

Inspection certificate 3.1 EN 10204:2004-10 (A02)		No. (A03) 35420 Page 1/9 Date 19.01.2015
No. (A07) STK-59285 23.09.2014 Purchaser Salzgitter Mannesmann International (A06) 1770 St. James Place Suite 500 77056-3499 HOUSTON USA		
Product steel line pipe, HFW-HFI-longitudinally welded (B01)	Works order No. 1000025739 (A08)	
Steel grade and terms of delivery X70M (B02-B03) API5L 45TH PSL2 Hardness according to Nace MR0175 / ISO 15156	Dispatch note No. 0080121522 16.01.2015 Inspection (A05) WA	
Inside conditions (B06) black		
Outside conditions (B06) black		
ends (B06) bevelled 30 +5/-0°, root face 1,6 +/-0,8 mm, pipe end protection: without plastic caps		
Marking of the product (B06) Inside marking at both ends: MW-HA Monogram * Spec. 5L0256 * API-Monogram * PSL2 HFW * X70M * mmYY * Inspection-no. * WA * single pipe length (mm) 1000025739 / 000005 * 20,000 " x 0,500 " Running pipe-no. * Barcode of running pipe-no. GERMANY * Customer P.O.-No. STK-59285		

Material data (B01-B99)									
Item	Heat No. (B07)	Quantity (B08)	Cond. of delivery (B04)	D x T x Length (B09-B11)	in x in x ft	Length (B09-B11)	ft	Weight (B12)	lbs
005	015566	50	U	20,000 x 0,500 x 44,980		2.217,190		231.128	
005	040501	70	U	20,000 x 0,500 x 44,980		3.116,760		324.935	
Σ		120	U: as rolled					5.333,950	556.063
The mentioned length and weight refers to the product in delivery condition									

We hereby certify that the delivered material complies with the terms of the order.
(Z01)

 **Ha** Trademark
(A04)

Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
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		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
(A06)	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
(B01)		
Steel grade and terms of delivery	X70M	(A08)
(B02-B03)	API5L 45TH PSL2	Dispatch note No. 0080121522
	Hardness according to Nace MR0175 / ISO	16.01.2015
	15156	Inspection (A05) WA

Ladle analysis (C70-C99)												
Heat No. (B07)	C %	Si %	Mn %	P %	S %	Al %	Cu %	Cr %	Ni %	Mo %		
015566 040501	0,05 0,06	0,29 0,30	1,09 1,08	0,011 0,009	0,002 0,001	0,033 0,045	0,02 0,03	0,02 0,03	0,03 0,03	0,19 0,18		
Heat No. (B07)	V %	Ti %	Nb %	N %	B %	Ca %	Nb+V %	EV1 1) %	EV2 2) %	EV3 3) %		
015566 040501	0,01 0,01	0,03 0,02	0,06 0,06	0,004 0,004	0,0002 0,0003	0,002 0,002	0,070 0,070	0,10 0,09	0,13 0,14	0,28 0,29		
1) EV1: V+Nb+Ti												
2) EV2: PCM=C+Mn/20+Mo/15+Ni/60+Cr/20+V/10+Cu/20+Si/30+5xB												
3) EV3: CEV=C+Mn/6+Mo/5+Ni/15+Cr/5+V/5+Cu/15												
Steelmaking process: Basic oxygen process (C70)												

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(Z01)

 **Ha** Trademark
(A04)

Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
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		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		
Steel grade and terms of delivery	X70M	Dispatch note No. 0080121522
{B02-B03}	API5L 45TH PSL2	16.01.2015
	Hardness according to Nace MR0175 / ISO	Inspection WA
	15156	{A05}

