

AARTI STEELS LIMITED

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MANUFACTURER'S OF: - CARBON ALLOYS & SPECIAL STEELS

TEST CERTIFICATE



MENO

-: Original

Date -: 31/12/2017 13:24:28 T.C.NO. 7273 M/S. - MAHADEV FORGE (PVT.) LTD. Invoice No. 9724 536/35D/A4, SUA ROAD. NEAR-Truck No. PB10FV-9920 EASTMAN CHOWK, LUDHIANA. NO. OF SUPPLY CONDN. OTY. COLOUR CODE MANUFACTURING ROUTE HEAT NO. GRADE SIZE PCS. (MT) 72 AS ROLLED 6.110 E.A.F.+L.F.+V.D.+CCM+EMS YELLOW 20 MNCR5 | 50 DIA | 1212 CHEMICAL COMPOSITION IN PERCENTAGE Sn Ti Cu Al P Si Ni Cr Mo C Mn S 0.1700 1.1000 -- - 0.1500 1.0000 Min 0.2200 1.4000 0.0350 0.0350 0.4000 -- 1.3000 Max Actual | 0.1700 | 1.1300 | 0.0270 | 0.0180 | 0.2280 | 0.0240 | 1.0400 | 0.0010 | 0.0026 | 0.0300 | 0.0090 | 0.0040 | 0.0034 | 0.0004 | 0.0008 METALLURGICAL RESULTS -:-Gas Content INCLUSION RATING IS: 4163/JK CHART/ASTM E-45A Aust. Grain (ppm) Size ASTM No. D B (E-112)T H H T H T H T 17 0.09 02 Decarb. (MM) 2.0 1.0 1.0 2.0 1.0 1.0 2.0 2.0 STD N2 82 MAX Micro-.932 H2 Structure 1.0 0.0 0.0 0.0 0.5 0.0 ACTUAL 1.5 MIX UP TEST ULTRASONIC MACRO MECHANICAL PROPERTIES (ASTM A-370/IS-1608) TEST TEST CONDITION (N / H & T) SPARK TEST Hardness BETTER THAN RA% CUImpact U. TReview & Mantied 100% DONE OK 100 % DONE OK C2, R2, S2 MAX B.H.N./Rb Accepted/F LEVEL AS PER PLATE Ist OF 240 MAX Reqd. Comment ASTM-E-381 154-160 Actual HARDENABILITY (HRC) AS PER IS: 3848 :-|J1/16 |J2/16 |J3/16 |J4/16 |J5/16 |J6/16 |J7/16 |J8/16 |J9/16 |J10/16 |J12/16 Distance 36-40 |-Required

Note :- TESTED FOR RADIOACTIVE CONTAMINATION &

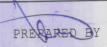
Remarks :- REDUCTION RATIO=13.0,100% MOBILE SPECTRO DONE OK (X-RAYS)

39

34

CERTIFIED THAT THE TEST FINDINGS ARE CORRECT & ARE BASED ON ACTUAL RESULTS CARRIED OUT ON SAMPLESS DRAWN AS PER Q.A.P.

Actual



30.5

24

SURFACE SATISFACTORY

26

27.5

AUTHORISED SIGNATORY