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CARRETERA MADRID - IRUN, KM. 419  
20212 OLABERRIA (Guipúzcoa)  
TELEF. (943) 80.50.00 - FAX (943) 88.04.04



## CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE OLA 5630

DISCHARGE ADDRESS		CUSTOMER	
ARCELOR INTERNACIONAL MEXICO CERRO DE LAS CAMPANAS,3 T.2 DESP.403-404 DES.403-404COL.S.ANDRES ATENCO 54040 TLALNEPANTLA - MEXICO		ARCELOR INTERNACIONAL MEXICO CERRO DE LAS CAMPANAS,3 T.2 DESP.403-404 DES.403-404COL.S.ANDRES ATENCO 54040 TLALNEPANTLA - MEXICO	
SHIPPED AND CERTIFIED BY		CREDIT NUMBER	PORT OF LOADING
ACERALIA PERFILES OLABERRIA, S.L. 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 (MEXICO)	TULA
OUR REFERENCE	CONTRACT NUMBER	ORDER NUMBER	DATE
MERCHE	E-14347	3° TRIM. 05	28/10/2005

Material: WF vigas, calidad DUAL ASTM A-36/A 572 Gr. 50

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

ACERALIA PERFILES OLABERRIA S.L. 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
WF BEAMS 10x15	40'	7	18	126	4898	34.286	54750,54751,54752
WF BEAMS 10x22	40'	10	12	120	4790	47.900	14828,52131,53437,53447,54802,54803,54804
WF BEAMS 12x16	40'	2	18	36	5225	10.450	52002,52003,54812
WF BEAMS 12x22	40'	16	12	192	4790	76.640	53332,53333,53433,54701,54705,54707,54708,54737,54738
WF BEAMS 14x22	40'	10	12	120	4790	47.900	52035,54928,54931,54940,54941,54942
WF BEAMS 21x44	40'	13	5	65	3992	51.896	55009,55011,55013,55065
WF BEAMS 24x55	40'	20	5	100	4990	99.800	55024,55025,55149,55181,55182
WF BEAMS 24x103	40'	13	2	26	3738	48.594	54730,54731,54732,54817,55184
WF BEAMS 24x68	40'	14	3	42	3701	51.814	54970,54971,54975,55049,55054,55067,55068,55069,55070,55071
WF BEAMS 24x84	40'	11	3	33	4572	50.292	54879,54897,54898,54996,55161,55162
WF BEAMS 24x94	40'	10	3	30	5117	51.170	54827,54829,54830,54835,54836,55181,55182
WF BEAMS 8x10	40'	12	27	324	4898	58.776	54946,54947,54949,54950,54951,54952,54953,54954,54955,54956,54958

**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE**
**OLA 5630**

SIZE	LENGTH	BUNDLES	PIECES BUNDLES	TOTAL PIECES	WEIGHT BUNDLES	TOTAL WEIGHT	HEAT
WF BEAMS 8x21	40'	2	12	24	4572	9.144	55006,55008
WF BEAMS 21x83	40'	1	2	2	3012	3.012	53635
WF BEAMS 21x83	40'	1	1	1	1506	1.506	55040

TOTAL BUNDLES 142 TOTAL WEIGHT 643.180 Kg.