Check analysis (C70-C99)										
Specimen No. (C00)	Heat No. (B07)	C %	Si %	Mn %	P %	S %	Al %	Cu %	Cr %	
WMF493006	015566	0,05	0,29	1,05	0,010	0,0004	0,035	0,02	0,02	
WMF493006	015566	0,05	0,29	1,05	0,010	0,0003	0,035	0,02	0,02	
WMF497004	040501	0,06	0,29	1,03	0,008	0,0002	0,044	0,03	0,03	
WMF497004	040501	0,06	0,29	1,03	0,008	0,0002	0,044	0,03	0,03	
Specimen No. (C00)	Heat No. (B07)	Ni %	Mo %	V %	Ti %	Nb %	N %	B %	Ca %	
WMF493006	015566	0,03	0,17	0,01	0,03	0,05	0,003	0,0001	0,001	
WMF493006	015566	0,03	0,17	0,01	0,03	0,05	0,002	0,0001	0,001	
WMF497004	040501	0,03	0,16	0,004	0,02	0,05	0,003	0,0002	0,001	
WMF497004	040501	0,03	0,16	0,004	0,02	0,05	0,003	0,0001	0,001	
Specimen No. (C00)	Heat No. (B07)	Nb+V %	EV1 1) %	EV2 2) %	EV3 3) %					
WMF493006	015566	0,060	0,09	0,13	0,27					
WMF493006	015566	0,060	0,09	0,13	0,27					
WMF497004	040501	0,054	0,07	0,14	0,27					
WMF497004	040501	0,054	0,07	0,14	0,27					

1) EV1: V+Nb+Ti
2) EV2: PCM-C+Mn/20+Mo/15+Ni/60+Cr/20+V/10+Cu/20+Si/30+5xB
3) EV3: CEV=C+Mn/6+Mo/5+Ni/15+Cr/5+V/5+Cu/15

We hereby certify that the delivered material complies with the terms of the order.
(Z01)

 **Ha** Trademark
(A04)

Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
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		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		
Steel grade and terms of delivery	X70M	Dispatch note No. 0080121522
{B02-B03}	API5L 45TH PSL2	16.01.2015
	Hardness according to Nace MR0175 / ISO	Inspection WA
	15156	{A05}

Tensile test (C10-C29) acc. API											
Specimen No. (C00)	Heat No. (B07)	Location (C01) 1)	Direct. (C02) 2)	Cond. (B05) 3)	Type (B05) 4)	Yield strength Rt0,5 psi 70300-92100	Tensile strength Rm psi 82700-110200	Tensile strength Rm psi ≥82700	Rt0,5/Rm ≤0,93	Elongation (C13) 2in %	≥22,0
WMF493006	015566	GW180	Q	U	L	79336	95000	91664	0,84	40,8	
WMF493006	015566	SN	Q	U	L	74985	92244	90213	0,81	33,4	
Specimen No. (C00)	Heat No. (B07)	Location (C01) 1)	Direct. (C02) 2)	Cond. (B05) 3)	Type (B05) 4)	Width of specimen in	Height of specimen in				
WMF493006	015566	GW180	Q	U	L	1,583	0,494				
WMF493006	015566	SN	Q	U	L	1,583	0,506				
WMF497004	040501	GW180	Q	U	L	1,583	0,494				
WMF497004	040501	SN	Q	U	L	1,583	0,494				

1) GW180 : Base material 180 degree
SN : Weldseam
2) Q: transversal
3) U: as rolled
4) L: Lot testing

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(Z01)



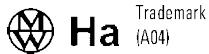
Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
{A02}		Page 5/9
		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		
Steel grade and terms of delivery	X70M	Dispatch note No. 0080121522
{B02-B03}	API5L 45TH PSL2	16.01.2015
	Hardness according to Nace MR0175 / ISO	Inspection WA
	15156	{A05}

Impact test {C40-C49}										
Specimen No. (C00)	Heat No. (B07)	Location (C01) 1)	Direct. (C02) 2)	Cond. (B05) 3)	Type (B06) 4)	Type of specimen (C40-C41) 5)	Temp. (C03) °C	Impact energy (C42-C43) 1 ftlbf ≥15	2	3 MW ftlbf ≥20
WMF493006 WMF497004	015566 040501	GW90 GW90	Q Q	U U	L L	Charpy-V/10,0 Charpy-V/10,0	+000 +000	221 221	221 221	221 221
Specimen No. (C00)	Heat No. (B07)	Location (C01) 1)	Direct. (C02) 2)	Cond. (B05) 3)	Type (B06) 4)	Type of specimen (C40-C41) 5)	Temp. (C03) °C	Ductile fracture (C42-C43) 1 %	2	3 MW % 6)
WMF493006 WMF497004	015566 040501	GW90 GW90	Q Q	U U	L L	Charpy-V/10,0 Charpy-V/10,0	+000 +000	100 100	100 100	100 100
1) GW90: Base material 90 degree						4) L: Lot testing				
2) Q: transversal						5) 10,0: 1/1 size				
3) U: as rolled						6) MW: Average				

