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Ein Unternehmen der Salzgitter Gruppe

Inspection certificate 3.1
DIN EN 10204 (003)

No. (001) 313/11562
Purchaser Salzgitter Mannesmann International Corporation
05.06.2012 No. (002)
04049 Düsseldorf

No. (003) 506749
Page 1/3
Date 13.07.2012

Product W-Shapes acc. ASTM A6
Spec. grade and form of delivery ASTM A 992-06a
(001-002) ASTM A 992-06a:2007

Agaronex S.A. de C.V.
65550 CIENNEGA DE FLORES NL C.P.
MEXICO

Works order No. (001) 0000381637
Direction code No. 0083808218
0083808219
0083808220
0083808221
0083808222

Inspector (001) NS

Material data (001-003)

Item	Part No. (001)	Quantity (002)	Cont. of delivery (003)	Process (004)	Length (005-011)	Fit	Weight (012)	kg
08	02830	24	AR					
08	02831	72	AR	W12X26LBS/FT				
08	02819	10	AR	W12X26LBS/FT	40'			11.324
09	02825	30	AR	W12X30LBS/FT	40'			23.972
09	02826	70	AR	W12X30LBS/FT	40'			16.275
09	43726	20	AR	W12X30LBS/FT	40'			16.275
13	01641	8	AR	W12X30LBS/FT	40'			37.975
13	43194	35	AR	W14X99LBS/FT	40'			10.850
Σ		289	AR, as rolled		40'			14.368
Dimensional check and visual examination of the surface condition: without objection								203.899

Ladle analysis (001-003)

Part No. (001)	C % ≤0.23	Si % ≤1.00	Mn % 0.50-1.60	P % ≤0.035	S % ≤0.035	N % ≤0.012	Al %	V % ≤0.11	Nb % ≤0.06	Ti %
01641	0.15	0.20	1.19	0.022	0.016	0.012	0.013	0.03	0.001	0.061
02819	0.09	0.21	1.30	0.018	0.028	0.010	0.013	0.06	0.001	0.061
02825	0.09	0.21	1.31	0.019	0.011	0.012	0.010	0.06	0.001	0.061
02826	0.09	0.22	1.33	0.020	0.016	0.012	0.011	0.06	0.001	0.061
02830	0.09	0.20	1.31	0.023	0.011	0.012	0.009	0.05	0.001	0.061
02831	0.09	0.22	1.31	0.022	0.014	0.012	0.012	0.05	0.001	0.061

Part No. (001)	Cu % ≤0.10	Cr % ≤0.35	Ni % ≤0.05	Mo % ≤0.05	Sn %	EW 1) % ≤0.01	V+Nb % ≤0.18
01641	0.30	0.11	0.11	0.02	0.01	0.41	0.03
02819	0.25	0.12	0.11	0.03	0.01	0.37	0.06
02825	0.27	0.09	0.10	0.02	0.01	0.37	0.06
02826	0.26	0.08	0.10	0.02	0.01	0.37	0.06
02830	0.27	0.08	0.10	0.02	0.02	0.36	0.05
02831	0.30	0.08	0.09	0.02	0.02	0.35	0.05

1) EWT: CrV, Cu, Mn, Ni, Nb, N, S, Si, Sn, Ti, V, W, Zn, Zr

This certificate is valid only if the material complies with the terms of the order. (001)

Inspected by: (001) [Signature]
Peiner Träger GmbH
Salzgitter-Str. 10
D-31226 Lüneburg
0411

Inspected by: (001) [Signature]

L. Link

This certificate was prepared by a computerized system and a valid electronic signature according to EN ISO 15626, section 5.



Ein Unternehmen der Salzgitter Gruppe

Inspection certificate 3.1
DIN EN 10204
 (M1)

No. (M1) 313/11562
 Position Salzgitter Mannesmann Internationala Konzern
 (M1) 40409 Lüsseldorf

05.06.2012 No. (M1)
 Aceronex S.A. de C.V.
 65550 CIENNEGA DE FLORES NL C.P.
 MEXIKO

Product W-Shapes acc. ASTM A6
 (M1)

Steel grade and heat of delivery ASTM A 992-06a
 (M1-503) ASTM A 992-06a-2007

No. (M1) 506749
 Page 2/3
 Date 13.07.2012

Werkzettel No. 0000381637
 (M1)
 Disposition No. 0083808216
 0083808319
 0083808220
 0083808967
 0083809061
 09.07.2012
 Inspector WS
 (M1)

