

Certificate

Quality management system for Manufacturer of Materials acc. to Directive 2014/68/EU

Certificate no.: 01 202 926/Q-01 0026

Name and address of the
certificate holder: **Wilhelm Schulz GmbH
Kuhleshütte 111
47809 Krefeld
Germany**

Herewith we certify that the material manufacturer has established and applies a Quality Management System. The system was audited according to the European Directive 2014/68/EU, Annex I, Par. 4.3, with regard to the materials as listed in the scope of approval.

Test basis: **QM System acc. to EN 764-5, article 4.2 and
AD 2000-Merkblatt W0**

Audit report no.: 01 202 926/Q-01 0026

Scope: **Seamless tubes and seamless / welded fittings, see annex to
certificate**

Manufacturing plant: Wilhelm Schulz GmbH
Kuhleshütte 111
47809 Krefeld
Germany

Validity: **This certificate is valid from
2021-08-11 to 2024-05-30.**
Initial issuance: 2001

Cologne, 2021-08-11

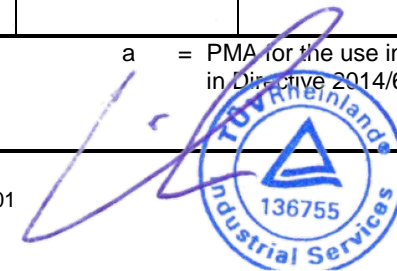
Dipl.-Ing. (FH) Vera Ruff



TÜV Rheinland Industrie Service GmbH
Notified Body for Pressure Equipment, ID-No. 0035
Am Grauen Stein, D-51105 Cologne

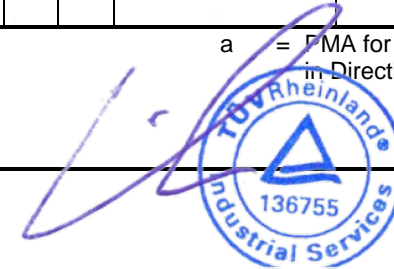
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Scope according to		<input checked="" type="checkbox"/> Directive 2014/68/EU Annex I §4.3		<input type="checkbox"/> EN 764-4		<input checked="" type="checkbox"/> AD 2000-Merkblatt W0		<input type="checkbox"/> Regulation (EU) No. 305/2011(System 2+)				
Manufacturer				Work				Nationality	Date	Page No..	TÜV Rheinland Industrie Service GmbH	
Company Name: Wilhelm Schulz GmbH Location: Kuhleshütte 111 47809 Krefeld Germany				Wilhelm Schulz GmbH Kuhleshütte 111 47809 Krefeld Germany				D	25.05.21	1		
								Rev.:20	of :	12		
Cur	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions				Weight max 1=t / 2=kg ↓ res ult	Technical Specifications Requirements Technical Regulations	Remarks	
					Thick- ness mm		Ø mm					
					from	Up to	from	Up to				
1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	10
1. Materials according to harmonized European standards (hEN) and European Approval for Materials (EAM) acc. Directive 2014/68/EU												
The use of the materials according to Directive 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.												
1	Austenitic steels	DIN EN 10253-4	AT	Cap Collar Stub end	3	28	15	500 400 200			DIN EN 10253-4	made from plate
2	Austenitic steels	DIN EN 10028-7	AT	Flange	3	28	15	200			EN 1092	Table 3 of EN 10028-7 made from plate
3	X2CrNiMoN22-5 (1.4462) X1CrNiMoCuN20-18-7 (1.4547) X1CrNiMoCuN25-20-7 (1.4529) X1CrNiMoCuN25-20-5 (1.4539) X2CrNiMoN25-7-4 (1.4410) X2CrNiMoCuWN25-7-4 (1.4501)	DIN EN 10253-4	AT	Cap	1,6	28	15	500			DIN EN 10253-4	made from plate
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed		+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved		a = PMA for the use in pressure equipment in Directive 2014/68/EU necessary						



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Company Name: Wilhelm Schulz GmbH Location: Kuhleshütte 111 47809 Krefeld Germany				Wilhelm Schulz GmbH Kuhleshütte 111 47809 Krefeld Germany				D		25.05.21		2		TÜV Rheinland Industrie Service GmbH	
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4	Ferritic steels	DIN EN 10253-2	N	Cap	3	10	15	500			DIN EN 10253-2	made from plate			
5	Ferritic steels	DIN EN 10253-2	N	Flange	3	10	15	200			DIN EN 10253-2	made from plate			
6	Austenitic steels	DIN EN 10253-4	AT	Elbow r/da>1.0 Tee Reducer	1,6	50	15	600			DIN EN 10253-4	made from seamless and welded pipe			
7	X2CrNiMoN22-5 (1.4462) X1CrNiMoCuN20-18-7 (1.4547) X1CrNiMoCuN25-20-7 (1.4529) X1CrNiMoCuN25-20-5 (1.4539) X2CrNiMoN25-7-4 (1.4410) X2CrNiMoCuWN25-7-4 (1.4501)	DIN EN 10253-4	AT	Elbow r/da>1.5 Tee Reducer	1,6	60	15	600			DIN EN 10253-4	made from seamless pipe / Welded pipe and plates			
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed		+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved		a = IBMA for the use in pressure equipment in Directive 2014/68/EU necessary									