Pipe list {B01-B89}									
Item	Inspection no. (B07)	Pipe-no. (B07)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Length (B09-B11)	ft	Weight (B12)	lbs
005	1001	WMF500009	2000782733	040501	U		44,910		4.683
005	1002	WMF500008	2000782732	040501	U		44,910		4.683
005	1003	WMF500007	2000782731	040501	U		44,910		4.683
005	1004	WMF500006	2000782730	040501	U		44,910		4.683
005	1005	WMF500015	2000782739	040501	U		44,910		4.683
005	1006	WMF500014	2000782738	040501	U		44,950		4.685
005	1007	WMF500013	2000782737	040501	U		44,910		4.683
005	1008	WMF500012	2000782736	040501	U		44,950		4.685
005	1009	WMF500011	2000782735	040501	U		44,910		4.683
		U: as rolled							

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(Z01)



Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1		No. (A03)	35420
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{A02}		Date	19.01.2015
No. (A07)	STK-59285 23.09.2014		
Purchaser	Salzgitter Mannesmann International		
{A06}	1770 St. James Place Suite 500		
	77056-3499 HOUSTON		
	USA		
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No.	1000025739
{B01}		{A08}	
Steel grade and terms of delivery	X70M	Dispatch note No.	0080121522
{B02-B03}	API5L 45TH PSL2		16.01.2015
	Hardness according to Nace MR0175 / ISO	Inspection	WA
	15156	{A05}	

Pipe list {B01-B99}									
Item	Inspection no. (B07)	Pipe-no. (B07)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Length (B09-B11)	ft	Weight (B12)	lbs
005	1010	WMF500010	2000782734	040501	U	44,910		4.683	
005	1011	WMF499016	2000782724	040501	U	32,810		3.419	
005	1012	WMF499015	2000782723	040501	U	44,910		4.683	
005	1013	WMF499009	2000782717	040501	U	44,910		4.683	
005	1014	WMF499008	2000782716	040501	U	44,910		4.683	
005	1015	WMF499002	2000782710	040501	U	44,490		4.639	
005	1016	WMF499014	2000782722	040501	U	44,910		4.683	
005	1017	WMF499013	2000782721	040501	U	44,950		4.685	
005	1018	WMF499012	2000782720	040501	U	44,910		4.683	
005	1019	WMF499011	2000782719	040501	U	44,910		4.683	
005	1020	WMF499010	2000782718	040501	U	44,950		4.685	
005	1021	WMF498011	2000782703	040501	U	44,950		4.685	
005	1022	WMF498006	2000782698	040501	U	44,980		4.689	
005	1023	WMF498005	2000782697	040501	U	44,950		4.685	
005	1024	WMF498015	2000782707	040501	U	44,550		4.645	
005	1025	WMF498014	2000782706	040501	U	44,980		4.689	
005	1026	WMF499007	2000782715	040501	U	44,910		4.683	
005	1027	WMF499006	2000782714	040501	U	44,910		4.683	
005	1028	WMF499005	2000782713	040501	U	44,910		4.683	
005	1029	WMF496014	2000782673	040501	U	44,910		4.683	
005	1030	WMF497008	2000782684	040501	U	44,910		4.683	
005	1031	WMF498004	2000782696	040501	U	44,910		4.683	
005	1032	WMF498003	2000782695	040501	U	44,910		4.683	
005	1033	WMF498002	2000782694	040501	U	44,910		4.683	
005	1034	WMF497003	2000782679	040501	U	44,910		4.683	
005	1035	WMF498013	2000782705	040501	U	44,980		4.689	
005	1036	WMF498012	2000782704	040501	U	44,980		4.689	
005	1037	WMF498009	2000782701	040501	U	44,980		4.689	
005	1038	WMF498008	2000782700	040501	U	44,980		4.689	
005	1039	WMF498007	2000782699	040501	U	44,980		4.689	
005	1040	WMF497011	2000782687	040501	U	44,910		4.683	
005	1041	WMF497010	2000782686	040501	U	44,910		4.683	
005	1042	WMF497009	2000782685	040501	U	44,950		4.685	
005	1043	WMF496015	2000782674	040501	U	44,980		4.689	
005	1044	WMF497004	2000782680	040501	U	44,060		4.592	
U: as rolled									

