


 STAHLWERK THÜRINGEN		A03 Certificate No. 2977/3-2015 Advice No. A150325053 A02 Test Report according to ASTM A6 	1 / 3
A01 Stahlwerk Thüringen GmbH A05 Quality Assurance Department Kronacher Straße 6 07333 Unterwellenborn Germany	A04 A06		Plesa Anahuac y Cias, S.A. de C.V. Colonia San Francisco Chilpan Av. Valle de las Alamedas N°66-O 54940 Tultitlan MEXICO
A08 Our Order No.: 2050659114 A07 Your Order No.: 20101			
B02 Quality: A992 TRI according to: ASTM A992 - ASTM A572 GR50 - ASTM A36 FINE GRAIN SILICON KILLED			

Pos.	Heat No.	Dimension	Length	Pieces	Theoretical Weight
A10	B07	B01	B09	B08	B12
001	54502	C 10X15,3	480 in	36	9 994 kg
001	54503	C 10X15,3	480 in	162	44 973 kg
001	54504	C 10X15,3	480 in	90	24 985 kg
002	54495	C 10X20	480 in	80	29 032 kg
002	54496	C 10X20	480 in	24	8 710 kg
003	54492	C 10X25	480 in	90	40 824 kg
004	54551	C 12X20,7	480 in	80	30 048 kg
004	54552	C 12X20,7	480 in	140	52 584 kg
005	54538	C 12X25	480 in	45	20 410 kg
005	54539	C 12X25	480 in	45	20 410 kg
006	54533	C 12X30	480 in	56	30 480 kg

Heat Analysis [%]										
Heat No.	C	Si	Mn	P	S	N	Nb	V	Cr	Cu
B07	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80
max	0.23	0.40	1.50	0.035	0.045	0.012	0.050	0.110	0.35	0.60
min		0.10	0.50				0.005			
54492	0.07	0.19	0.94	0.023	0.024	0.009	0.020	0.006	0.10	0.30
54495	0.07	0.18	0.92	0.019	0.025	0.008	0.019	0.006	0.08	0.28
54496	0.07	0.19	0.92	0.017	0.021	0.009	0.019	0.005	0.08	0.28
54502	0.08	0.18	0.91	0.019	0.022	0.008	0.019	0.005	0.09	0.30
54503	0.08	0.18	0.93	0.019	0.023	0.010	0.018	0.006	0.10	0.27
54504	0.08	0.19	0.93	0.017	0.024	0.009	0.020	0.006	0.10	0.31
54533	0.08	0.19	0.92	0.024	0.023	0.010	0.019	0.006	0.14	0.38
54538	0.07	0.20	0.92	0.016	0.020	0.008	0.020	0.006	0.09	0.25
54539	0.07	0.20	0.94	0.015	0.022	0.010	0.020	0.006	0.09	0.25
54551	0.09	0.20	0.94	0.017	0.019	0.008	0.020	0.007	0.09	0.26
54552	0.09	0.20	0.94	0.016	0.020	0.009	0.021	0.006	0.08	0.26

Z03 Works inspector
René Merbach



Z02 Mar 26, 2015

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A01	Stahlwerk Thüringen GmbH		
A05	Quality Assurance Department Kronacher Straße 6 07333 Unterwellenborn Germany		
A08	Our Order No.:	2050659114	
A07	Your Order No.:	20101	
B02	Quality:	A992 TRI according to: ASTM A992 - ASTM A572 GR50 - ASTM A36 FINE GRAIN SILICON KILLED	

Heat Analysis [%]

Heat No.	Ni	Mo	CEV1	Sn
B07	C71	C72	C93	C73
max	0.45	0.15	0.45	
min				
54492	0.13	0.03	0.29	0.014
54495	0.14	0.05	0.28	0.012
54496	0.14	0.04	0.28	0.012
54502	0.15	0.03	0.29	0.014
54503	0.13	0.04	0.29	0.013
54504	0.14	0.03	0.29	0.013
54533	0.16	0.04	0.31	0.018
54538	0.16	0.04	0.28	0.014
54539	0.14	0.04	0.28	0.012
54551	0.16	0.06	0.30	0.012
54552	0.14	0.03	0.29	0.013

Tensile test

Heat No.	Yield stress [PSI]	Tensile strength [PSI]	Elongation 2 in [%]	Ys/Ts
B07	C11	C12	C13	C14
max	65000	80000		0.85
min	50000	65000	21.0	
54492/1	52200	75980	42.2	0.69
54492/2	55535	73370	42.2	0.76
54495/1	58145	75255	40.9	0.77
54495/2	54955	72935	42.9	0.75
54496	60610	75690	38.3	0.80
54502	59595	78590	35.6	0.76
54503/1	56840	75110	39.6	0.76
54503/2	54520	73225	42.9	0.74
54504/1	59160	75690	39.6	0.78
54504/2	55970	73225	42.2	0.76
54533/1	59595	76270	34.3	0.78
54533/2	56840	73225	42.2	0.78
54538/1	59740	74965	34.3	0.80
54538/2	56550	73515	42.2	0.77
54539/1	58290	73660	35.6	0.79

Z03 Works inspector
René Merbach



Z02 Mar 26, 2015

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A01 Stahlwerk Thüringen GmbH A05 Quality Assurance Department Kronacher Straße 6 07333 Unterwellenborn Germany		A02 Test Report according to ASTM A6 	
A08 Our Order No.: 2050659114 A07 Your Order No.: 20101		Plesa Anahuac y Cias, S.A. de C.V. Colonia San Francisco Chilpan Av. Valle de las Alamedas N°66-O 54940 Tultitlan MEXICO	
B02 Quality: A992 TRI according to: ASTM A992 - ASTM A572 GR50 - ASTM A36 FINE GRAIN SILICON KILLED			


Tensile test				
Heat No.	Yield stress [PSI]	Tensile strength [PSI]	Elongation 2 in [%]	Ys/Ts
B07	C11	C12	C13	C14
max	65000	80000		0.85
min	50000	65000	21.0	
54539/2	55680	73515	42.2	0.76
54551/1	57420	74675	33.0	0.77
54551/2	57275	73660	42.2	0.78
54552/1	56840	75545	31.7	0.75
54552/2	56695	73370	42.2	0.77

Z01

- electric arc melting

We confirm herewith that the delivered material complies with the terms of the order.

Z03 Works inspector
René Merbach



Z02 Mar 26, 2015