

02/18/2005 01:11 55-58361033

FERRE BARNIEDO SA CV

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ACERIALIA PERFILES
Grupo Arcelor
CARRETERA TOLEDO, KM. 9
28021 MADRID
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Handwritten signature: Juan M. ...
Handwritten number: 19943-1
Handwritten initials: ESC

CERTIFICADO DE CALIDAD

APS 3726

C70E MATERIAL SIZE	COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)															Cov
		C	Mn	SI	P	S	N	V	Cr	Ni	Mo	Cu	Nb	Al	Ti		
W-18x46	25651	.09	1.16	.19	.020	.022	.011	.024	.117	.157	.034	.416	.003	.002	.002	.35	
W-18x46	26679	.07	1.12	.21	.017	.027	.009	.024	.128	.132	.028	.461	.003	.001	.002	.33	
W-18x46	33996	.11	1.28	.19	.028	.045	.012	.038	.129	.117	.024	.528	.003	.002	.003	.40	
W-18x46	44918	.10	1.15	.19	.024	.033	.011	.002	.119	.130	.022	.574	.018	.001	.002	.37	
W-18x46	44919	.09	1.13	.20	.024	.027	.012	.002	.132	.118	.020	.574	.018	.001	.003	.36	
W-21x44	26019	.12	1.01	.20	.018	.013	.011	.026	.119	.168	.035	.589	.003	.002	.002	.37	
W-21x44	35608	.09	1.02	.18	.018	.033	.011	.031	.103	.141	.042	.525	.003	.001	.003	.34	
W-21x44	35609	.09	.97	.17	.021	.031	.011	.032	.120	.145	.040	.575	.003	.002	.003	.34	
W-21x44	44918	.10	1.14	.19	.024	.034	.010	.002	.118	.129	.022	.572	.018	.001	.002	.36	
W-21x50	44909	.08	1.09	.19	.027	.025	.010	.002	.213	.166	.030	.579	.021	.002	.002	.36	
W-21x50	44914	.08	1.07	.19	.025	.020	.011	.002	.212	.164	.030	.576	.018	.002	.003	.36	
W-21x50	44915	.09	1.13	.17	.021	.031	.011	.002	.101	.116	.021	.571	.020	.001	.002	.35	
W-21x57	35602	.09	1.11	.18	.022	.030	.012	.030	.118	.160	.043	.589	.003	.001	.003	.36	
W-21x57	35603	.12	1.12	.19	.023	.031	.012	.030	.117	.165	.044	.578	.003	.002	.003	.39	
W-21x57	35604	.12	1.12	.19	.022	.028	.012	.030	.116	.162	.043	.572	.003	.001	.003	.39	
W-21x57	44891	.09	1.12	.17	.021	.032	.011	.002	.101	.113	.021	.565	.019	.001	.002	.35	
W-21x57	44909	.09	1.13	.17	.022	.038	.012	.002	.098	.114	.021	.573	.021	.001	.002	.35	
W-21x93	21264	.09	1.13	.22	.030	.033	.012	.023	.174	.152	.034	.587	.003	.002	.002	.37	
W-21x93	21265	.08	1.04	.18	.028	.034	.012	.024	.125	.152	.031	.532	.003	.002	.002	.34	
W-21x93	23023	.10	1.18	.20	.023	.022	.011	.025	.184	.177	.049	.573	.003	.002	.002	.40	
W-21x93	23051	.11	1.02	.18	.019	.020	.010	.022	.128	.168	.041	.524	.003	.002	.002	.36	
W-21x93	24895	.10	1.03	.18	.020	.018	.012	.024	.137	.182	.045	.550	.003	.001	.002	.36	
W-24x55	44889	.08	1.16	.17	.021	.034	.012	.002	.163	.158	.022	.573	.024	.001	.003	.36	
W-24x55	44890	.09	1.16	.17	.021	.027	.012	.002	.158	.148	.024	.576	.023	.001	.003	.37	
W-24x55	44891	.09	1.12	.17	.022	.032	.011	.002	.107	.114	.021	.588	.019	.001	.002	.36	
W-24x62	35589	.09	1.03	.20	.025	.044	.012	.030	.127	.171	.041	.575	.003	.002	.003	.35	
W-24x62	42531	.07	1.09	.22	.029	.019	.011	.002	.140	.149	.028	.574	.018	.001	.003	.33	
W-24x62	44971	.10	1.15	.20	.024	.023	.011	.002	.131	.123	.023	.571	.017	.002	.003	.37	
W-24x62	44972	.09	1.13	.20	.024	.026	.012	.002	.125	.123	.022	.580	.016	.002	.003	.35	
W-24x62	44973	.11	1.10	.20	.019	.026	.010	.002	.109	.120	.021	.528	.015	.002	.002	.36	
W-8x31	24659	.10	1.11	.20	.034	.027	.012	.024	.244	.181	.043	.579	.003	.001	.002	.40	
W-8x31	33863	.11	1.02	.19	.023	.030	.010	.025	.142	.185	.033	.523	.003	.002	.002	.37	
W-8x31	33870	.08	1.04	.19	.021	.028	.010	.027	.173	.199	.052	.527	.003	.002	.003	.35	
W-8x31	44842	.06	1.14	.20	.023	.030	.010	.002	.125	.130	.024	.575	.018	.001	.003	.33	
W-8x31	44843	.07	1.12	.21	.024	.034	.011	.002	.124	.131	.025	.570	.019	.001	.003	.34	
W-8x31	44850	.09	1.13	.17	.023	.032	.011	.002	.128	.123	.026	.573	.023	.001	.003	.35	
W-8x35	33853	.09	1.02	.21	.017	.017	.011	.025	.115	.120	.021	.510	.003	.002	.003	.33	
W-8x35	44844	.09	1.16	.20	.027	.021	.010	.002	.150	.124	.022	.578	.017	.001	.003	.36	
W-8x40	33851	.10	1.03	.19	.023	.020	.011	.027	.149	.137	.023	.572	.003	.002	.003	.36	
W-8x40	33854	.09	1.01	.21	.019	.018	.010	.027	.134	.132	.024	.556	.003	.002	.003	.34	
W-8x48	33848	.11	1.08	.24	.022	.017	.011	.026	.131	.152	.031	.518	.003	.002	.003	.38	
W-8x48	33849	.12	1.06	.21	.021	.020	.010	.028	.138	.133	.027	.509	.003	.002	.003	.37	
MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXION POR CHOQUE IMPACT TEST											
		ReH MPa	Rm MPa	A% L0=5.65VS0	Doblado 180°	°C	KV300	V1 J	V2 J	V3 J	Media J						
W-12x14	42288	406	547	30.2		+20°	4	53	48	62	51						

INSCRITA EN EL REGISTRO MERCANTIL DE MADRID, TOMO 15221, FOLIO 200, SECCION 8, HOJA N° 284814 N° I.V.A.J.U.L.F.: 046001318

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