

ArcelorMittal Gipuzkoa, S.L.U.
 Long Carbon Europe
 CARRETERA MADRID - IRUN, KM. 419
 20212 OLABERRIA (Guipúzcoa)
 TELEF. (943) 80.50.00 - FAX (943) 88.04.04



MILL TEST CERTIFICATE

OLA P-35148

DISCHARGE ADDRESS				CUSTOMER			
Ferre Barniedo, S.A. de C.V. Edo. de Mexico San Cristobal Ecatepec, C.P. MEXICO				Ferre Barniedo, S.A. de C.V. Edo. de Mexico San Cristobal Ecatepec, C.P. MEXICO			
SHIPPED AND CERTIFIED BY				CREDIT NUMBER	PORT OF LOADING		
ARCELOMITTAL OLABERRIA CARRETERA MADRID - IRUN, KM. 419 20212 OLABERRIA (Guipúzcoa) TELEF. (943) 80.50.00 - FAX (943) 88.04.04					BILBAO, SPAIN		
				PORT OF DISCHARGE	VESSEL		
				ALTAMIRA	PRIMATICBORG		
OUR REFERENCE	CONTRACT NUMBER		ORDER NUMBER	DATE			
mcabello	01-E-44028 / 1700016449		600870	29/04/2013			
Material: WF Vigas,							
El exportador de los productos incluidos en el presente documento, Autorización aduanera no.							
ARCELOMITTAL GIPUZKOA, S.L.U. ES/20/0040/03							
Declara que, salvo indicación en sentido contrario, estos productos gozan de un origen preferencial ESPAÑA							
SIZE	LENGTH	BUNDLES	PIECES BUNDLES	TOTAL PIECES	WEIGHT BUNDLES	TOTAL WEIGHT	HEAT
W-14x74 40' +/WHITE							
W-16x26 40' +/WHITE							
W-24x55 40' +/WHITE							
W-21x83 40' +/WHITE							
W-21x44 40' +/WHITE							
W-24x68 40' +/WHITE							
W-16x67 40'							
W-10x88 40' +/WHITE							
W-16x57 40' +/WHITE							
W-8x67 40' +/WHITE							
W-10x49 40' +/WHITE							
W-24x84 40' +/WHITE							
W-16x31 40' +/WHITE							
W-21x68 40' +/WHITE							
WF BEAMS 8x67	40'	2	4	8	4863	9.726	135603
WF BEAMS 8x67	40'	1	2	2	2431	2.431	126868
WF BEAMS 8x67	40'	1	3	3	3647	3.647	123628
WF BEAMS 10x49	40'	19	6	114	5334	101.346	144103,144104
WF BEAMS 10x88	40'	21	3	63	4790	100.590	144119,144120
WF BEAMS 14x74	40'	1	3	3	4028	4.028	143663
WF BEAMS 16x26	40'	57	6	342	2830	161.310	143676,144140,144144,144150,144151
WF BEAMS 16x31	40'	36	6	216	3375	121.500	144120,144121,144122,144133
WF BEAMS 16x57	40'	19	5	95	5171	98.249	141767,142683,142684,142685,144099,144100

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SIZE	LENGTH	BUNDLES	PIECES BUNDLES	TOTAL PIECES	WEIGHT BUNDLES	TOTAL WEIGHT	HEAT
WF BEAMS 16x57	40'	1	1	1	1034	1.034	142683
WF BEAMS 16x57	40'	1	4	4	4137	4.137	144099
WF BEAMS 16x67	40'	24	3	72	3647	87.528	141641,141642,141643,141645,141646
WF BEAMS 16x67	40'	1	2	2	2431	2.431	141646
WF BEAMS 21x44	40'	50	5	250	3992	199.600	144151,144152,144153,144154,144155
WF BEAMS 21x44	40'	1	4	4	3193	3.193	143672,143690
WF BEAMS 21x68	40'	21	4	84	4935	103.635	143141,144177,144178
WF BEAMS 21x83	40'	34	3	102	4518	153.612	142743,143952,143953,144182
WF BEAMS 24x55	40'	38	5	190	4990	189.620	143883,144115,144116,144117
WF BEAMS 24x55	40'	1	3	3	2994	2.994	143884
WF BEAMS 24x55	40'	1	2	2	1996	1.996	144115
WF BEAMS 24x68	40'	68	3	204	3701	251.668	144133,144142,144143,144144,144145,144147,144148,144149
WF BEAMS 24x84	40'	22	3	66	4572	100.584	144155,144156,144157

TOTAL BUNDLES 420 TOTAL WEIGHT 1.704.859 Kg.

