

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-34830

DISCHARGE ADDRESS		CUSTOMER	
Plesa Anahuac Y Cias, S.A. de C.V. Av. Valle de las Alamedas 66-O Col. S. Francisco Chilpan, Tul MEXICO		Plesa Anahuac Y Cias, S.A. de C.V. Av. Valle de las Alamedas 66-O Col. S. Francisco Chilpan, Tul MEXICO	
SHIPPED AND CERTIFIED BY		CREDIT NUMBER	PORT OF LOADING
ARCELORMITTAL 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
		VERACRUZ	NIKOL H.
OUR REFERENCE	CONTRACT NUMBER	ORDER NUMBER	DATE
mcabello	01-E-43644 / 1700016168	15039	31/03/2013

Material: WF Vigas,

El exportador de los productos incluidos en el presente documento,
Autorización aduanera no.

ARCELORMITTAL 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
+ / RED							
WF BEAMS 8x31	40'	7	8	56	4499	31.493	142744,142746,143641, 143661
WF BEAMS 8x35	40'	6	8	48	5081	30.486	143661,143668
WF BEAMS 8x40	40'	14	6	84	4355	60.970	142275,143659,143660
WF BEAMS 10x19	40'	1	13	13	4482	4.482	142360
WF BEAMS 10x19	40'	7	14	98	4827	33.789	143439,143469
WF BEAMS 10x39	40'	7	8	56	5661	39.627	138980,138981,140966, 143832,143833
WF BEAMS 12x40	40'	23	6	138	4355	100.165	143427,143438,143439, 143440
WF BEAMS 14x22	40'	21	12	252	4790	100.590	143426,143429
WF BEAMS 14x68	40'	12	4	48	4935	59.220	143666,143669
WF BEAMS 14x74	40'	10	3	30	4028	40.280	148416,148981,148982
WF BEAMS 16x26	40'	35	6	210	2830	99.050	142311,142314,142315, 142316,142318,142321, 142325,142326
WF BEAMS 16x26	40'	1	2	2	943	943	143256
WF BEAMS 16x31	40'	12	6	72	3375	40.500	143255,143257,143719, 143720,143721,143722
WF BEAMS 18x76	40'	1	1	1	1379	1.379	142069

A01

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-34830

SIZE	LENGTH	BUNDLES	PIECES BUNDLES	TOTAL PIECES	WEIGHT BUNDLES	TOTAL WEIGHT	HEAT
WF BEAMS 18x76	40'	36	3	108	4137	148.932	142834,142835,142836,143474,143475,143476,143477,143478,143480,143482,143484
WF BEAMS 18x86	40'	32	2	64	3121	99.872	143101,143102,143106,143485,143486,143716,143717
WF BEAMS 21x44	40'	25	5	125	3992	99.800	143672,143673,143674
WF BEAMS 21x62	40'	13	4	52	4500	58.500	140480,143636
WF BEAMS 21x68	40'	1	2	2	2468	2.468	142761
WF BEAMS 21x68	40'	12	4	48	4935	59.220	143641,143642
WF BEAMS 21x73	40'	1	1	1	1325	1.325	142737
WF BEAMS 21x73	40'	7	4	28	5298	37.086	143643,143644
WF BEAMS 21x93	40'	7	3	21	5082	35.434	143646
WF BEAMS 24x55	40'	20	5	100	4990	99.800	143610,143611
WF BEAMS 24x55	40'	1	1	1	998	998	142639
WF BEAMS 24x62	40'	1	2	2	2250	2.250	142645
WF BEAMS 24x62	40'	21	4	84	4500	94.500	143561,143612
WF BEAMS 24x68	40'	27	3	81	3701	99.927	143560,143561,143564
WF BEAMS 24x84	40'	17	3	51	4572	77.724	143290,143577,143578
WF BEAMS 24x84	40'	1	1	1	1524	1.524	142122
WF BEAMS 24x94	40'	1	1	1	1706	1.706	143290,143292
WF BEAMS 24x94	40'	6	3	18	5117	30.702	143583,143584

TOTAL BUNDLES 386 TOTAL WEIGHT 1.594.742 Kg.

COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)												
	C	Mn	Si	P	S	V	Cr	Ni	Mo	Cu	Nb	Sn	CEV
138980	,112	1,220	,190	,027	,017	,040	,140	,220	,042	,420	,003	,029	,40
138981	,119	1,200	,190	,025	,023	,041	,120	,160	,040	,360	,003	,053	,39
140480	,103	1,130	,190	,018	,015	,031	,140	,160	,039	,360	,003	,053	,37
140986	,106	1,170	,200	,024	,010	,042	,170	,120	,024	,440	,003	,042	,39
142089	,093	1,000	,170	,014	,019	,040	,090	,160	,046	,410	,003	,023	,33
142122	,103	1,050	,180	,026	,013	,043	,130	,140	,025	,500	,003	,041	,36
142275	,107	,990	,200	,020	,025	,033	,170	,250	,058	,440	,003	,039	,37
142311	,085	1,000	,180	,015	,015	,035	,080	,160	,033	,290	,003	,022	,31
142314	,083	1,030	,190	,021	,014	,036	,120	,190	,033	,390	,003	,034	,33
142315	,097	1,030	,200	,029	,011	,036	,200	,180	,042	,470	,003	,045	,37
142316	,091	1,010	,190	,023	,017	,037	,160	,200	,040	,460	,003	,046	,35
142318	,085	1,030	,190	,019	,018	,037	,140	,240	,054	,410	,003	,044	,35
142321	,090	,980	,160	,022	,008	,033	,120	,200	,034	,410	,003	,036	,33
142325	,117	1,030	,190	,024	,015	,040	,190	,210	,046	,400	,003	,032	,38