A02 EN 10204/3.1.b		ASTM A36 - A572 G50/A6														B01/B02/B03 AC3		
MATERIAL SIZE	COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)														Cev		
		C	Mn	Si	P	S	N	V	Cr	Ni	Mo	Cu	Nb	Al	Ti			
W-10x15	54750	.09	1.14	.21	.017	.021	.011	.002	.090	.130	.026	.349	.024	.001	.002			33
W-10x15	54751	.09	1.28	.18	.017	.028	.009	.002	.081	.134	.027	.341	.019	.001	.002			36
W-10x15	54752	.08	1.19	.19	.018	.024	.011	.002	.097	.184	.038	.436	.021	.001	.002			35
W-10x22	14828	.08	1.05	.24	.017	.024	.009	.025	.125	.120	.023	.533	.003	.002	.002			34
W-10x22	52131	.10	1.14	.22	.017	.027	.012	.002	.100	.123	.026	.475	.020	.001	.003			35
W-10x22	53437	.10	1.17	.22	.021	.018	.010	.002	.111	.132	.023	.578	.021	.001	.002			36
W-10x22	53447	.08	1.11	.17	.021	.018	.010	.002	.153	.171	.030	.488	.019	.002	.002			35
W-10x22	54802	.08	1.14	.16	.018	.028	.009	.002	.115	.193	.045	.490	.016	.001	.002			35
W-10x22	54803	.09	1.16	.20	.020	.036	.009	.002	.103	.152	.034	.384	.020	.001	.002			34
W-10x22	54804	.09	1.19	.19	.020	.027	.011	.002	.122	.203	.051	.467	.020	.001	.002			37
W-12x16	52002	.09	1.16	.19	.020	.024	.012	.002	.111	.175	.039	.550	.017	.001	.002			36
W-12x16	52003	.12	1.20	.24	.016	.012	.012	.002	.084	.167	.038	.518	.021	.001	.003			39
W-12x16	54812	.10	1.12	.16	.019	.021	.009	.002	.089	.124	.026	.294	.017	.002	.002			33
W-12x22	53332	.07	1.19	.21	.028	.023	.010	.002	.156	.112	.018	.389	.026	.001	.002			34
W-12x22	53333	.08	1.05	.17	.017	.024	.009	.002	.111	.118	.020	.423	.024	.001	.002			32
W-12x22	53433	.10	1.23	.19	.024	.026	.000	.002	.120	.120	.025	.600	.031	.002	.002			39
W-12x22	54701	.09	1.22	.25	.027	.026	.010	.002	.135	.134	.019	.483	.021	.002	.002			37
W-12x22	54705	.10	1.14	.22	.027	.024	.009	.002	.171	.147	.021	.436	.019	.002	.002			37
W-12x22	54707	.10	1.18	.21	.028	.023	.009	.002	.160	.145	.020	.432	.019	.001	.002			37
W-12x22	54708	.10	1.15	.22	.026	.015	.009	.002	.149	.164	.028	.524	.022	.002	.002			37
W-12x22	54737	.10	1.32	.24	.018	.029	.009	.002	.112	.169	.035	.479	.019	.002	.002			39
W-12x22	54738	.09	1.21	.19	.020	.027	.009	.002	.132	.174	.030	.448	.018	.002	.003			40
W-14x22	52035	.11	1.17	.19	.030	.032	.011	.002	.186	.218	.038	.575	.026	.002	.003			38
W-14x22	54928	.10	1.22	.24	.029	.032	.010	.002	.184	.149	.025	.398	.023	.002	.003			36
W-14x22	54931	.09	1.19	.21	.028	.042	.010	.002	.163	.160	.031	.419	.022	.001	.002			37
W-14x22	54940	.09	1.12	.21	.023	.029	.009	.002	.189	.137	.025	.338	.019	.002	.002			35
W-14x22	54941	.11	1.11	.24	.016	.021	.010	.002	.137	.134	.023	.374	.018	.002	.002			36
W-14x22	54942	.10	1.10	.20	.020	.031	.009	.002	.138	.153	.028	.370	.020	.002	.002			35
W-21x44	55009	.09	1.19	.19	.023	.026	.011	.003	.134	.108	.027	.390	.026	.001	.002			35
W-21x44	55011	.10	1.33	.22	.021	.015	.011	.003	.170	.131	.034	.406	.030	.002	.002			40
W-21x44	55013	.11	1.20	.20	.025	.028	.011	.003	.171	.154	.041	.402	.028	.002	.002			39
W-21x44	55065	.08	1.17	.18	.023	.038	.011	.003	.144	.165	.043	.373	.027	.001	.002			35
W-21x83	53635	.11	1.20	.22	.018	.019	.009	.002	.114	.146	.029	.414	.020	.002	.002			37
W-21x83	55040	.08	1.15	.19	.026	.040	.011	.002	.137	.198	.048	.385	.026	.002	.002			35
W-24x103	54730	.10	1.18	.17	.022	.028	.011	.002	.154	.164	.040	.448	.020	.002	.002			38
W-24x103	54731	.09	1.19	.17	.023	.028	.011	.003	.147	.193	.056	.525	.021	.002	.002			38
W-24x103	54732	.09	1.18	.20	.018	.012	.010	.002	.106	.121	.026	.379	.021	.002	.002			35
W-24x103	54817	.09	1.25	.17	.021	.028	.012	.002	.162	.156	.048	.454	.023	.002	.002			36

