



AARTI STEEL INTERNATIONAL LIMITED

Registered Office : G.T.Road, Miller Ganj, Ludhiana.

Works : Focal Point, LUDHIANA - 141 010. (INDIA)

Phone no. :- +91-161-5244200 Fax :- +91-161-5244250

MANUFACTURER'S OF :- CARBON ALLOYS & SPECIAL STEELS

REGD. OFF. - 159 061 2516 COMPANY :-

TEST CERTIFICATE :-

-: Original :-

M/S.- S.S.B. ENGINEERS PVT. LTD.
PLOT NO.C-158A, M.I.A ALWAR
RAJASTHAN-301030

T.C.NO. 5928 Date :- 20/03/2025 16:57:53
Invoice No. 5807
Truck No. PB10HW-6229

GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY COND.N.	QTY. (MT)	NO. OF PCS.
20MNCR5 B	80 DIA	6909	E.A.F.+L.F.+V.D.+CCM+EMS	PHEROZY+RED DOT	AS ROLLED	15.460	79

:- CHEMICAL COMPOSITION IN PERCENTAGE :-

	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Sn	Ti	B	Ca
Min	0.1500	1.0000	0.0200	--	--	--	1.0000	--	--	0.0200	--	--	--	0.0010	--
Max	0.2000	1.3000	0.0350	0.0250	0.3000	0.3000	1.3000	0.1200	--	0.0500	--	--	--	0.0030	--
Actual	0.1610	1.2800	0.0210	0.0170	0.2400	0.0830	1.2300	0.0620	0.0039	0.0340	0.1990	0.0084	0.0038	0.0017	0.0007

:- METALLURGICAL RESULTS :-

INCLUSION RATING IS : 4163/JK CHART/ASTM E-45A									Aust. Grain Size ASTM No. (E-112)	7	Gas Content (ppm)	
A		B		C		D		Decarb. (MM)	O2		14	
	T	H	T	H	T	H	T		H	Micro- Structure	P+F	N2
STD MAX	2.0	1.0	2.0	0.0	2.0	0.0	2.0	1.0	ACTUAL			P+F
	1.5	0.0	0.5	0.0	0.0	0.0	1.0	0.0				

MECHANICAL PROPERTIES (ASTM A-370/IS-1608) AS ROLLED MACRO ULTRASONIC MIX UP TEST
TEST CONDITION (N / H & T) TEST

	U.T.S.	Y.S.	EL%	RA%	Impact Value	Hardness BHN / HRB	C2,R2,S2 LEVEL AS PER PLATE 1st OF ASTM-E-381	100 % DONE OK	SPARK, MOBILE SPECTRO TEST 100% DONE OK
Reqd.	-	-	-	-	-	-	-	-	-
Actual	-	-	-	-	-	220-231	-	-	-

:- HARDENABILITY (HRC) AS PER IS : 3848 :-

Distance | 5 MM | 10 MM | 25 MM |

Required | 39-43 | 35-39 | 27-31 |

Actual | 43 | 37.5 | 29 |

Remarks :- REDUCTION RATIO=11.5:1, BILLET SIZE=240X240 MM, SURFACE SATISFACTORY
THIS RAW MATERIAL MADE FOR ASHOK LEYLAND AS PER STANDARD ALS 258.02
DATE: 17.12.2015

JOMINY: 50 MM=26.5(24 MIN), HEAT APPROVED MAIL DATE: 01.03.2025
ISSUE 02 & CSR ISSUE 03, DATED 15.02.14 RMQP(P), REV. 03

Note :- TESTED FOR RADIOACTIVE CONTAMINATION

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

PREPARED BY

AUTHORISED SIGNATORY