



## RAW MATERIAL INCOMING INSPECTION REPORTS

D.C. No. :- F/05/01  
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Report NO.	740	SECTION :-	20	HAET NO. :-	7725	INVOICE NO. :-	ASIL/P/E/2979476											
DATE :-	21/12/2024	STEEL SUPPLIER :-	AASTE	REC.QTY :-	29500	INVOICE DATE :-												
GRADE :-	SAE1053H	STEEL TC NO. :-	4501	NO. OF BARS :-														
01) Process / Mfg Route																		
Chemistry	%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Pb	%Ca	%Nb	%Ti	%B
Min	0.48	0.6	0.15	0.015	—	—	—	—	0.02	—	—	—	—	—	—	—	—	—
Max	0.55	0.9	0.4	0.035	0.035	0.25	0.25	0.06	0.05	0.25	—	—	—	—	0.001	—	—	0.001
Mill Tc Value	0.50	0.85	0.207	0.017	0.017	0.188	0.13	0.036	0.021	0.102	—	—	0.0016	—	0.005	—	0.01	0.005
Spectro Value	0.485	0.793	0.216	0.02	0.015	0.183	0.135	0.038	0.025	0.098	—	—	0.002	—	—	0.002	0.01	0.005
02) Bar Size (As per WI...) Qty: 10 % Of Total Heat																		
Diameter/Section Size (In mm)																		
S.NO.	1	2	3	4	5	6	7	8	9	10	11	12						
10	119.5	119.8	119.7	119.6	119.5	119.4	119.3	120.1	120.2	119.8								
03) Gas Content (PPM): As per Mill Tc																		
N2 H2 O2																		
Min — — —																		
Max — — —																		
Value																		
Mill Tc 78 0.881 12																		
04) Steel Supply Condition: AS ROLLED																		
05) MACRO (i) Internal soundness Sample : (ASTM E381 or as per customer) S-2 R 2 C 2																		
Value Obs. —																		
(ii) Dendrite structure O1 sample : —																		
(iii) Step Down Test Sample : (IS4075 or as per customer) —																		
06) Micro structure As Rolled : Micro structure : { or as per customer }																		
Mill Tc P + F																		
SSB P + F																		
07) ULTRASONIC TEST (AS PER ASTM A388) : Mill Tc 100 % OK																		
08) INCLUSION RATING ( IS 14163 /ASTM: E45A OR REQUIRED BY CUSTOMER )																		
A B C D DS																		
Sulphide Aluminate Silicate Oxide																		
TN TK TN TK TN TK TN TK TN TK																		
Cust Spec. If Any 2.0 1.5 2.0 1.0 0.5 0.5 1.0 1.0 — —																		
Mill Tc 1.5 0.0 0.5 0.0 0.0 0.0 1.0 0.0 — —																		
SSB 1.5 0.0 0.5 0.0 0.0 0.0 1.0 0.0 — —																		
09) GRAIN SIZE : Spec. :- Mill Tc 7.0 SSB 6.5																		
10) JOMINY HARDENILITY IS-3848 /ASTMA255 (As per required by Customer)																		
Distance 1.5 3 5 7 9 11 13 15 20 25 30																		
Specified 59-63 50-61 45-58 32-50 28-42 26-36 25-31 24-31 22-30 20-24 20-24																		
Mill Tc 59.5 58 52 36 32 31.5 31 30.5 29 27.5 25.5																		
Observed 59 58 51 37 33 32 31 29 28 27 25																		
11) MECHANICAL PROPERTIES : (If Required in TDC /Customer )																		
As per IS:1608/ ASTM A 370																		
U.T.S N/mm2 /MPA Y.S N/mm2 %EL IMPACT VALUE CHERRY IMPACT VALUE IZOD																		
Specified 930/1120 706 MPa 8 MPa 30 J MPa																		
Observed 984 789 9.5 47 J																		
As Rolled Hardness (BHN (Max / Min) (If Required in TDC /Customer )																		
1 2 3 4 5																		
185 197 189 191 193																		
12) VISUAL : (i) Surface Condition 100 % Bars Checked OK No (Gas Cutting, Rwt, Cracks)																		
(ii) Heat No. 100 % Bars Checked OK (7725)																		
(iii) Color Code. 100 % Bars Checked OK (4 Green w/ Green Dot)																		
13) REDUCTION RATIO : Specify BLOOM SIZE - 240x240 REDUCTION RATIO : 5.1:1																		
(If Required in TDC /Customer ) As Per Mill TC																		
14) DECARB LEVEL : (AS PER IS 6396 / ASTM E1077 ) Specified NA																		
(If Required in TDC /Customer ) Observed PD 0.23 FD																		
15) UPSETIBILITY TEST ( AS PER IS 10167 ) :																		
16) Test Certificate verified for Each Heat no : Available & Ok Not Available Not Conforming																		
OK																		
17) TDC / Customer STD SSB/TDC/ Mill Tc No. Mill Tc Date Verified By :																		
(If Required in TDC /Customer )																		
18) MIX-UP TEST Verified By Mobile Spectro /X-Ray Gun/Spark Test																		
(If Required in TDC /Customer ) Accepted [X] Rejected																		
Other Remarks																		
Checked By [Signature] Approved By [Signature]																		