



**STAHLWERK
THÜRINGEN**

A03 Certificate No. 2368/1-2013 1/3
Advice No. A130125003

A02 Test Report
according to ASTM A6

A01 Stahlwerk Thüringen GmbH
A05 Quality Assurance Department
Kronacher Straße 6
07333 Untermellenborn
Germany

A04 (SWT)
A06 Ferre Barniedo S.A. de C.V.
Carretera San Cristóbal
Av. Revolución N°81
55224 Ecatepec
MEXICO

A08 Our Order No.: 2033525112
A07 Your Order No.: # 6500549

B02 Quality: A36/A572 DUAL
according to: PRODUCED TO ASTM
AND ASTM A572 GRADE 50

Pos.	Heat No.	Dimension	Length	Pieces	Theoretical Weight
A10	B07	B01	B08	B06	B12
001	29750	C 10X15,3	480 in	162	44 973 kg
001	29751	C 10X15,3	480 in	169	46 916 kg
001	29752	C 10X15,3	480 in	18	4 997 kg
002	29735	C 10X20	480 in	40	14 516 kg
002	29736	C 10X20	480 in	110	39 919 kg
003	29732	C 10X25	480 in	60	27 216 kg
003	29733	C 10X25	480 in	50	22 680 kg
004	29729	C 10X30	480 in	21	11 430 kg
004	29730	C 10X30	480 in	84	45 720 kg
004	29731	C 10X30	480 in	29	15 240 kg
005	29911	C 12X20,7	480 in	90	33 804 kg
005	29912	C 12X20,7	480 in	80	30 048 kg
005	29913	C 12X20,7	480 in	80	30 048 kg
005	29914	C 12X20,7	480 in	150	56 340 kg
005	29915	C 12X20,7	480 in	35	13 146 kg
006	29871	C 15X33,9	480 in	28	17 224 kg
006	29872	C 15X33,9	480 in	77	47 366 kg
006	29873	C 15X33,9	480 in	19	6 687 kg

Heat No.	C	Si	Mn	P	S	Nb
B07	C71	C72	C73	C74	C75	C77
max		0.40		0.040	0.050	0.050
min						0.005
29729	0.08	0.21	1.15	0.023	0.023	0.005
29730	0.08	0.21	1.13	0.020	0.022	0.005
29731	0.07	0.20	1.13	0.020	0.023	0.008
29732	0.08	0.21	1.15	0.018	0.022	0.008
29733	0.07	0.20	1.13	0.017	0.021	0.008
29735	0.07	0.19	1.11	0.018	0.021	0.005
29736	0.08	0.18	1.14	0.018	0.018	0.007
29750	0.07	0.19	1.12	0.021	0.023	0.008
29751	0.08	0.20	1.13	0.021	0.024	0.007
29752	0.08	0.20	1.13	0.020	0.020	0.007
29871	0.08	0.21	1.11	0.020	0.021	0.007

Z03 Works inspector
René Merbach

Z02 Jan 25, 2013

TELEFONO PARA LA REMISION DE MUESTROS
58-36-10-00
VENTAS@ferrebarniedo.com.mx
FERRERRE BARNIEDO S.A. DE C.V.
CERTIFICADO ORIGINAL
48671



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AND ASTM A572 GRADE 50

Heat Analysis [%]									
Heat No.	C	Si	Mn	P	S	N	Nb	V	
[B07]	[C71]	[C72]	[C73]	[C74]	[C75]	[C76]	[C77]	[C78]	
max		0.40		0.040	0.050		0.050		
min							0.005		
29872	0.08	0.21	1.10	0.022	0.024	0.009	0.015	0.006	
29873	0.08	0.20	1.13	0.021	0.023	0.009	0.012	0.006	
29911	0.08	0.21	1.14	0.021	0.022	0.008	0.015	0.006	
29912	0.08	0.19	1.14	0.022	0.024	0.007	0.014	0.006	
29913	0.08	0.19	1.14	0.024	0.022	0.007	0.014	0.006	
29914	0.08	0.19	1.14	0.020	0.026	0.008	0.011	0.006	
29915	0.08	0.20	1.14	0.028	0.024	0.008	0.012	0.007	

Tensile test				
Heat No.	Yield stress [PSI]	Tensile strength [PSI]	Elongation 2 in [%]	Ys/Ts
[B07]	[C11]	[C12]	[C13]	[C14]
max		80000		
min	50000	65000	21.0	
29729/1	55390	75410	34.3	0.74
29729/2	55390	72645	42.2	0.76
29730/1	54810	75110	33.0	0.73
29730/2	55680	72355	42.2	0.77
29731/1	53940	70180	30.4	0.77
29731/2	54810	72490	42.2	0.75
29732/1	53795	73205	35.6	0.73
29732/2	54955	72700	42.2	0.75
29733/1	52490	69890	37.0	0.74
29733/2	53795	72355	42.9	0.74
29735/1	54230	74095	33.0	0.73
29735/2	52780	71340	43.6	0.74
29736/1	53940	74965	35.6	0.72
29736/2	53505	72210	43.6	0.74
29750/1	50605	72355	11.7	0.70
29750/2	53940	71340	43.6	0.76
29751/1	51040	72065	34.3	0.71
29751/2	54665	72065	43.6	0.74
29752	51620	71775	30.4	0.72

203 Works inspector
René Merbach

202 Jan 25, 2013

TEL: 52-8-3610-00
LA ORIGINAL DE ESTE CERTIFICADO DE FERRE BARNIEDO S.A. DE C.V. NO. 2368/1-2013
REVISIÓN DE NUESTRAS COPIAS ARCHIVOS
ferrebarniedo.com.mx



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Tensile test Heat No.	Yield stress [PSI]	Tensile strength [PSI]	Elongation 2 in [%]	Ys/Ts
B07	C11	C12	C13	C14
max		80000		
min	50000	65000	21.0	
29871/1	52780	73560	42.2	0.72
29871/2	55100	72500	42.9	0.76
29872/1	52490	71050	43.6	0.74
29872/2	55335	72065	42.9	0.77
29873/1	51620	71920	44.9	0.72
29873/2	54520	71195	43.6	0.77
29911/1	52780	72500	42.2	0.73
29911/2	55100	72500	42.9	0.76
29912/1	51330	69890	43.6	0.73
29912/2	54520	72210	42.9	0.76
29913/1	52345	71050	42.2	0.74
29913/2	54665	72500	42.9	0.75
29914/1	51910	68295	46.2	0.76
29914/2	53795	71920	43.6	0.75
29915/1	54085	69890	42.2	0.77
29915/2	54665	72210	42.2	0.76

- Z01
- electric arc melting
 - controlled rolled
 - surface condition without complaint

We confirm herewith that the delivered material complies with the terms of the order.

Z03 Works inspector
René Merbach

Z02 Jan 25, 2013

TEL: 562-36-10-00 PARA LA RECEPCION DE NUESTROS ARCHIVOS
FERRERRE BARNIEDO S.A. DE C.V.
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