

Heat E102

Sample Result Name	Type	Measure Date Time	Recalculation Date Time	Origin	Method Name	Method Version	Operator Name	Correction Type	Type Corr Sample Name
QARA	10000000	8/20/2011 10:00:00 AM	8/20/2011 10:00:00 AM	Medium	P0-20 (M)		6013	100%	
Check Type	Check Status	Grade Verification Name			Grade Verification Similarity		Grade Search Name		Grade Search Similarity
None	OK				0%				0%
Sample Name	Grade Name	Grade							

Elements Conc.

Meas.	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co
	%	%	%	%	%	%	%	%	%	%
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
Cal. Min	0.006	0.005	0.004	0.003	0.002	0.005	0.003	0.005	0.003	0.005
<x>	0.025	0.32	1.57	0.027	0.077	17.36	2.00	10.08	0.011	0.20
Cal. Max	3.00	5.04	18.12	0.18	0.30	36.00	10.20	55.2	5.24	21.60
Mean	0.025	0.32	1.57	0.027	0.077	17.36	2.00	10.08	0.011	0.20
	0.02	0.28	1.57	0.06	0.013	16.84	2.02	10.12		
Meas.	Cu	Nb	Ti	V	W	Pb	Sn	As	Zr	Ca
	%	%	%	%	%	%	%	%	%	%
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
Cal. Min	0.002	0.005	0.0010	0.002	0.040	0.010	0.002	0.005	0.003	0.0005
<x>	0.41	0.013	0.006	0.059	0.070	<0.010	0.010	<0.005	0.003	0.0009
Cal. Max	7.44	3.60	3.60	12.00	7.32	0.13	0.27	0.13	0.19	0.016
Mean	0.41	0.013	0.006	0.059	0.070	<0.001	0.010	<0.005	<0.002	0.0009
	0.41									
Meas.	B	Fe								
	%	%								
	Conc.	Conc.								
Cal. Min	0.0005									
<x>	<0.0005	67.7								
Cal. Max	0.025									
Mean	<0.0005	67.8								

INSPECTION CERTIFICATE

(En 10204 - 3.1)

AD 2000 – MERKBLATT W0 CERTI NO. 07 202 1423 WP-1414/13Q & PED 97/23/EC CERTI NO. 07 202 1423 WZ 1414/13Q

Customer Name & Destination : M/s. SARA SAE		T.C.NO.:L - 31430	Date : 05/07/2013	PURCHASE ORDER NO : 4182 DT-01.07.2013		
Material Specification	Manufacturing Route	Supply Condition	Size	Stamp of the Testing Engineer	Colour Code	Weight
SS 316/SS316L Billets	Electric Furnace with AOD Route, Ladle Refined, Fully Killed Quality Steel	As Cast	120X120X1000 MM		Blue & White	5095

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS		C	Mn	Si	S	P	Cr	Ni	N	Mo	Size	Pcs.
Specification	Min.	-	-	-	-	-	16.00	10.00	-	2.00		
	Max.	0.030	2.00	1.00	0.030	0.045	18.00	14.00	0.1000	3.00		
Heat No.	Grade											
E-102	SS 316/SS316L	0.025	1.52	0.37	0.019	0.037	17.00	10.08	0.0627	2.02	120X120X1000 MM	45

ULTRASONIC TESTING : NA

REMARKS : NA

RADIATION LEVEL : NIL

MECHANICAL PROPERTIES : TEST STD DIN EN 10272

Size	Test Condition	UTS (N/MM ²)	YS (N/MM ²)	% EL	% RA	Hardness (BHN)	
						Min.	Max.
-	-	-	-	-	-	-	-

METALLURGICAL TEST RESULT

Grain Size
E 112

IMPACT TESTING : DIN EN 10045

Test Temp : Test Std :

INCLUSION RATING ASTM E - 45

Sr. No

Impact
Energy (J)

Average

	A	B	C	D
Thin	-	-	-	-
Thick	-	-	-	-

JOMINY HARDENABILITY : IS - 3848

MACROSTREAK FLAW TEST (IS - 4075)

DIST mm/Inch	J	J	J	J	J	J	Macro Test (ASTM E - 381)	1 st Step	2 nd Step	3 rd Step
ACTUAL HRC	-	-	-	-	-	-	-	-	-	-

Visual Inspection :Satisfactory

Remarks

- The material is free from Radioactive contamination..
- Lead has not been added during manufacturing.
- Steel is fully killed by Aluminum for fine grain structure.

WE CONFIRM THAT THE TEST
CERTIFICATE FINDINGS ARE
CORRECT & RESULTS ARE
AS PER STANDARD /
CUSTOMER'S REQUIREMENTS

For Laxcon Steels Ltd.


(S V SINGH)
Lab Incharge

For Laxcon Steels Ltd.


(SACHIN MOKHADKAR)
Authorized Signatory (Q.C.)