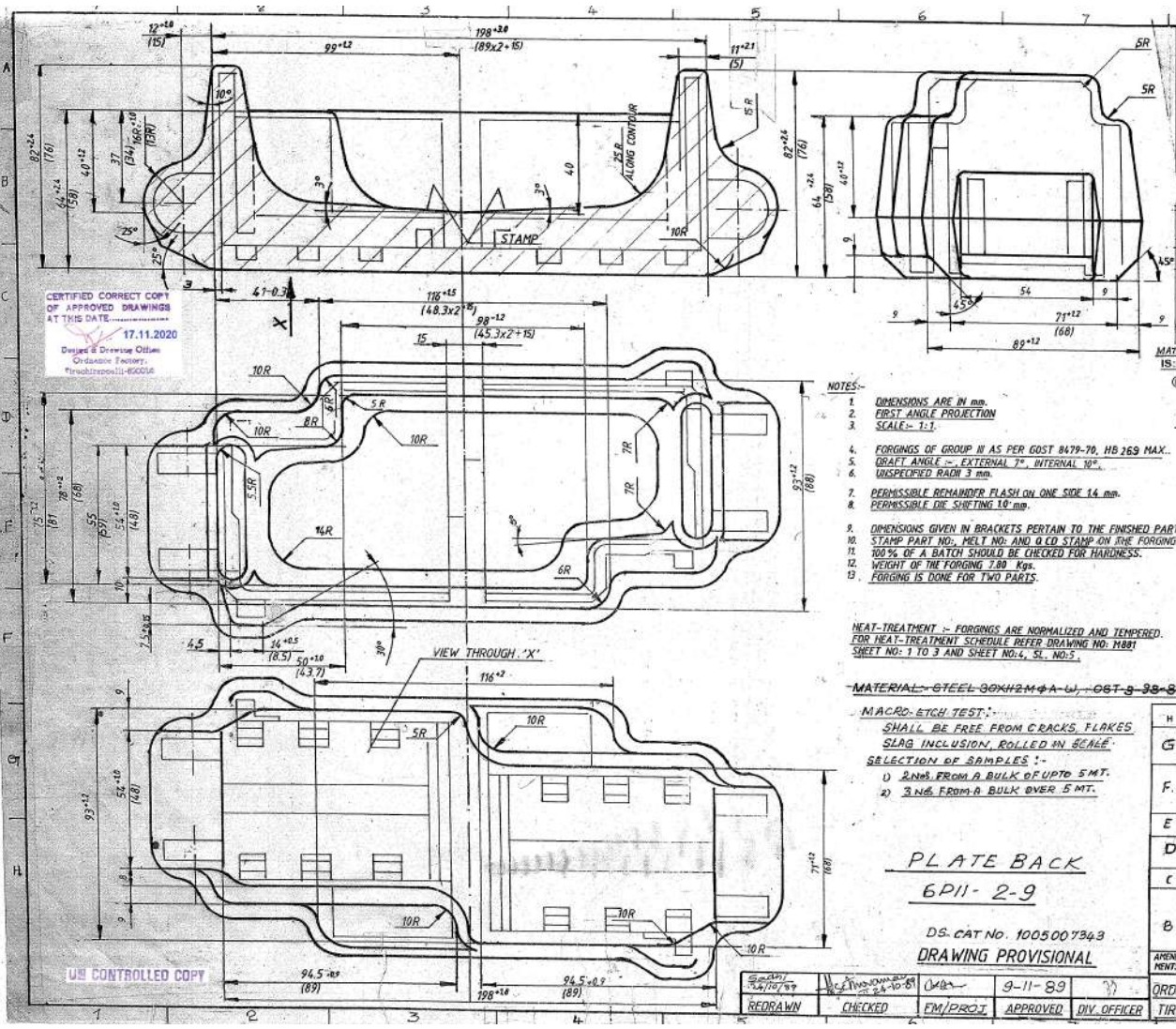

CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE.....
17.11.2020
Designs & Drawings Office
Ordnance Factory,
Tiruchirapalli-620016

UN CONTROLLED COPY

NOTES:-

1. DIMENSIONS ARE IN mm.
2. FIRST ANGLE PROJECTION
3. SCALE:- 1:1.
4. FORGINGS OF GROUP III AS PER GOST 8479-70, HB 269 MAX.
5. DRAFT ANGLE :- EXTERNAL 7°, INTERNAL 10°.
6. UNSPECIFIED RADII 3 mm.
7. PERMISSIBLE REMAINDER FLASH ON ONE SIDE 14 mm.
8. PERMISSIBLE DIE SHIFTING 10 mm.
9. DIMENSIONS GIVEN IN BRACKETS PERTAIN TO THE FINISHED PART.
10. STAMP PART NO:, MELT NO: AND Q CD STAMP ON THE FORGING.
11. 100 % OF A BATCH SHOULD BE CHECKED FOR HARDNESS.
12. WEIGHT OF THE FORGING 7.80 Kgs.
13. FORGING IS DONE FOR TWO PARTS.

