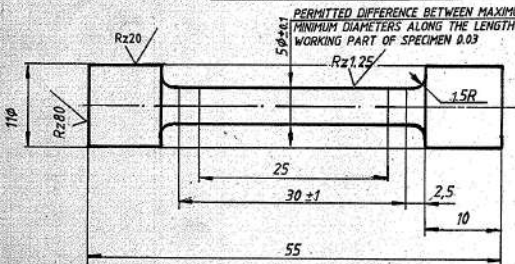


TEST SPECIMEN FOR TENSILE AND IMPACT STRENGTH FOR BLANKS

(Blanks of Component Nos. G 1102, S 1002 and A 1003)

TENSILE TEST SPECIMEN (As Per Gost 1497-84)



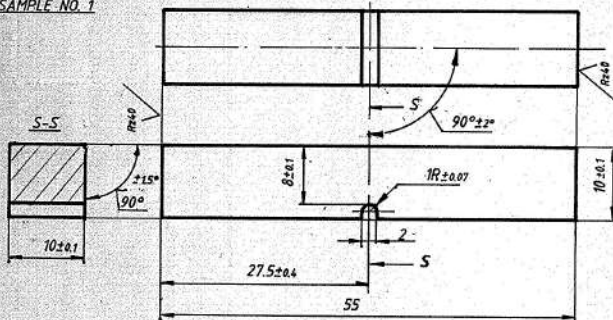
As per Gost 5160-70 & Gost 4543-71	
YIELD POINT	80 kgf/mm ² MINIMUM
TENSILE STRENGTH	90 Kgf/mm ² MINIMUM
ELONGATION	10 % MINIMUM
RELATIVE REDUCTION	40 % MINIMUM
TESTING TEMPERATURE	20°C ± 0.5°C

NOTES :-

- MECHANICAL PROPERTIES OF BLANKS ARE TO BE OBTAINED FROM TEST PIECES CUT OUT LONGITUDINALLY FROM HEAT-TREATED BLANKS
- ADDITIONAL TEST TO BE CARRIED OUT FOR IMPACT STRENGTH AS PER SAMPLE 2 AT NORMAL TEMPERATURE. RESULTS OF THIS TEST ARE ENTERED IN THE QUALITY CERTIFICATE.
- WHILE TESTING FOR IMPACT STRENGTH WHEN OBTAINING A CRYSTALLINE FRACTURE ON TEST PIECES, AN ADDITIONAL TEST OF TWO SAMPLES IS CARRIED OUT AT A TEMPERATURE OF -50°C, IN THIS CASE THE VALUE OF IMPACT STRENGTH IS 5 KgfM/cm² MINIMUM FOR EACH SAMPLE
- FOR CHECKING MECHANICAL PROPERTIES, TWO BLANKS ARE SELECTED FROM A BATCH HAVING MAXIMUM AND MINIMUM BRINELL HARDNESS. SAMPLES ARE REMOVED FROM ONE END OF THE BLANK FOR COMPONENT NOS. G1102 AND S1002 AND FROM BOTH THE ENDS OF THE BLANKS FOR COMPONENT NOS. G1102 AND A1003 AS PER TYB 3-41-86
- NO. OF TEST PIECES REQUIRED :-
TWO TEST PIECES FOR TENSILE TEST AND TWO TEST PIECES FOR IMPACT TEST.
- REPEATATIVE TEST :- IN CASE BLANKS/TEST PIECES FAIL TO PASS THE TEST, DOUBLE THE QUANTITY OF THE TEST PIECES ARE SUBJECTED TO RE-TEST. PARAMETERS FOUND NOT SATISFACTORY IN THE FIRST TEST ARE ONLY RE-TESTED. WHEN THE RE-TEST IS ALSO A FAILURE THEN THEY ARE SUBJECTED TO ANOTHER HEAT-TREATMENT AND COMPLETE TEST-REPEATED HEAT-TREATMENT IS PERMITTED ONLY TWICE.
- DURING RETESTING, TEST PIECES SHOULD BE TAKEN FROM THE SAME LOCATION AS THE PREVIOUS ONE WHICH FAILED THE TEST.
- HARDNESS TO BE CHECKED ON EACH BLANKS.
- REMAINING TECHNICAL REQUIREMENTS SHOULD BE AS PER GOST 4543-71 : 5160-70 AND TYB3-41-86
- THE STEEL SHOULD BE TESTED FOR ABSENCE OF CONCHOIDAL FRACTURE IN SAMPLES TESTED FOR IMPACT STRENGTH. WHILE EVALUATING CONCHOIDAL FRACTURES, PERMISSIBLE NUMBER ARE 1 AND 2 [SEE APPENDIX GOST 5160-70]

IMPACT TEST SPECIMENS (As Per Gost 9454-78)

SAMPLE NO. 1



As per Gost 5160-70 & Gost 4543-71	
IMPACT STRENGTH	9 KgfM/cm ² MINIMUM
TESTING TEMPERATURE	20°C ± 0.5°C
ENERGY OF PENDULUM	15 OR 30 KJ/s

HARDNESS OF TEST SPECIMEN HB 269-341

CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE.....

17.11.2020

Design & Drawing Office
Ordnance Factory,
Tiruchirappalli-630016

UN CONTROLLED COPY

AUTHENTICATED BY :-

LEADER
SOVIET CO-ORDINATING TEAM
ORDNANCE FACTORY
TIRUCHIRAPALLY-16

SENIOR ENGINEER
SOVIET CO-ORDINATING TEAM
ORDNANCE FACTORY
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SHEETS :- 1	1 ST ANGLE	Checked	AWM/PROJECT	APPROVED
SHEET NO :- 1	PROJECTION	Checked	AWM/PROJECT	DRG. NO.
DIMENSIONS	SCALE	Sadhi 12/11/20	AWM/PROJECT	06 D 0000 303 A 3
ARE IN mm	2:1	DRAWN	AWM/PROJECT	