**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE**
**OLA 5630**

MATERIAL SIZE	COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)															Cev
		C	Mn	Si	P	S	N	V	Cr	Ni	Mo	Cu	Nb	Al	Ti		
W-24x103	55184	.10	1,26	.18	.022	.029	.012	.002	.180	.186	.056	.442	.020	.002	.002	.40	
W-24x55	55024	.09	1,11	.21	.018	.025	.010	.002	.144	.140	.027	.414	.023	.002	.002	.34	
W-24x55	55025	.08	1,08	.19	.015	.025	.011	.002	.155	.191	.038	.418	.019	.002	.002	.34	
W-24x55	55149	.10	1,08	.20	.023	.021	.009	.002	.182	.118	.020	.415	.023	.002	.002	.35	
W-24x55	55181	.10	1,16	.18	.017	.025	.010	.002	.135	.134	.027	.384	.021	.002	.002	.36	
W-24x55	55182	.07	1,14	.20	.018	.019	.009	.002	.124	.141	.028	.359	.023	.002	.002	.33	
W-24x68	54970	.11	1,18	.25	.020	.023	.010	.002	.116	.111	.021	.409	.020	.002	.002	.37	
W-24x68	54971	.11	1,13	.23	.021	.026	.010	.002	.119	.112	.024	.418	.020	.002	.002	.36	
W-24x68	54975	.10	1,14	.23	.020	.032	.010	.002	.103	.099	.026	.315	.022	.002	.002	.35	
W-24x68	55049	.10	1,19	.22	.016	.014	.010	.002	.110	.125	.032	.415	.022	.002	.002	.36	
W-24x68	55054	.10	1,18	.20	.018	.026	.011	.002	.110	.137	.030	.406	.025	.002	.002	.36	
W-24x68	55067	.11	1,17	.20	.018	.023	.010	.002	.107	.128	.031	.361	.023	.002	.002	.37	
W-24x68	55068	.10	1,15	.19	.017	.024	.010	.002	.112	.137	.032	.361	.018	.002	.002	.35	
W-24x68	55069	.08	1,15	.19	.018	.022	.011	.002	.138	.183	.047	.377	.021	.002	.002	.34	
W-24x68	55070	.08	1,22	.19	.022	.021	.010	.002	.117	.159	.042	.465	.024	.002	.002	.36	
W-24x68	55071	.12	1,14	.18	.018	.020	.010	.002	.150	.161	.036	.426	.023	.002	.002	.38	
W-24x84	54879	.09	1,10	.18	.020	.029	.010	.002	.134	.117	.025	.397	.024	.002	.002	.34	
W-24x84	54897	.12	1,15	.24	.024	.022	.009	.003	.197	.152	.031	.409	.022	.002	.002	.39	
W-24x84	54898	.10	1,21	.20	.026	.030	.010	.003	.192	.172	.039	.433	.021	.002	.002	.38	
W-24x84	54996	.10	1,19	.20	.021	.020	.011	.002	.165	.154	.035	.394	.024	.002	.002	.38	
W-24x84	55161	.11	1,19	.20	.022	.027	.010	.002	.171	.166	.036	.400	.025	.002	.002	.38	
W-24x84	55162	.09	.92	.20	.018	.034	.009	.003	.133	.131	.029	.407	.016	.002	.002	.31	
W-24x94	54827	.11	1,12	.21	.022	.037	.011	.002	.170	.208	.048	.430	.021	.002	.002	.38	
W-24x94	54829	.07	1,08	.18	.018	.037	.012	.002	.107	.183	.046	.409	.024	.002	.002	.32	
W-24x94	54830	.08	1,19	.22	.021	.028	.011	.002	.184	.189	.045	.519	.023	.002	.002	.37	
W-24x94	54835	.09	1,11	.20	.021	.034	.011	.002	.161	.189	.048	.479	.023	.002	.002	.36	
W-24x94	54836	.12	1,26	.19	.020	.016	.000	.004	.130	.200	.051	.470	.020	.001	.000	.41	
W-24x94	55181	.08	1,19	.17	.020	.042	.011	.002	.125	.167	.040	.418	.021	.002	.002	.35	
W-24x94	55182	.09	1,21	.16	.019	.030	.012	.002	.151	.146	.044	.435	.022	.002	.002	.37	
W-8x10	54946	.09	1,15	.21	.021	.031	.010	.002	.079	.125	.024	.473	.020	.001	.002	.34	
W-8x10	54947	.10	1,17	.22	.027	.028	.011	.002	.132	.116	.022	.349	.023	.001	.002	.36	
W-8x10	54949	.09	1,15	.19	.017	.019	.009	.002	.111	.162	.027	.387	.021	.002	.002	.35	
W-8x10	54950	.08	1,19	.20	.019	.024	.010	.002	.107	.127	.020	.403	.021	.001	.002	.34	
W-8x10	54951	.08	1,13	.20	.025	.033	.010	.002	.138	.150	.027	.456	.019	.001	.002	.34	
W-8x10	54952	.10	1,09	.22	.022	.019	.010	.002	.131	.126	.021	.393	.026	.002	.002	.34	
W-8x10	54953	.07	1,05	.18	.026	.025	.010	.002	.138	.137	.025	.363	.022	.001	.002	.31	
W-8x10	54954	.08	1,18	.24	.027	.038	.012	.002	.129	.119	.025	.413	.023	.002	.002	.35	
W-8x10	54955	.08	1,06	.19	.026	.023	.011	.002	.137	.126	.022	.371	.022	.001	.002	.32	
W-8x10	54956	.07	1,05	.20	.020	.025	.010	.002	.119	.126	.020	.383	.017	.002	.002	.31	
W-8x10	54958	.09	1,13	.19	.017	.022	.011	.002	.111	.165	.028	.391	.021	.001	.002	.35	
W-8x21	55006	.09	1,21	.22	.027	.024	.009	.002	.207	.176	.046	.541	.023	.002	.002	.39	
W-8x21	55008	.09	1,12	.18	.027	.012	.011	.002	.204	.151	.038	.498	.021	.002	.002	.37	
MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN 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-10x15	54750	419	540	32,7		+20°	4	93	68	79	80						
W-10x15	54751	389	547	32,2		+20°	4	104	91	99	98						