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-34830

COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)												
	C	Mn	Si	P	S	V	Cr	Ni	Mo	Cu	Nb	Sn	CEV
142326	,095	,980	,170	,021	,015	,036	,180	,220	,039	,360	,003	,040	,35
142360	,083	1,020	,160	,018	,020	,032	,180	,200	,042	,350	,003	,038	,34
142639	,184	1,070	,200	,035	,019	,032	,180	,190	,027	,370	,003	,037	,45
142645	,076	1,030	,190	,039	,011	,036	,200	,190	,029	,450	,003	,042	,34
142737	,090	1,070	,200	,015	,026	,036	,110	,290	,046	,530	,003	,027	,36
142744	,086	1,000	,180	,022	,020	,038	,120	,240	,025	,390	,003	,034	,33
142746	,093	1,000	,200	,019	,017	,037	,120	,230	,027	,420	,003	,031	,34
142761	,065	1,040	,190	,025	,027	,042	,160	,180	,029	,410	,003	,024	,32
142834	,087	1,030	,190	,017	,014	,035	,150	,180	,020	,350	,003	,017	,34
142835	,108	1,030	,190	,022	,013	,038	,140	,210	,029	,360	,003	,019	,36
142836	,070	1,030	,170	,026	,027	,039	,150	,190	,024	,360	,003	,017	,32
143101	,105	,990	,200	,013	,006	,037	,100	,240	,051	,350	,003	,020	,35
143102	,081	1,020	,210	,016	,018	,040	,130	,200	,032	,330	,003	,019	,33
143106	,082	,990	,180	,015	,020	,040	,100	,160	,027	,370	,003	,022	,32
143255	,100	1,040	,200	,013	,035	,036	,080	,150	,022	,330	,003	,030	,33
143256	,095	,990	,180	,015	,037	,035	,090	,160	,022	,390	,003	,035	,33
143257	,096	,980	,170	,017	,023	,035	,100	,150	,022	,370	,003	,031	,33
143290	,101	1,000	,170	,030	,014	,038	,130	,170	,034	,430	,003	,033	,35
143292	,098	1,010	,170	,019	,021	,040	,140	,220	,043	,340	,003	,033	,35
143426	,089	1,000	,180	,018	,023	,041	,200	,180	,028	,430	,007	,037	,35
143427	,090	1,340	,190	,015	,024	,086	,140	,200	,033	,460	,004	,033	,41
143429	,101	,980	,190	,018	,022	,036	,130	,170	,025	,440	,006	,031	,34
143438	,081	,990	,190	,018	,023	,040	,130	,210	,042	,390	,003	,023	,33
143439	,111	,980	,170	,021	,012	,043	,100	,250	,041	,390	,005	,025	,35
143440	,112	1,080	,190	,022	,012	,040	,160	,220	,043	,380	,007	,022	,38
143469	,088	1,030	,200	,015	,024	,040	,090	,180	,031	,340	,003	,020	,31
143474	,079	1,000	,190	,015	,021	,035	,100	,180	,034	,350	,003	,019	,31
143475	,079	1,010	,180	,016	,024	,035	,100	,170	,029	,300	,007	,018	,31
143476	,092	,990	,180	,018	,033	,034	,100	,180	,026	,320	,003	,019	,32
143477	,105	1,030	,220	,026	,027	,036	,140	,180	,027	,310	,003	,019	,35
143478	,090	1,000	,200	,021	,030	,032	,150	,180	,026	,330	,003	,021	,33
143480	,085	1,000	,190	,022	,023	,034	,160	,200	,033	,350	,003	,019	,33
143482	,090	1,040	,200	,026	,021	,036	,180	,190	,033	,420	,004	,019	,35
143484	,099	,990	,200	,023	,019	,035	,150	,180	,028	,320	,003	,017	,34
143485	,119	,970	,210	,024	,018	,034	,160	,190	,027	,310	,003	,017	,36
143486	,080	1,000	,180	,020	,013	,037	,140	,190	,027	,330	,005	,018	,32
143560	,073	1,040	,180	,014	,028	,033	,170	,260	,075	,360	,003	,022	,34
143561	,075	1,020	,200	,022	,024	,033	,180	,270	,069	,750	,003	,039	,37
143564	,099	1,050	,170	,034	,014	,034	,280	,220	,051	,520	,008	,037	,40
143577	,108	,990	,210	,029	,013	,036	,200	,240	,058	,330	,003	,031	,37
143578	,092	1,000	,180	,014	,018	,036	,130	,290	,059	,370	,003	,028	,35
143583	,071	1,000	,190	,018	,019	,037	,110	,170	,032	,430	,003	,029	,31
143584	,081	,970	,190	,022	,010	,039	,150	,190	,040	,420	,003	,030	,33
143610	,077	1,000	,200	,020	,015	,038	,150	,220	,043	,350	,003	,036	,33
143611	,105	1,020	,190	,026	,013	,037	,190	,240	,045	,370	,003	,035	,37
143612	,089	,970	,190	,022	,014	,038	,140	,210	,033	,390	,004	,038	,33
143636	,104	1,010	,200	,015	,012	,038	,160	,240	,037	,350	,003	,021	,36
143641	,076	1,010	,190	,026	,026	,036	,140	,210	,035	,400	,006	,031	,33