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

(Z01)



Trademark
(A04)

Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
{A02}		Page 7/9
		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		
Steel grade and terms of delivery	X70M	(A08)
{B02-B03}	API5L 45TH PSL2	Dispatch note No. 0080121522
	Hardness according to Nace MR0175 / ISO	16.01.2015
	15156	Inspection (A05) WA

Pipe list {B01-B99}									
Item	Inspection no. (B07)	Pipe-no. (B07)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Length (B09-B11)	ft	Weight (B12)	lbs
005	1045	WMF497015	2000782691	040501	U		44,520		4.641
005	1046	WMF497014	2000782690	040501	U		44,950		4.685
005	1047	WMF497013	2000782689	040501	U		44,910		4.683
005	1048	WMF497012	2000782688	040501	U		44,980		4.689
005	1049	WMF496012	2000782671	040501	U		44,980		4.689
005	1050	WMF497007	2000782683	040501	U		44,980		4.689
005	1051	WMF495014	2000782657	015566	U		44,720		4.661
005	1052	WMF497006	2000782682	040501	U		44,950		4.685
005	1053	WMF497005	2000782681	040501	U		44,950		4.685
005	1054	WMF496011	2000782670	040501	U		44,980		4.689
005	1055	WMF496010	2000782669	040501	U		44,980		4.689
005	1056	WMF494008	2000782635	015566	U		44,980		4.689
005	1057	WMF500002	2000782726	040501	U		41,240		4.299
005	1058	WMF494006	2000782633	015566	U		44,980		4.689
005	1059	WMF493006	2000782616	015566	U		44,820		4.672
005	1060	WMF494005	2000782632	015566	U		44,980		4.689
005	1061	WMF494004	2000782631	015566	U		44,980		4.689
005	1062	WMF496009	2000782668	040501	U		44,950		4.685
005	1063	WMF496008	2000782667	040501	U		44,950		4.685
005	1064	WMF496007	2000782666	040501	U		44,910		4.683
005	1065	WMF496006	2000782665	040501	U		44,910		4.683
005	1066	WMF495003	2000782646	015566	U		44,750		4.665
005	1067	WMF496005	2000782664	040501	U		44,950		4.685
005	1068	WMF496004	2000782663	040501	U		44,950		4.685
005	1069	WMF496003	2000782662	040501	U		44,910		4.683
005	1070	WMF496002	2000782661	040501	U		44,720		4.661
005	1071	WMF495004	2000782647	015566	U		44,980		4.689
005	1072	WMF495015	2000782658	015566	U		44,980		4.689
005	1073	WMF495013	2000782656	015566	U		44,980		4.689
005	1074	WMF495012	2000782655	015566	U		44,980		4.689
005	1075	WMF495011	2000782654	015566	U		44,980		4.689
005	1076	WMF495010	2000782653	015566	U		44,980		4.689
005	1077	WMF495009	2000782652	015566	U		44,980		4.689
005	1078	WMF499004	2000782712	040501	U		37,830		3.944
005	1079	WMF498001	2000782693	040501	U		44,490		4.639
U: as rolled									

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

(Z01)

Trademark
(A04)Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1		No. (A03) 35420
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{A02}		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500 77056-3499 HOUSTON USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		{A08}
Steel grade and terms of delivery	X70M	Dispatch note No. 0080121522
{B02-B03}	API5L 45TH PSL2 Hardness according to Nace MR0175 / ISO 15156	16.01.2015
		Inspection WA
		{A05}