Ladle analysis (M1-03)

Inst. No. (M1)	C %	Si %	Mn %	P %	S %	N %	Al %	V %	Nb %	Ti %
48194 48726	0,16 0,08	0,31 0,22	1,18 1,26	0,015 0,015	0,006 0,012	0,010 0,012	0,009 0,013	0,03 0,05	0,001 0,001	0,001 0,001
Inst. No. (M1)	Cu %	Cr %	Ni %	Mo %	Sn %	EVI 1) %	V+Nb %			
48194 48726	0,23 0,23	0,09 0,09	0,10 0,09	0,03 0,04	0,01 0,01	0,41 0,35	0,03 0,05			

1) EVI: Cu-C-Mn-Mo-S-Ni-P-Sb-Si-Sn-V-Ti

Steel making: Electric process
 (M1)

Tensile test (M1-02)

Inst. No. (M1)	Product (M1)	Location (M1)	Urecl. (M1)	Typ (M1)	Widestart (M1) Reff N/mm ² 16-45	Streckgrenze (M1) Re N/mm ² 16-60	Bruchdeh (M1) A ₅₀ %	HR/80 (M1)
C1641	W14X99LBS/PT	PL	L	P	415	563	22	0,74
C1641	W14X99LBS/PT	PL	L	P	422	564	22	0,75
C2819	W12X30LBS/PT	PL	L	P	422	563	22	0,75
C2819	W12X30LBS/PT	PL	L	P	437	561	22	0,78
C2825	W12X30LBS/PT	PL	L	P	440	572	21	0,77
C2825	W12X30LBS/PT	PL	L	P	430	564	22	0,76
C2826	W12X30LBS/PT	PL	L	P	449	559	22	0,80
C2826	W12X30LBS/PT	PL	L	P	436	553	21	0,79
C2830	W12X26LBS/PT	PL	L	P	442	559	20	0,79
C2830	W12X26LBS/PT	PL	L	P	437	557	21	0,78
C2831	W12X26LBS/PT	PL	L	P	446	575	21	0,78
C2831	W12X26LBS/PT	PL	L	P	444	572	21	0,78
48194	W14X99LBS/PT	PL	L	P	411	564	24	0,71

1) L: Flange
 2) L: longitudinal

1) P: Parallel

We hereby certify that the delivered material complies with the terms of the order.
 (M1)

Inspected: (M1) [Signature]
 Peiner Träger GmbH
 Gießerei- und Maschinenbau
 D-31224 Werra
 (M1)

Inspector: (M1) [Signature]
 (M1)

Eintrag: (M1)

This certificate was prepared by a suitable data processing system and bears the digital signature according to EN10204, section 3.



Ein Unternehmen der Salzgitter Gruppe

Inspection certificate 3.1 DIN EN 10204 IAN		No. (AN) Page Date	506749 3/3 13.07.2012
No. (AN) Purchase order IAN	313/11562 Salzgitter Mannesmann International 40409 Düsseldorf	05.06.2012 No. (AN) Manufacturer	Aceronex S.A. de C.V. 6550 CIENNEGA DE FLORES NL C.P. MEXICO
Product Spec	W-Shapes acc. ASTM A6 A6	Works order No. (AN)	0000381637
Steel grade and terms of delivery (AN - 020)	ASTM A 992-06a ASTM A 992-06a:2007	Dispatch note No. 0083808219 0083808220 0083809007 0083809061 09.07.2012	
		Inspector (AN)	WS

Tensile test (30-c20)										
Serial no. (AN)	Product (AN)	Location		Type (AN)	Yield point E _{0.2} ReH N/mm ² 315-450	Tensile strength R _m N/mm ² 450-600	Elongation A ₅ 200mm %	A _{50%}		
		1	2							
48194	W14X99LBS/FT	FL	L	P	420	563	24	0,75		
48726	W12X30LBS/FT	FL	L	P	413	558	22	0,75		
48726	W12X30LBS/FT	FL	L	P	413	547	22	0,75		

1) FL: Flange
 2) L: longitudinal
 P: Parallel

Fully killed steel produced by an electric arc furnace

Verify each cut the dimension on both couples with the terms of the order.
 (20)

Trademark
 IAN

Peiner Träger GmbH
 Gabel & Lenz-Meyer-Str. 10
 D-32276
 (AN)

Inspector Representative
 (AN)
 L.N.T.C.

This certificate was prepared by a computerized processing system and is valid without a signature according to EN 10204, section 5.