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



MILL TEST CERTIFICATE

OLA P-34830

COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)														
	C	Mn	Si	P	S	V	Cr	Ni	Mo	Cu	Nb	Sn	CEV		
143642	,075	,990	,170	,020	,018	,037	,110	,210	,031	,370	,003	,025	,31		
143643	,087	,970	,180	,021	,018	,036	,100	,190	,036	,420	,003	,031	,32		
143644	,099	,990	,170	,021	,018	,037	,120	,230	,037	,500	,005	,036	,35		
143646	,113	1,000	,190	,029	,023	,040	,140	,170	,030	,390	,004	,051	,36		
143659	,088	1,020	,190	,020	,018	,036	,120	,190	,024	,480	,005	,025	,34		
143660	,075	1,030	,220	,019	,034	,039	,130	,190	,026	,440	,003	,021	,33		
143661	,074	1,000	,190	,026	,012	,038	,140	,190	,031	,460	,003	,027	,33		
143663	,094	,990	,200	,024	,016	,046	,110	,160	,021	,410	,003	,035	,33		
143664	,094	,990	,170	,024	,016	,037	,120	,200	,027	,350	,003	,035	,33		
143666	,089	1,020	,190	,014	,017	,037	,100	,200	,028	,390	,003	,034	,33		
143668	,091	,980	,160	,027	,014	,037	,130	,160	,016	,390	,005	,026	,33		
143669	,081	1,000	,190	,028	,010	,038	,130	,170	,016	,390	,004	,025	,32		
143672	,080	,940	,180	,019	,012	,038	,080	,180	,019	,350	,004	,025	,28		
143673	,066	,990	,200	,027	,010	,037	,080	,140	,012	,380	,005	,029	,29		
143674	,076	,990	,180	,023	,015	,037	,090	,140	,021	,400	,003	,027	,31		
143716	,077	,970	,170	,026	,025	,035	,100	,190	,029	,440	,003	,023	,31		
143717	,086	1,040	,180	,027	,019	,034	,120	,190	,029	,460	,006	,023	,34		
143719	,086	1,000	,190	,023	,018	,035	,140	,220	,035	,430	,005	,028	,34		
143720	,112	,990	,160	,029	,016	,032	,150	,230	,038	,390	,003	,022	,36		
143721	,092	1,010	,160	,040	,016	,036	,140	,170	,020	,360	,007	,018	,33		
148416	,087	1,020	,160	,030	,014	,039	,110	,160	,017	,370	,006	,019	,33		
148981	,075	1,020	,180	,020	,021	,037	,110	,180	,031	,330	,003	,029	,31		
148982	,073	,990	,180	,019	,023	,036	,080	,160	,021	,390	,003	,031	,30		

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES					
		R _m MPa		R _m MPa		A% L0-5g	
BT	BS	C1		C2		C3	
W-10x19	142360	417	409	540	525	26,7	26,4
W-10x19	143439	429	428	588	568	22,4	22,
W-10x19	143469	439	423	567	543	22,4	22,1
W-10x39	138980	407	406	552	535	23,8	23,2
W-10x39	138981	450	433	594	595	23,3	23,1
W-10x39	140966	410	408	551	529	22,4	21,7
W-10x39	143832	387	381	524	514	25,2	24,3
W-10x39	143833	397	381	514	514	23,7	23,3
W-12x40	143427	449	450	598	592	22,7	22,5
W-12x40	143438	426	412	554	538	24,1	23,3
W-12x40	143439	422	418	557	535	22,6	21,9
W-12x40	143440	420	414	561	559	23,	22,7
W-14x22	143426	430	423	577	561	22,6	22,2
W-14x22	143429	422	418	573	567	22,2	22,
W-14x68	143666	388	382	501	497	23,4	23,2
W-14x68	143669	393	377	500	486	24,1	23,9
W-14x74	148416	397	380	509	507	23,4	23,2
W-14x74	148981	403	387	522	505	23,3	22,5
W-14x74	148982	405	400	525	518	23,3	22,8
W-16x26	142314	410	400	511	507	24,1	24,
W-16x26	142315	417	405	530	519	23,6	23,