HEAT-TREATMENT :- FORGINGS ARE NORMALIZED AND TEMPERED. FOR HEAT-TREATMENT SCHEDULE REFER DRAWING NO: H881 SHEET NO: 1 TO 3 AND SHEET NO:4, SL. NO:5.

~~MATERIAL:- STEEL 30XH2MФA-W, - OST 3-98-80~~

MACRO-ETCH TEST:-
SHALL BE FREE FROM CRACKS, FLAKES, SLAG INCLUSION, ROLLED IN SCALE.

SELECTION OF SAMPLES :-
1) 2 Nos. FROM A BULK OF UPTO 5 MT.
2) 3 Nos. FROM A BULK OVER 5 MT.

CHEMICAL COMPOSITION OF THE MATERIAL 30XH2MФA-W (ESR QUALITY)

C	0.27-0.34	Mo	0.20-0.30
Si	0.17-0.37	V	0.10-0.18
Mn	0.30-0.60	S	0.010 MAX.
Cr	0.60-0.90	P	0.016 MAX.
Ni	2.00-2.40	Cu	0.20 MAX.

MECHANICAL PROPERTIES OF THE MATERIAL 30XH2MФA-W (ESR QUALITY)

ULTIMATE STRENGTH	160 Kgf/mm²
YEILD STRENGTH	130 Kgf/mm²
ELONGATION %	10%
RELATIVE REDUCTION IN AREA	45 %
IMPACT STRENGTH	7 Kgf/cm²

MATERIAL FOR INDIA:-
IS: 5517-1993 DESIGN. 42Cr4 Mo2 LRS-30mm
(H) BS. 970 PT. 1:1983 Gr. 708 M40 OR Gr. 709 M40 OR IS: 4367-67 DESIG. 40 Cr. 1. Mo. 2.5

MATERIAL:- STEEL 40X OST 3-98-80

ALT. MATL.: STEEL 30XPA OST 3-98-80

VETTED FOR MATERIAL ONLY
Principal Scientific Officer,
Quality Assurance Division,
For Senior Quality Assurance Officer
Quality Assurance Estt. (Army)
Tiruchirapalli-620 016

PLATE BACK

6P11-2-9

DS. CAT NO. 1005007343

DRAWING PROVISIONAL

AMEND-MENTS	DESCRIPTION/DETAILS	SIG. & DATE
H	MATL. AMENDED AS PER DA No. 27695-SA Dt. 02.06.17 Amended Dt. 01.11.17	PP
G	MACRO ETCH TEST ADDED. REF. CQA(SA) LETTER NO. MQA-1/02/TS. DT 19.7.93.	S. Rajan 10/96
F.	MATL. STEEL 30XH2MФA-W. DELETED. MATL. STEEL 40X OST-3-98-80 & ALT. MATL. STEEL 30XPA OST 3-98-80 INTRODUCED. REF: CQA(SA). DTG. DT. 16.4.93	S. Rajan 10/93
E	MATERIAL FOR INDIA ADDED. DGST 20767-89 Dt 8-5-90, VIDE LE DL 23-9-90	
D	1. MATERIAL STEEL 40X AND STEEL 30XPA DELETED 2. MATERIAL STEEL 30XH2MФA-W INTRODUCED 3. NEW DRAWING PREPARED	5-11-87
C	ALT. MATL. 30XGSNMA ADDED.	
B	BI-LATERAL TOLERANCE DELETED & UNI-LATERAL TOLERANCE ADOPTED DRAWING NO: 1200 SL4 DELETED AND RENUMBERED AS 62 C 2209 200 B 2. DRAWING UPDATED.	5-11-87

REDRAWN	CHECKED	FM/PROJ	APPROVED	DIV. OFFICER
24/10/89	24-10-89		9-11-89	

ORDNANCE FACTORY TIRUCHIRAPALLI-16.

DRG. NO: 62 C 2209 200 H2