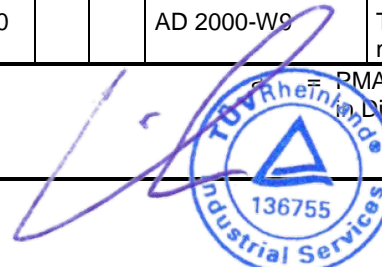
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8	1.4410 / 1.4501	DIN EN 10217-7	AT	Welded pipe	3	60	60,3	914			DIN EN 10217-7	
9	1.4462	DIN EN 10217-7	AT	Welded pipe	3	75	60,3	914			DIN EN 10217-7	
10	Austenitic steels	DIN EN 10217-7	AT	Welded pipe	3	75	60,3	914			DIN EN 10217-7	Table 3
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed		+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved		a = FMA for the use in pressure equipment in Directive 2014/68/EU necessary						



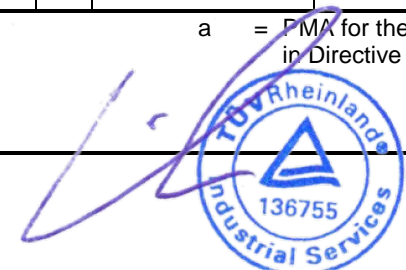
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11	Austenitic steels	DIN EN 10253-4	AT	Cap Collar Stub end	3	28	15	500 400 200			AD2000-W2, W10 DIN EN 10253-4 VdTÜV 1252	Table 2a and 2b of AD 2000 W2 made from plate			
12	Austenitic steels	DIN EN 10028-7	AT	Flange	3	28	15	200			AD2000-W2, W9, W10	Table 2a and 2b of AD 2000 W2 made from plate			
13	X2CrNiMoN22-5 (1.4462) X1CrNiMoCuN20-18-7 (1.4547) X1CrNiMoCuN25-20-7 (1.4529) X1CrNiMoCuN25-20-5 (1.4539) X2CrNiMoN25-7-4 (1.4410) X2CrNiMoCuWN25-7-4 (1.4501)	DIN EN 10253-4	AT	Cap	1,6	28	15	500			AD 2000-W2 DIN EN 10253-4 VdTÜV 1252	made from plate VdTÜV 418, VdTÜV 473, VdTÜV 502, VdTÜV 421 are to consider for the semi-finished material			
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed		+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved		a = PMA for the use in pressure equipment in Directive 2014/68/EU necessary									



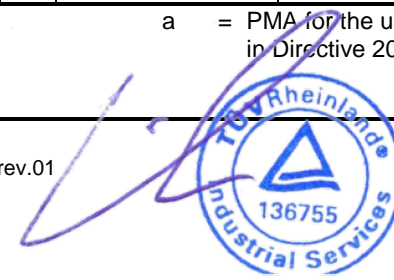
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14	NiCrN21Mo (2.4858)	VdTÜV 432-1	A	Cap	1,6	28	15	500			AD 2000-W2 DIN EN 10253-4 VdTÜV 1252	made from plate				
15	2.4856	VdTÜV 499	A	Cap	1,6	28	15	500			VdTÜV 499	made from plate				
16	Ferritic steels	EN 10025-2	N	Cap	3	10	15	500			AD 2000 W1 VdTÜV 1252	Table 2 of AD 2000 W1 made from plate; a)				
17	Ferritic steels	EN 10025-2	N	Flange	3	10	15	200			AD 2000-W9	Table 2 of AD 2000 W1 made from plate; a)				
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed			+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved			= PMA for the use in pressure equipment if Directive 2014/68/EU necessary								