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



MILL TEST CERTIFICATE

OLA P-34830

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES					
		ReH MPa		Rm MPa		A% LO=8"	
c11	c09	c11		c11		c13	
W-16x26	142316	425	409	516	516	26,1	25,6
W-16x26	142318	392	378	506	498	22,8	22,3
W-16x26	142321	406	395	511	502	23,1	22,5
W-16x26	142325	437	431	551	530	22,6	22,1
W-16x26	142326	444	439	579	574	22,4	22,0
W-16x26	143256	392	385	520	514	23,7	22,8
W-16x31	143255	403	399	518	516	23,4	23,2
W-16x31	143257	413	405	524	514	23,6	23,4
W-16x31	143719	407	399	556	548	25,6	24,8
W-16x31	143720	405	399	530	528	23,1	22,8
W-16x31	143721	412	406	528	520	23,9	23,1
W-16x31	143722	409	405	541	517	25,2	24,6
W-18x76	142089	383	375	508	504	25,6	25,0
W-18x76	142834	403	397	534	516	26,3	25,3
W-18x76	142835	392	390	531	521	25,0	24,6
W-18x76	142836	378	362	498	494	25,4	25,3
W-18x76	143474	406	398	483	527	24,8	25,7
W-18x76	143475	446	441	607	583	25,9	25,9
W-18x76	143476	406	392	517	515	22,9	22,3
W-18x76	143477	376	374	504	492	22,7	22,6
W-18x76	143478	388	374	499	499	27,2	26,4
W-18x76	143480	390	376	507	495	25,9	25,3
W-18x76	143482	396	384	518	497	23,4	22,5
W-18x76	143484	402	386	519	517	24,9	24,3
W-18x86	143101	408	402	534	514	22,2	22,0
W-18x86	143102	410	396	536	535	24,3	23,8
W-18x86	143106	426	426	579	557	22,3	22,3
W-18x86	143485	407	394	543	529	23,6	23,5
W-18x86	143486	391	386	521	509	25,6	25,4
W-18x86	143716	391	387	510	502	24,6	23,7
W-18x86	143717	402	396	527	507	23,4	22,9
W-21x44	143672	383	381	487	479	23,6	22,7
W-21x44	143673	396	390	506	491	22,3	22,1
W-21x44	143674	406	390	506	504	23,4	23,0
W-21x62	140480	413	403	535	517	23,4	22,9
W-21x62	143636	378	403	511	498	23,8	24,3
W-21x68	142761	368	373	491	497	23,4	23,4
W-21x68	143641	401	383	514	498	24,4	24,0
W-21x68	143642	396	386	513	501	22,9	22,6
W-21x73	142737	394	381	525	513	22,6	22,1
W-21x73	143643	425	407	553	529	24,2	23,3
W-21x73	143644	407	399	535	523	22,6	22,4
W-21x93	143646	414	398	540	528	23,4	22,6
W-24x55	142639	432	430	576	573	22,6	22,5
W-24x55	143610	402	390	521	505	23,1	22,9
W-24x55	143611	401	387	515	495	22,9	22,5
W-24x62	142645	399	393	543	533	22,5	22,3
W-24x62	143561	395	383	511	494	23,4	22,9

AQ1

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-34830

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES					
		ReH MPa		Rm MPa		A% LO=0%	
B11	B09	C11		C12		C13	
W-24x62	143612	391	381	501	489	25,	24,2
W-24x68	143580	418	415	539	518	22,6	21,9
W-24x68	143561	416	404	519	517	22,4	21,8
W-24x68	143564	422	414	537	527	22,4	22,3
W-24x84	142122	400	392	538	516	23,2	23,2
W-24x84	143290	382	391	519	543	22,6	22,9
W-24x84	143577	402	392	525	519	23,	22,3
W-24x84	143578	384	374	516	507	22,6	22,4
W-24x94	143290	392	388	531	509	24,7	23,7
W-24x94	143292	390	374	510	508	23,9	23,3
W-24x94	143583	398	395	526	504	22,5	22,1
W-24x94	143584	397	391	500	488	22,6	22,1
W-8x31	142744	390	386	520	515	24,2	23,9
W-8x31	142746	401	389	523	509	24,7	24,
W-8x31	143641	387	384	509	500	23,1	22,8
W-8x31	143661	379	405	518	494	22,8	21,9
W-8x35	143661	397	395	508	504	23,5	23,
W-8x35	143668	407	397	518	500	22,4	22,2
W-8x40	142275	395	384	527	510	22,5	22,3
W-8x40	143659	407	397	536	517	22,5	22,2
W-8x40	143660	408	400	519	517	22,3	22,3

85 análisis

D01: Certificamos que los aceros arriba indicados han sido satisfactoriamente probados de acuerdo con la especificación.
 B09: Marca AMO

Z01


 Lorenzo Zabala