

Sample Result Name	Type	Measure Date Time	Recalculation Date Time	Origin
10430 (DIA-56 MM) HN0-S-11901	Unknown	Thursday, January 08, 2015	5:22:04 PM	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	Grade
10430 (DIA-56 MM) HN0-S-11901	

	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	0.031	0.33	1.88	0.034	0.012	16.88	2.07	10.28	0.005	0.17	0.33	0.005	0.007	0.059	0.043	0.012	<0.002	<0.005	0.004
2	0.033	0.35	1.92	0.038	0.016	16.89	2.05	10.36	0.006	0.18	0.32	<0.005	0.006	0.055	0.051	0.014	<0.002	<0.005	0.004
3	0.029	0.36	1.90	0.038	0.020	16.85	2.04	10.27	0.006	0.17	0.32	<0.005	0.007	0.053	0.052	0.012	<0.002	<0.005	0.004
4	0.027	0.38	1.93	0.038	0.013	16.85	2.03	10.30	0.008	0.17	0.31	<0.005	0.007	0.052	0.049	0.013	<0.002	<0.005	0.004
Rep	0.030	0.35	1.91	0.037	0.015	16.87	2.05	10.30	0.006	0.17	0.32	0.005	0.007	0.055	0.049	0.013	<0.002	<0.005	0.004
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	0.030	0.35	1.91	0.037	0.015	16.87	2.05	10.30	0.006	0.17	0.32	<0.003	0.007	0.055	0.049	0.013	<0.002	<-0.008	0.004
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	0.003	<0.0005	67.8																
2	0.002	<0.0005	67.7																
3	0.004	0.0007	67.8																
4	0.004	0.0006	67.8																
Rep	0.003	0.0006	67.8																
Min Cal	0.0005	0.0005																	
Mean	0.003	<0.0005	67.8																
Max Cal	0.016	0.025																	

Quality in SS316 as per
SES-21-720
Dufaly

INSPECTION CERTIFICATE

TC. No.: 71951	Invoice No.: 02281	T.C. as per: DIN EN 10204-3.1
Date: 06/01/15	Date: 06/01/15	

Customer: SARA SAE PVT. LTD
A-12, SARA INDUSTRIAL ESTATE LTD., CHAKRATA ROAD,
RAMPUR, SERAQUI, DEHRADUN
, Uttarakhand -

Inspector Stamp:



Size: Round Bar-56 mm	Heat No.: S-11901	Grade: X2CrNiMo-17-12-2-Number-1.4404/316L
Supply Condition: AS ROLLED	No. of Pcs: 26	Weight: 3.03
Shape: Round Bar-56	Melting Process: EF/AOD/MEMS.	

CHEMICAL ANALYSIS %

Elements	C	Si	Mn	P	S	Cr	Mo	Ni	N2
Results	0.020	0.34	1.79	0.036	0.020	16.95	2.05	10.12	0.0680

MECHANICAL PROPERTIES

Ultrasonic Testing	YS/0.2% PS [Mpa] [L]	UTS (Mpa) [L]	% Elongation [L]	% R.A. [L]	Charpy Impact V Notch (Joules) [L] Sample Size 10X10X55 mm	Temp. Deg. C.	Hardness (BHN)	Radiation (Bq/gram)
OK	233	600	59	75	263,267,274,Mean-268	23	164	0.00

METALLURGICAL PROPERTIES

Inclusion Rating (ASTM E 45)								Grain Size (ASTM E112)	IGC Test	Macroetch Test (ASTM E381)	Jominy (ASTM A-255)
A		B		C		D		6	OK	C1 R1 S1	-
T	H	T	H	T	H	T	H				
1.0	1.0	1.0	1.0	1.5	1.0	1.0	1.0				

Remarks

IGC test as per ASTM A 262 Practice E /DIN EN ISO 3651

Tensile testing as per DIN EN 10002/ISO 6892

Impact Testing as per DIN EN ISO 148

Hardness testing as per DIN EN ISO 6506

Ultrasonic testing, as per ASTM A 388/A 388M

NOTE :

Qualify in 85316
as per 26-720
@aypallr



We confirm that material is in accordance with PO