**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE**
**OLA 5630**

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN POR CHOQUE IMPACT TEST					
		ReH MPa	Rm MPa	A% L0=5.65VS0	Doblado 180°	°C	KV300	V1 J.	V2 J.	V3 J.	Media J.
Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12
W-10x15	54752	382	540	30,1		+20°	4	109	89	119	106
W-10x22	14828	366	508	33,7		+20°	5	175	146	149	157
W-10x22	52131	367	545	27,7		+20°	5	103	96	110	103
W-10x22	53437	378	543	29,3		+20°	5	69	54	57	60
W-10x22	53447	366	545	31,		+20°	5	88	66	77	77
W-10x22	54802	363	540	27,		+20°	5	93	76	86	85
W-10x22	54803	367	536	28,4		+20°	5	66	59	64	63
W-10x22	54804	363	549	25,4		+20°	5	65	56	48	56
W-12x16	52002	359	541	30,7		+20°	4	86	70	66	74
W-12x16	52003	374	542	27,4		-20°	4	102	79	89	90
W-12x16	54812	387	544	32,4		+20°	4	137	118	141	132
W-12x22	53332	374	545	28,9		+20°	5	47	40	42	43
W-12x22	53333	403	532	32,		+20°	5	97	86	96	93
W-12x22	53433	363	520	33,9		+20°	5	134	102	130	122
W-12x22	54701	395	541	28,3		+20°	5	60	49	47	52
W-12x22	54705	365	539	28,3		-20°	5	76	58	67	67
W-12x22	54707	396	536	28,6		-20°	5	71	54	57	61
W-12x22	54708	381	549	26,7		+20°	5	51	40	42	44
W-12x22	54737	399	541	32,2		+20°	5	49	39	48	45
W-12x22	54738	379	538	29,		+20°	5	100	83	81	66
W-14x22	52035	359	548	27,1		+20°	4	46	38	40	41
W-14x22	54928	389	548	29,7		+20°	4	60	50	49	53
W-14x22	54931	375	541	31,1		+20°	4	48	46	47	47
W-14x22	54940	414	547	31,4		+20°	4	75	67	62	68
W-14x22	54941	422	544	30,2		+20°	4	75	66	60	67
W-14x22	54942	424	545	30,9		+20°	4	113	90	119	107
W-21x44	55009	419	526	31,4		+20°	7,5	170	135	140	148
W-21x44	55011	436	550	31,4		+20°	7,5	182	165	156	166
W-21x44	55013	438	546	29,8		+20°	7,5	103	81	95	93
W-21x44	55065	425	530	30,8		+20°	7,5	123	113	122	119
W-21x83	53635	411	537	28,7		+20°	10	138	122	118	126
W-21x83	55040	402	528	29,1		+20°	10	42	38	40	40
W-24x103	54730	385	526	29,8		+20°		53	45	56	52
W-24x103	54731	384	532	28,1		+20°		48	44	49	47
W-24x103	54732	398	528	28,8		+20°		54	43	50	49
W-24x103	54817	388	525	28,6		+20°		53	45	52	50
W-24x103	55184	391	533	28,8		+20°		56	49	57	54
W-24x55	55024	413	531	29,5		+20°		133	111	150	131
W-24x55	55025	412	540	32,3		+20°		112	105	116	111
W-24x55	55149	419	546	30,6		+20°		93	75	78	82
W-24x55	55181	397	531	32,2		+20°		131	109	120	120
W-24x55	55182	407	515	32,4		+20°		169	131	165	155
W-24x68	54970	417	550	28,6		+20°	10	107	82	104	98
W-24x68	54971	419	544	29,3		+20°	10	116	100	93	103
W-24x68	54975	406	521	32,5		+20°	10	115	93	122	110
W-24x68	55049	413	538	29,7		+20°	10	153	124	134	137
W-24x68	55054	419	540	30,		+20°	10	174	134	168	159
W-24x68	55067	419	537	30,2		+20°	10	163	139	184	162

