

Sample Result Name: 9143 (1542/a-02)
 Method Name: Unknown
 Method Version: SARA SAE
 Grade Verification Name: Fe-30-MO
 Grade Verification Similarity: 0
 Measure Date Time: Thursday, January 30, 2014 4:14 PM
 Operator Name: SARA SAE
 Correction Type: None
 Recalculation Date Time: 4:14 PM
 Check Type: None
 Type Corr Sample Name: None
 Origin: Measured
 Check Status: Not Used
 Grade Search Name:

Grade Search Similarity: 0
 Type: None
 Status: Not Used
 Outlier Removal:

Sample Name: 9143 (1542/a-02)
 Grade:

	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co	Cu	Nb	Ti	V	W	Pb	Sn	As	Zr
1	0.029	0.13	0.43	0.010	<0.002	20.96	2.83	40.44	0.098	0.056	1.63	0.033	0.80	0.034	<0.040	0.012	0.005	<0.005	<0.003
2	0.023	0.13	0.43	0.009	<0.002	20.97	2.75	40.49	0.094	0.056	1.64	0.034	0.78	0.034	<0.040	0.012	0.004	<0.005	<0.003
3	0.023	0.14	0.43	0.010	<0.002	21.04	2.76	40.47	0.095	0.056	1.63	0.034	0.78	0.033	<0.040	0.012	0.004	<0.005	0.003
Rep	0.025	0.13	0.43	0.010	<0.002	20.99	2.78	40.47	0.095	0.056	1.63	0.034	0.79	0.033	<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	0.025	0.13	0.43	0.010	<0.002	20.99	2.78	40.47	0.095	0.056	1.63	0.034	0.79	0.033	<0.079	0.012	0.004	<0.004	<0.002
Max Cal	3.00	5.04	18.12	0.18	0.30	36.00	10.20	53.2	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	0.002	0.0008	32.44																
2	0.002	0.0006	32.49																
3	0.002	0.0007	32.43																
Rep	0.002	0.0007	32.45																
Min Cal	0.0005	0.0005																	
Mean	0.002	0.0007	32.58																
Max Cal	0.016	0.025																	

Dr. 9/8/08
 E. 1/1/09



M.D. Steels Pvt. Ltd.

Plot No. F- 669 , Phase - II

RIICO Industrial Area , Bhiwadi, Distt.- Alwar (Rajasthan) 301019

Phone +91 1493 512079/225495 Fax +91 01493 222483

Email: mdsteels@gmail.com Website : www.mdsteels.com

Customer : M/s Sara Sae Pvt. Ltd. UNIT - II A-2, Sara Industrial Estate Ltd. Chakrata Road, Rampur Dehradun - 248197 - Uttarakhand	T.C. No.	: M- 1442
	Dated	: 14.01.2014
	Heat No.	: 1542/A- 02 / 2014
	Date	: 02.01.2014
P.O. No. : Dated 20.12.2013		
Specification : INC 825	Foundry identification : MD	
	Surface : Proof Machine	
	Casting Processed by Induction melting	

Heat Treatment : Solution Annealed at 1150⁰ C, 1.30 Hours Soaking and water quenched.

CHEMICAL COMPOSITION %

Element	C	Si	Mn	Cr	Ni	Mo	S	Al	Cu	Ti	P
Minimum	-	-	-	19.50	38.000	2.500	-	-	1.500	0.60	-
Maximum	0.050	0.500	1.000	23.50	46.000	3.500	0.030	0.200	3.000	1.20	0.030
Actual	0.048	0.470	0.250	20.00	39.500	2.950	0.018	0.059	1.750	1.10	0.019

MECHANICAL PROPERTIES

	Y.S	UTS	EL%	Reduction	Charpy At ambient	Bend Test	Hardness			
	Mpa	Mpa	GI= 50mm	Area %	Ambient temp.		HRB			
Min										
Max.										
Actual										

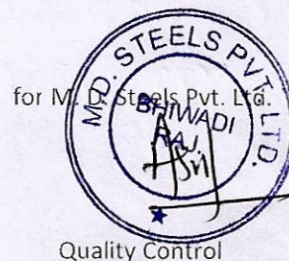
S. No.	Description	Item & Code	Qty.
1	Centrifugally Casted Rings Proof Machined Size OD 291 mm X ID 254 mm X H- 43 mm	BNT & IX708-R	30 Nos. (01 - 30)

Remarks : Visual Inspection Carried out and dimension checked and found Ok.

specification and was found to meet the requirements and also compliance to the purchase order.

Gopal Dass
Checked by

Approved by



M. D. STEELS (P) LTD.
F-669, Phase-II, Indl. Area
BHIWADI - 301 019.
☎ : 01493 - 222483. 512079

Handwritten signature and date: 14/01/2014