A02 EN 10204/3.1

QSA G40.21 50W/ASTM A572 G50/A992/A6

(B01/B02/B03) A03

COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)													
	C	Mn	Si	P	S	V	Cr	Ni	Mo	Cu	Nb	Sn	CEI	
123628	.16	1.180	.190	.027	.012	.042	.100	.140	.023	.000	.003	.028	.38	
128868	.093	1.140	.180	.021	.020	.045	.150	.160	.042	.470	.003	.030	.37	
135603	.127	1.260	.190	.022	.026	.038	.100	.170	.028	.400	.003	.035	.41	
141641	.078	1.050	.190	.022	.017	.033	.110	.130	.036	.410	.003	.033	.32	
141642	.086	1.120	.210	.025	.017	.033	.120	.150	.035	.430	.003	.045	.35	
141643	.081	1.120	.200	.029	.018	.035	.150	.150	.040	.450	.003	.049	.35	
141645	.092	1.030	.170	.016	.016	.037	.110	.140	.042	.390	.003	.032	.34	
141646	.088	1.080	.180	.013	.016	.032	.100	.150	.044	.380	.003	.029	.34	
141767	.097	1.040	.200	.019	.011	.037	.130	.150	.031	.350	.003	.042	.34	
142683	.084	1.060	.160	.015	.018	.038	.100	.170	.026	.310	.003	.015	.33	
142684	.093	1.010	.200	.019	.023	.035	.120	.190	.041	.310	.003	.022	.33	
142685	.074	.980	.170	.020	.020	.035	.130	.200	.029	.380	.003	.020	.31	
142743	.080	.990	.200	.019	.019	.038	.100	.230	.023	.420	.003	.049	.32	
143141	.105	1.030	.210	.017	.017	.038	.110	.150	.021	.340	.003	.026	.34	
143663	.094	.990	.200	.024	.016	.046	.110	.160	.021	.410	.003	.035	.33	
143672	.080	.940	.160	.019	.012	.036	.080	.180	.019	.350	.004	.025	.28	
143676	.081	1.060	.200	.025	.027	.034	.090	.140	.012	.400	.006	.031	.32	
143690	.101	1.010	.170	.022	.015	.036	.120	.180	.020	.430	.007	.022	.35	
143883	.077	1.070	.240	.035	.013	.038	.180	.150	.033	.480	.003	.034	.35	
143884	.087	.970	.220	.039	.012	.037	.180	.160	.026	.370	.003	.037	.33	
143952	.074	.970	.180	.016	.014	.035	.090	.170	.031	.380	.003	.032	.30	

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MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES					
		ReH MPa		Rm MPa		A% LO-B ⁰	
B71	B05	C11		G12		G13	
W-16x57	141767	392	378	503	493	23,8	23,1
W-16x57	142683	379	365	501	485	23,8	22,9
W-16x57	142684	374	372	497	485	23,4	23,3
W-16x57	142685	387	384	507	505	25,	24,4
W-16x57	144099	417	413	535	525	22,5	21,8
W-16x57	144100	395	381	529	508	22,6	22,5
W-16x67	141641	393	387	514	505	22,3	21,8
W-16x67	141642	396	388	513	508	22,3	22,2
W-16x67	141643	402	390	519	509	22,6	22,3
W-16x67	141645	376	360	496	492	22,6	22,5
W-16x67	141646	370	366	498	493	22,6	21,7
W-21x44	143672	383	381	487	479	23,6	22,7
W-21x44	143690	407	405	522	516	22,8	22,8
W-21x44	144151	419	405	535	528	26,	25,5
W-21x44	144152	418	410	535	533	24,7	24,3
W-21x44	144153	417	417	538	525	25,6	24,9
W-21x44	144154	430	383	509	491	24,3	24,7
W-21x44	144155	407	397	528	511	24,1	23,7
W-21x68	143141	399	377	507	534	23,3	24,5
W-21x68	144177	383	381	527	515	22,7	22,4
W-21x68	144178	385	380	500	488	22,7	22,7
W-21x83	142743	368	368	506	488	22,9	22,6
W-21x83	143952	415	399	538	536	25,5	25,4
W-21x83	143953	402	386	523	516	22,3	21,9
W-21x83	144182	400	392	528	516	22,4	22,
W-24x55	143883	426	410	529	525	22,2	22,1
W-24x55	143884	436	428	544	536	22,3	21,9
W-24x55	144115	427	415	552	544	22,5	21,9
W-24x55	144116	426	418	549	533	24,	24,
W-24x55	144117	443	426	576	554	22,7	21,8
W-24x68	144133	411	403	538	528	22,3	22,
W-24x68	144142	414	411	538	534	22,8	22,2
W-24x68	144143	412	404	543	527	22,4	22,2
W-24x68	144144	412	404	550	526	23,9	23,4
W-24x68	144145	407	403	525	521	23,1	22,6
W-24x68	144147	406	400	561	536	22,4	22,3
W-24x68	144148	401	396	535	527	25,4	24,7
W-24x68	144149	398	392	533	509	22,4	22,3
W-24x84	144155	379	375	519	505	23,3	22,7
W-24x84	144156	399	397	530	522	22,6	22,2
W-24x84	144157	404	388	532	517	22,4	21,9
W-8x67	123628	429	417	551	546	26,2	25,3
W-8x67	126868	405	397	531	527	23,8	23,6
W-8x67	135603	381	377	517	503	22,3	22,

52 análisis

D01: Certificamos que los aceros arriba indicados han sido satisfactoriamente probados de acuerdo con la especificación.
 B06: Marca AMO

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Lorenzo Zabala