

Sample Result Name	8972 (300649)	Type	Unknown	Measure Date Time	Wednesday, December 04, 2013	Recalculation Date Time	10:50:24 AM	Origin	Measured
Method Name	Fe-30-MO	Method Version	SARA SAE	Operator Name	None	Check Type	None	Check Status	Not Used
Grade Verification Name	Grade Verification Similarity	Grade Verification Similarity	Correction Type	Type	Corr Sample Name	Grade Search Name	Grade Search Name	Grade Search Name	Grade Search Name
Grade Search Similarity	0	Type	Status	Not Used	Outlier Removal	Outlier Removal	Outlier Removal	Outlier Removal	Outlier Removal

Sample Name
8972 (300649)

	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	Conc
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	0.21	0.23	0.82	<0.003	0.003	0.013	<0.003	0.007	0.029	<0.005	0.003	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
2	0.25	0.27	0.78	0.005	0.017	0.014	<0.003	0.028	0.064	<0.005	0.004	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
3	0.20	0.23	0.79	<0.003	0.006	0.007	<0.003	0.008	0.034	<0.005	0.003	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
4	0.18	0.21	0.84	<0.003	<0.002	0.009	<0.003	<0.005	0.024	<0.005	0.003	<0.005	<0.0010	<0.002	<0.040	<0.010	<0.002	<0.005	<0.003
Rep	0.21	0.23	0.81	0.004	0.007	0.011	<0.003	0.012	0.038	0.005	0.003	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	0.038	0.005	0.002	0.005	0.0010	0.002	0.040	0.010	0.002	0.005	0.003
Mean	0.21	0.23	0.81	<0.002	0.005	0.011	<0.030	0.011	0.038	<0.0002	0.003	<0.012	<0.005	<0.0003	<0.097	<0.009	<0.007	<0.008	<0.000
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
Ca	B	Fe																	
Conc	Conc	Conc																	
%	%	%																	
1	0.004	<0.0005	98.6																
2	0.005	<0.0005	98.5																
3	0.001	<0.0005	98.6																
4	0.001	<0.0005	98.6																
Rep	0.003	<0.0005	98.6																
Min Cal	0.0005	0.0005	98.9																
Mean	0.003	<0.003																	
Max Cal	0.016	0.025																	

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1018
895 - 26-747
Borfen

TEST CERTIFICATE

Product/Size :	56 mm Round	Customer :
T.C.No.: QMS/R/QAD/RM/15/M002825 - 5	Dt. 30/11/2013	SARA SAE PRIVATE LIMITED UNIT - II
Order No. RMP4331011010		DEHRADUN
Invoice No.: 2013001615		
Wagon/Truck No.: PB10DZ5451		Invoice Wt. (T): 14.410

HEAT NO	300649
No. of Bundles	2
C %	0.16 ✓
Mn %	0.62 ✓
P %	0.020 ✓
S %	0.015 ✓
Si %	0.140 ✓
Al %	0.034
C.E. (IF APPLICABLE)	0.27
YS (N/mm ²)	284
UTS (N/mm ²)	460
%EL	29
WRA	NA
OTHERS	NA
BEND TEST	NA
GRADE	SAE1018

AVERAGE WEIGHT OF EACH BUNDLE IS 7.205 TONS APPROXIMATELY

The material supplied conform to the standard rolling and weight tolerances.

for MOD(QA & TD)
Visakhapatnam Steel Plant

RASHTRIYA ISPAT NIGAM LTD.
(A GOVT. OF INDIA ENTERPRISE)
1st Floor, 27-E.C. ROAD
DEHRADUN-248 001