AD1



**ACERALIA PERFILES OLABERRIA**  
Grupo Arcelor

CARRETERA MADRID - IRUN, KM. 419  
20212 OLABERRIA (Guipúzcoa)  
TELEF. (943) 80.50.00 - FAX (943) 88.04.04



**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE OLA 5630**

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN POR CHOQUE IMPACT TEST					
		ReH MPa	Rm MPa	A% L0=5.65VS0	Dobrado 180°	°C	KV300	V1 J.	V2 J.	V3 J.	Media J.
W-24x68	55068	395	526	30,4		+20°	10	148	137	135	140
W-24x68	55069	394	523	30,1		+20°	10	149	120	160	143
W-24x68	55070	403	544	26,4		+20°	10	87	72	87	82
W-24x68	55071	422	540	29,8		+20°	10	103	88	118	103
W-24x84	54879	383	520	30,6		+20°	10	116	95	101	104
W-24x84	54897	403	550	27,7		+20°	10	93	75	96	88
W-24x84	54898	389	538	28,1		+20°	10	69	58	69	62
W-24x84	54996	399	545	28,1		+20°	10	97	70	85	84
W-24x84	55161	409	541	26,8		+20°	10	90	79	83	84
W-24x84	55162	371	487	29,4		+20°	10	97	80	91	89
W-24x94	54827	397	545	29,5		+20°	10	61	57	63	60
W-24x94	54829	385	494	30,7		+20°	10	131	108	109	116
W-24x94	54830	360	531	29,6		+20°	10	60	53	52	55
W-24x94	54835	391	525	30,4		+20°	10	48	42	39	43
W-24x94	54836	398	522	34,1		+20°	10	89	81	90	87
W-24x94	55181	382	506	28,4		+20°	10	76	68	77	74
W-24x94	55182	399	522	29,8		+20°	10	100	80	84	88
W-8x10	54946	390	538	31,3		+20°	3	106	89	117	104
W-8x10	54947	387	539	32,9		+20°	3	75	63	63	67
W-8x10	54949	401	543	29,3		+20°	3	165	121	146	144
W-8x10	54950	393	549	32,4		+20°	3	123	113	111	116
W-8x10	54951	370	541	30,1		+20°	3	97	86	91	91
W-8x10	54952	399	547	28,2		+20°	3	112	102	107	107
W-8x10	54953	388	535	30,2		+20°	3	147	115	119	127
W-8x10	54954	372	540	31,6		+20°	3	79	70	64	71
W-8x10	54955	403	548	30,4		+20°	3	109	84	95	96
W-8x10	54956	412	541	29,2		+20°	3	133	111	110	118
W-8x10	54958	409	549	31,9		+20°	3	176	158	152	162
W-8x21	55006	377	542	24,6		+20°	5	42	35	37	38
W-8x21	55008	371	541	28,9		+20°	5	36	36	41	38

