

Sample Result Name	Type	Measure Date Time	Recalculation Date Time	Origin
9813 (DIA-40 MM) HNO-S-67	Unknown	Thursday, August 14, 2014	11:32:30 AM	Measured
Method Name	Method Version	Operator Name	Check Type	Check Status
Fe-30-MO		SARA SAE	None	Not Used
Grade Verification Name	Grade Verification Similarity	Correction Type	Type Corr Sample Name	Grade Search Name
	0	None		
Grade Search Similarity	Type	Status	Outlier Removal	
0	None	Not Used		

Sample Name
9813 (DIA-40 MM) HNO-S-67

	C Conc %	Si Conc %	Mn Conc %	P Conc %	S Conc %	Cr Conc %	Mo Conc %	Ni Conc %	Al Conc %	Co Conc %	Cu Conc %	Nb Conc %	Ti Conc %	V Conc %	W Conc %	Pb Conc %	Sn Conc %	As Conc %	Zr Conc %
4	0.088	0.095	0.44	0.020	0.019	0.056	<0.003	0.033	0.011	<0.005	0.036	<0.005	<0.0010	<0.002	<0.040	0.010	0.008	<0.005	<0.003
5	0.069	0.054	0.26	0.015	0.013	0.040	0.013	0.036	<0.003	<0.005	0.039	<0.005	<0.0010	<0.002	<0.040	<0.010	0.008	<0.005	<0.003
6	0.11	0.089	0.44	0.015	0.021	0.058	<0.003	0.033	<0.003	<0.005	0.038	<0.005	<0.0010	<0.002	<0.040	<0.010	0.008	<0.005	<0.003
Rep	0.088	0.079	0.38	0.017	0.018	0.051	0.006	0.034	0.005	<0.005	0.038	<0.005	<0.0010	<0.002	<0.040	<0.010	0.014	<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	0.010	<0.005	0.003
Mean	0.088	0.079	0.38	0.017	0.018	0.051	0.005	0.034	0.004	<0.003	0.038	<-0.017	<-0.002	<-0.0009	<-0.065	<0.008	0.010	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	<-0.002	<0.0010
	Ca Conc %	B Conc %	Fe Conc %																
4	<0.0005	<0.0005	99.1																
5	<0.0005	<0.0005	99.4																
6	<0.0005	<0.0005	99.1																
Rep	<0.0005	<0.0005	99.2																
Min Cal	0.0005	0.0005																	
Mean	<0.0004	<0.0000	99.3																
Max Cal	0.016	0.025																	

Qualify in 1008 as per
Sec 26-615
Dupate



SHARU STEELS (P) LTD.

B-48 & D-251, Phase-VII, Focal Point, LUDHIANA - 141 010.
Mobile : 98550-82559 E-mail : info@sharusteels.com & sales@sharusteels.com

QUALITY ASSURANCE DEPARTMENT METALLURGICAL TEST REPORT

TEST CERTIFICATE

18397 F-QCD-03

ISO 9001 : 2008
Certified Company

M/S. SARA SAE PRIVATE LIMITED DIVISION-II A-2 SARA INDUSTRIAL ESTATE LTD. CHAKRATA ROAD, SELAQUI RAMPUR DEHRADUN (UTTRAKHAND)	T.C. No. 0496 Invoice No. Truck No. PB23K/8410	Date 09-08-2014
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GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY COND.N.	QNTY. M.T.	NO. OF PCS.
SAE1008	40 MM	S-67	L/HT	ORANGE	AS ROLLED	7.410 MT	LOOSE

CHEMICAL COMPOSITION IN PERCENTAGE

	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Sn	Ti	B	Ca
Min.	-														
Max.	-														
Actual	0.10	0.35	0.020	0.035	0.09					0.022					

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)	5/6		O ₂	
T	H	T	H	T	H	T	H				N ₂	
STD								Micro-Structure	PIF		H ₂	
MAX												
ACTUAL	1.0		1.0		1.0		1.0	0.5				

MECHANICAL PROPERTIES

	U.T.S.	Y.S.	EL %	RA %	Impact Value	Hardness B.H.N. / Rb	MACRO	ULTRASONIC TEST	MIX UP TEST
Reqd.							OK		OK
Actual						146			

HARDENABILITY (HRC) AS PER IS : 3848

Distance										
Regd.										
Actual										

Remarks :

Quality is 1008 Grade
as per S&S 26-615
Deepali



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QUALITY ASSURANCE DEPARTMENT
METALLURGICAL TEST REPORT

F-QCD-03

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18397

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. 0497 Invoice No. Truck No. PB23K/8410	Date 09-08-2014
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GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY COND.N.	QNTY. M.T.	NO. OF PCS.
SAE1008	40 MM	S-68	L/HT	ORANGE/ST/PINK	AS ROLLED	1.510 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	0.32	0.021	0.029	0.07					0.024					

METALLURGICAL RESULTS

INCLUSION RATING IS : 4163/JK CHART/ASTM E-45A									Aust. Grain Size ASTM No. (E-112)		5/6		Gas content (ppm)	
	A		B		C		D		Decarb. (MM)				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							

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						142			

HARDENABILITY (HRC) AS PER IS : 3848

Distance									
Regd.									
Actual									

Remarks :

Qualify in 1008 Grade
as per S&S 26-615
Deepali



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QUALITY ASSURANCE DEPARTMENT
METALLURGICAL TEST REPORT

F-QCD-03

ISO 9001 : 2008
Certified Company

TEST CERTIFICATE

18397

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

T.C. No. 0495

Date 09-08-2014

Invoice No.

Truck No. PB23K/8410

GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY COND.N.	QNTY. M.T.	NO. OF PCS.
SAE1008	40 MM	S-66	L/HT	YELLOW	AS ROLLED	6.200 MT	LOOSE

CHEMICAL COMPOSITION IN PERCENTAGE

	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Sn	Ti	B	Ca
Min.	-														
Max.	-														
Actual	0.08	0.35	0.020	0.027	0.09					0.026					

METALLURGICAL RESULTS

INCLUSION RATING IS : 4163/JK CHART/ASTM E-45A									Aust. Grain Size ASTM No. (E-112)	5/6	Gas content (ppm)	
A		B		C		D		Decarb. (MM)	Micro-Structure	p+f	O ₂	
T	H	T	H	T	H	T	H				N ₂	
STD MAX												
ACTUAL	1.0		1.0		1.0		1.0					

MECHANICAL PROPERTIES

	U.T.S.	Y.S.	EL %	RA %	Impact Value	Hardness B.H.N. / Rb	MACRO	ULTRASONIC TEST	MIX UP TEST
Reqd.							OK		OK
Actual						145			

HARDENABILITY (HRC) AS PER IS : 3848

Distance												
Regd.												
Actual												

Remarks :

Qualify in 1008 grade
as per S&S 26-615
Deepali