

Sample Result Name	9771 (S-350) SHARU	Type	Unknown	Measure Date Time	Wednesday, July 30, 2014	Recalculation Date Time	3:31:20 PM	Origin	Measured
Method Name	Fe-30-MO	Method Version		Operator Name	SARA SAE	Check Type	None	Check Status	Not Used
Grade Verification Name		Grade Verification Similarity	0	Correction Type	None	Type Corr Sample Name		Grade Search Name	
Grade Search Similarity	0	Type	None	Status	Not Used	Outlier Removal			
Sample Name	9771 (S-350) SHARU	Grade							

	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co	Cu	Nb	Ti	V	W	Pb	Sn	As	Zr
	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc
1	0.032	0.17	0.35	0.019	0.028	0.015	<0.003	0.017	0.012	<0.005	0.004	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
2	0.034	0.18	0.35	0.019	0.022	0.006	<0.003	0.013	0.014	<0.005	0.004	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
3	0.026	0.18	0.35	0.021	0.021	<0.005	<0.003	0.011	0.011	<0.005	0.004	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
Rep	0.031	0.18	0.35	0.020	0.024	0.009	0.003	0.013	0.012	<0.005	0.004	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
Min Cal	0.006	0.005	0.004	0.003	0.002	0.005	0.003	0.005	0.003	0.005	0.002	0.005	<0.0010	0.002	<0.040	<0.010	<0.002	<0.005	0.003
Mean	0.031	0.18	0.35	0.020	0.024	0.008	<0.006	0.013	0.012	<0.008	0.004	<0.016	<0.005	0.002	0.040	0.010	0.002	0.005	0.003
Max Cal	3.00	5.04	18.12	0.18	0.30	36.00	10.20	55.2	6.24	21.60	7.44	3.60	3.60	12.00	7.32	0.13	0.27	<0.001	<0.002
	Ca	B	Fe																
	Conc	Conc	Conc																
1	0.0009	<0.0005	99.3																
2	0.001	<0.0005	99.3																
3	0.0006	<0.0005	99.3																
Rep	0.0010	<0.0005	99.3																
Min Cal	0.0005	0.0005																	
Mean	0.0010	<0.0000	99.4																
Max Cal	0.016	0.025																	

Quality in 1008 as per SAE 96-615



SHARU STEELS (P) LTD.

B-48 & D-251, Phase-VII, Focal Point, LUDHIANA - 141 010.
E-mail : info@sharusteels.com & sales@sharusteels.com

QUALITY ASSURANCE DEPARTMENT
METALLURGICAL TEST REPORT

F-QCD-03



ISO/TS
16949 : 2009
ISO 9001 : 2008
ISO 14001 : 2004

TEST CERTIFICATE

M/S. SARA SAE PRIVATE LIMITED DIVISION-II
A-2 SARA INDUSTRIAL ESTATE LTD.
CHAKRATA ROAD, SELAQUI RAMPUR
DEHRADUN (UTTRAKHAND)

T.C. No. 0085

Date 02-07-2014

Invoice No.

Truck No. PB11AN-8494

GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY COND.	QNTY. M.T.	NO. OF PCS.
SAE1008	25X35 MM	S-350	L/HT	YELLOW	AS ROLLED	6.495 MT	LOOSE

CHEMICAL COMPOSITION IN PERCENTAGE

	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Sn	Ti	B	Ca
Min.	-														
Max.	-														
Actual	0.09	0.46	0.032	0.034	0.08					0.030					

METALLURGICAL RESULTS

INCLUSION RATING IS : 4163/JK CHART/ASTM E-45A									Aust. Grain Size ASTM No. (E-112)		Gas content (ppm)	
	A		B		C		D		Decarb. (MM)	6/7	O ₂	
	T	H	T	H	T	H	T	H			N ₂	
STD MAX									Micro-Structure		H ₂	
ACTUAL	1.0		1.0		1.0		1.0	0.5		p+f		

MECHANICAL PROPERTIES							MACRO	ULTRASONIC TEST	MIX UP TEST
	U.T.S.	Y.S.	EL %	RA %	Impact Value	Hardness B.H.N. / Rb	OK		OK.
Reqd.									
Actual									

HARDENABILITY (HRC) AS PER IS : 3848

Distance									
Regd.									
Actual									

Remarks :