**80 análisis**

DD1. Certificamos que los aceros arriba indicados han sido satisfactoriamente probados de acuerdo con la especificación  
B06. Marca APO

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Luis María Lakunza

**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE OLA 5630**

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN POR CHOQUE IMPACT TEST					
		ReH MPa	Rm MPa	A% L0=5.65VS0	Doblado 180°	°C	KV300	V1 J.	V2 J.	V3 J.	Media J.
B01	B02	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10
W-10x15	54752	382	540	30,1		+20°	4	109	89	119	106
W-10x22	14828	366	508	33,7		+20°	5	175	148	149	157
W-10x22	52131	367	545	27,7		+20°	5	103	96	110	103
W-10x22	53437	378	543	29,3		+20°	5	69	54	57	60
W-10x22	53447	366	545	31,		+20°	5	88	66	77	77
W-10x22	54802	363	540	27,		+20°	5	93	76	86	85
W-10x22	54803	367	536	28,4		+20°	5	66	59	64	63
W-10x22	54804	363	549	25,4		+20°	5	65	56	48	56
W-12x16	52002	359	541	30,7		+20°	4	86	70	66	74
W-12x16	52003	374	542	27,4		+20°	4	102	79	89	90
W-12x16	54812	387	544	32,4		+20°	4	137	118	141	132
W-12x22	53332	374	545	28,9		+20°	5	47	40	42	43
W-12x22	53333	403	532	32,		+20°	5	97	86	96	93
W-12x22	53433	363	520	33,9		+20°	5	134	102	130	122
W-12x22	54701	395	541	28,3		+20°	5	60	49	47	52
W-12x22	54705	365	539	28,3		+20°	5	76	58	67	67
W-12x22	54707	396	538	28,6		+20°	5	71	54	57	51
W-12x22	54708	381	549	26,7		+20°	5	51	40	42	44
W-12x22	54737	399	541	32,2		+20°	5	49	39	48	45
W-12x22	54738	379	538	29,		+20°	5	100	83	81	88
W-14x22	52035	359	548	27,1		+20°	4	46	38	40	41
W-14x22	54928	389	548	29,7		+20°	4	60	50	49	53
W-14x22	54931	375	541	31,1		+20°	4	48	46	47	47
W-14x22	54940	414	547	31,4		+20°	4	75	67	62	68
W-14x22	54941	422	544	30,2		+20°	4	75	66	60	67
W-14x22	54942	424	545	30,9		+20°	4	113	90	119	107
W-21x44	55009	419	526	31,4		+20°	7,5	170	135	140	148
W-21x44	55011	436	550	31,4		+20°	7,5	182	165	156	168
W-21x44	55013	438	546	29,8		+20°	7,5	103	81	95	93
W-21x44	55065	425	530	30,8		+20°	7,5	123	113	122	119
W-21x83	53635	411	537	28,7		+20°	10	138	122	118	126
W-21x83	55040	402	528	29,1		+20°	10	42	38	40	40
W-24x103	54730	385	526	29,8		+20°		53	45	58	52
W-24x103	54731	384	532	28,1		+20°		48	44	49	47
W-24x103	54732	398	528	28,8		+20°		54	43	50	49
W-24x103	54817	388	525	28,6		+20°		53	45	52	50
W-24x103	55184	391	533	28,8		+20°		56	49	57	54
W-24x55	55024	413	531	29,5		+20°		133	111	150	131
W-24x55	55025	412	540	32,3		+20°		112	105	116	111
W-24x55	55149	419	546	30,6		+20°		93	75	78	82
W-24x55	55181	397	531	32,2		+20°		131	109	120	120
W-24x55	55182	407	515	32,4		+20°		169	131	165	155
W-24x68	54970	417	550	28,6		+20°	10	107	82	104	98
W-24x68	54971	419	544	29,3		+20°	10	116	100	93	103
W-24x68	54975	406	521	32,5		+20°	10	115	93	122	110
W-24x68	55049	413	538	29,7		+20°	10	153	124	134	137
W-24x68	55054	419	540	30,		+20°	10	174	134	168	159
W-24x68	55067	419	537	30,2		+20°	10	163	139	184	162