

Sample Name	Type	Meas. Date	Time	Calc. Date	Time	Origin	Method Name	Method Version	Operator Name	Check Type	Check Status	Grade Verif. Name	Grade Verif. %	Correction Type	Type	Corr. Name	Grade Search Name	Grade Search %	Type	Status	Outlier Removal	
heat -210668	Unknown	8/30/2013 9:37:42 AM	8/30/2013 9:38:18 AM	Measured	Fe-30-MO	SARA SAE	None	Not Used	0	None	ASTM-A-181	100	None	Not Used	No							
Sample Name	Grade Norm	Grade ID																				
heat -210668	SARA	AI SI 1008																				
C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co	Cu	Nb	Ti	V	W	Pb	Sn	As	Zr	Ca	B	Fe	
Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	0.064	0.13	0.46	0.016	0.002	0.009	0.003	0.008	0.024	0.005	0.004	0.005	0.0010	0.002	0.074	0.010	0.004	0.005	0.003	0.003	0.0005	99.2
2	0.089	0.14	0.46	0.017	0.002	0.009	0.003	0.006	0.033	0.005	0.003	0.005	0.0010	0.002	0.066	0.010	0.004	0.005	0.003	0.009	0.0005	99.1
3	0.079	0.13	0.46	0.017	0.002	0.009	0.003	0.013	0.031	0.005	0.003	0.005	0.0010	0.002	0.053	0.010	0.004	0.005	0.003	0.003	0.0005	99.2
Rep	0.077	0.13	0.46	0.017	0.002	0.009	0.003	0.009	0.029	0.005	0.003	0.005	0.0010	0.002	0.064	0.010	0.004	0.005	0.003	0.005	0.0005	99.2
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	0.0005	0.0005	
Mean	0.077	0.13	0.46	0.017	-0.016	0.009	-0.012	0.009	0.029	0.001	0.003	-0.009	-0.004	0.0004	0.064	0.002	0.004	-0.007	0.001	0.005	-0.0001	99.2
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	0.13	0.19	0.016	0.025	



RASHTRIYA ISPAT NIGAM LIMITED

SAE1008

VISAKHAPATNAM STEEL PLANT

Quality Assurance & Technology Development Department, Visakhapatnam

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TEST CERTIFICATE

Product/Size :	90X90 mm Billets	Customer :
T.C.No.: QMS/R/QAD/RM/20/M001526 - 3	Dt. 31/07/2013	SARA SAE PRIVATE LIMITED UNIT-II
Order No. EMSC293010050		DEHRADUN-UTTARAKHAND
Invoice No.: 2013001952		
Wagon/Truck No.: HR55B5400		Invoice Wt. (T): 14.190

HEAT NO	210668
No Of Pcs/Bundles	2
C %	0.07 ✓
Mn %	0.43 ✓
P %	0.019 ✓
S %	0.010 ✓
Si %	0.200 ✓
Al %	0.027 ✓
C.E. (IF APPLICABLE)	0.14
YS (N/mm ²)	NA
UTS (N/mm ²)	NA
%EL	NA
%RA	NA
OTHERS	NA
BEND TEST	
GRADE	SAE1008

on

1008
Dreph

AVERAGE WEIGHT OF EACH BUNDLE IS 7.095 TONS APPROXIMATELY
The material supplied conform to the standard rolling and weight tolerances.

for HOD (QA & TD)
Visakhapatnam Steel Plant
In-charge
RASHTRIYA ISPAT NIGAM
A Govt. of India Enterprise
Visakhapatnam Steel Plant
RAJAHMUNDRAM