Pipe list {B01-B99}									
Item	Inspection no. (B07)	Pipe-no. (B07)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Length (B09-B11)	ft	Weight (B12)	lbs
005	1080	WMF494007	2000782634	015566	U		44,950		4.685
005	1081	WMF496016	2000782675	040501	U	42,190			4.398
005	1082	WMF500016	2000782740	040501	U	44,590			4.647
005	1083	WMF496013	2000782672	040501	U	44,910			4.683
005	1084	WMF498010	2000782702	040501	U	44,950			4.685
005	1085	WMF495016	2000782659	015566	U	44,520			4.641
005	1086	WMF495008	2000782651	015566	U	44,950			4.685
005	1087	WMF495007	2000782650	015566	U	44,980			4.689
005	1088	WMF495006	2000782649	015566	U	44,980			4.689
005	1089	WMF495005	2000782648	015566	U	44,980			4.689
005	1090	WMF494014	2000782641	015566	U	44,980			4.689
005	1091	WMF494013	2000782640	015566	U	44,980			4.689
005	1092	WMF494012	2000782639	015566	U	44,980			4.689
005	1093	WMF494011	2000782638	015566	U	44,980			4.689
005	1094	WMF494010	2000782637	015566	U	44,980			4.689
005	1095	WMF494009	2000782636	015566	U	44,980			4.689
005	1096	WMF493008	2000782618	015566	U	44,980			4.689
005	1097	WMF494001	2000782628	015566	U	44,720			4.661
005	1098	WMF493016	2000782626	015566	U	44,750			4.665
005	1099	WMF493004	2000782614	015566	U	44,980			4.689
005	1100	WMF493003	2000782613	015566	U	44,980			4.689
005	1101	WMF493002	2000782612	015566	U	44,780			4.669
005	1102	WMF492017	2000782610	015566	U	37,400			3.898
005	1103	WMF493012	2000782622	015566	U	44,980			4.689
005	1104	WMF493011	2000782621	015566	U	44,950			4.685
005	1105	WMF493015	2000782625	015566	U	44,950			4.685
005	1106	WMF493013	2000782623	015566	U	44,950			4.685
005	1107	WMF492013	2000782606	015566	U	35,300			3.680
005	1108	WMF493010	2000782620	015566	U	44,950			4.685
005	1109	WMF493009	2000782619	015566	U	44,980			4.689
005	1110	WMF494003	2000782630	015566	U	44,950			4.685
005	1111	WMF493014	2000782624	015566	U	44,650			4.654
005	1112	WMF492016	2000782609	015566	U	44,980			4.689
005	1113	WMF492015	2000782608	015566	U	44,980			4.689
005	1114	WMF492014	2000782607	015566	U	44,980			4.689
U: as rolled									

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

(Z01)



Trademark
(A04)

Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)

Inspection certificate 3.1 EN 10204:2004-10		No. (A03) 35420
{A02}		Page 9/9
		Date 19.01.2015
No. (A07)	STK-59285 23.09.2014	
Purchaser	Salzgitter Mannesmann International	
{A06}	1770 St. James Place Suite 500	
	77056-3499 HOUSTON	
	USA	
Product	steel line pipe, HFW-HFI-longitudinally welded	Works order No. 1000025739
{B01}		
Steel grade and terms of delivery	X70M	Dispatch note No. 0080121522
{B02-B03}	API5L 45TH PSL2	16.01.2015
	Hardness according to Nace MR0175 / ISO	Inspection WA
	15156	{A05}

Pipe list {B01-B99}									
Item	Inspection no. (B07)	Pipe-no. (B07)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Length (B09-B11)	ft	Weight (B12)	lbs
005	1115	WMF499003	2000782711	040501	U		44,980		4.689
005	1116	WMF492010	2000782603	015566	U		44,780		4.669
005	1117	WMF492009	2000782602	015566	U		44,780		4.669
005	1118	WMF492006	2000782599	015566	U		44,780		4.669
005	1119	WMF493007	2000782617	015566	U		44,980		4.689
005	1120	WMF494015	2000782642	015566	U		33,370		3.479
Quantity (B08)	120	U: as rolled				5.333,950		556.063	

Visual and dimensional inspection:	Satisfactory
Heat treatment: Weld zone inductive normalized (Temperature minimum 1600°F/871°C)	
Flattening test:	Satisfactory
Hydrostatic test 3170 psi , holding time 10 s :	Satisfactory
US-Test of the weld seam for longitudinal defects acc. to API 5L, reference standard: N10 notch:	Satisfactory
Magnetism residual test max. 30 Gauss :	Satisfactory
Metallographic examination:	Satisfactory
Statement of compliance The products have been tested in accordance with the purchase specification and are found to be satisfactory.	
Alteration of this testimonial and certification or use for other products is not allowed and are regarded as falsification of documents and will be subjected to criminal jurisdiction.	

We hereby certify that the delivered material complies with the terms of the order.
(Z01)



Salzgitter Mannesmann Line Pipe GmbH
Kissinger Weg
D-59067 Hamm
(A01)



Inspection Representative
(Z02)

Dr. Löbbe