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18	Ferritic steels	EN 10028-2	N	Cap	3	10	15	500			AD 2000-W1 VdTÜV 1252	Table 1 of AD 2000 W1 made from plate			
19	Ferritic steels	EN 10028-2	N	Flange	3	10	15	200			AD 2000-W9 VdTÜV 1252	Table 1 of AD 2000 W1 made from plate			
20	Austenitic steels	DIN EN 10253-4	AT	Elbow r/da>1.0 Tee Reducer	1,6	50	15	600			AD 2000-W2, W10 DIN EN 10253-4 VdTÜV1252	made from seamless and welded pipe pipe			
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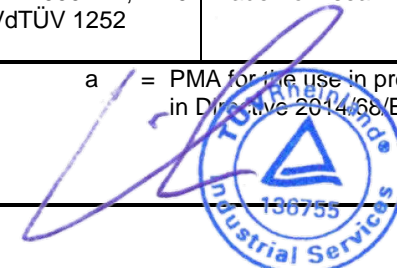
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22	NiCrN21Mo (2.4858)	VdTÜV 432-2	S	Elbow r/da>1.5 Tee Reducer	1,6	60	15	600			AD 2000-W2 VdTÜV 1252	made from seamless pipe / Welded pipe and plates a)			
23	P235TR2, P265TR2, P235GH, P265GH, L290NB, L360NB, L415NB	EN 10253-2	N	Elbow r/da>1.5 Tee Reducer	3	40	30	600			AD 2000-W4, VdTÜV 1252	made from seamless pipe			
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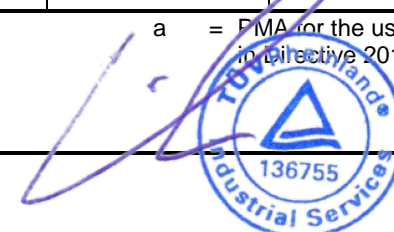
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24	P195TR2, P235TR2, P265TR2	EN 10216-1	N	Elbow r/da>1.5 Tee Reducer	3	40	30	600			AD 2000-W14 VdTÜV 1252	made from seamless pipe	
25	P195GH, 16Mo3	EN 10216-2	N	Elbow r/da>1.5 Tee Reducer	3	40	30	600			AD 2000-W4 VdTÜV 1252	made from seamless pipe	
26	P215NL, P265NL	EN 10216-4	N	Elbow r/da>1.5 Tee Reducer	3	40	30	600			AD 2000-W4 VdTÜV 1252	made from seamless pipe	
27	L245NB, L290NB, L360NB, L415NB	EN 10208-2	N	Elbow r/da>1.5 Tee Reducer	3	40	30	600			AD 2000-HP 100R VdTÜV 1252	made from seamless pipe	
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28	13CrMo4-5, 10CrMo9-10	EN 10253-2	QT	Elbow r/da>3.0 Tee	3	30	20	250			AD 2000-W4 VdTÜV 1252	made from seamless pipe				
29	15MnNi63	VdTÜV 427/2	N	Elbow r/da>1.4 Tee	3	30	30	350			KTA 3201.1, 3401.1	made from seamless pipe VdTüV Werkstoffblatt 427/2 are to consider a)				
30	12Ni14	EN 10216-4	QT	Elbow r/da>3.0 Tee Reducer	3	10	30	350			AD 2000-W4, W10 VdTÜV 1252	made from seamless pipe				
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1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	10
2. Materials according to the AD 2000-Code												
The use of the materials according to DGR 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.												
31	1.4410 / 1.4501	DIN EN 10217-7	AT	Welded pipe	3	60	60,3	914			AD 2000 W2 DIN EN 10217-7	VdTÜV Werkstoffblatt 508 are to consider
32	1.4462	DIN EN 10217-7	AT	Welded pipe	3	75	60,3	914			AD 2000 W2 DIN EN 10217-7	VdTÜV Werkstoffblatt 518 are to consider
33	Austenitic steels	DIN EN 10217-7	AT	Welded pipe	3	75	60,3	914			AD 2000 W2 DIN EN 10217-7	Table 1a (of AD 2000 W2) VdTÜV Werkstoffblätter are to consider
Remarks		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed		+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved		a = FMA for the use in pressure equipment in Directive 2014/68/EU necessary						



Scope according to		<input checked="" type="checkbox"/> Directive 2014/68/EU Annex I §4.3		<input type="checkbox"/> EN 764-4		<input checked="" type="checkbox"/> AD 2000-Merkblatt W0		<input type="checkbox"/> Regulation (EU) No. 305/2011(System 2+)							
Manufacturer				Work				Nationality		Date		Page No..			
Company Name: Wilhelm Schulz GmbH Location: Kuhleshütte 111 47809 Krefeld Germany				Wilhelm Schulz GmbH Kuhleshütte 111 47809 Krefeld Germany				D		25.05.21		11		TÜV Rheinland Industrie Service GmbH	
										Rev.:20		of : 12			
Cur	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions				Weight max 1=t / 2=kg ↓ res ult	Technical Specifications		Remarks			
					Thick- ness mm		Ø mm			Requirements					
					from	Up to	from	Up to		Technical Regulations					
1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	10			
3. Materials according to international standards (e. g. ASTM, ASME, IBR etc.)															
The use of the materials according to DGR 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.															
34	Austenitic steels	ASTM A 403	AT	Cap Collar Stub end	3	28	15	500 400 200			ASTM A 403	made from plate a)			
35	Austenitic steels	ASTM A 240	AT	Flange	3	28	15	200			ASME B16.5	made from plate a)			
36	N08926, N06625	ASTM-B366	S	Cap	1,6	28	15	500			ASTM-B366	made from plate			
37	Austenitic steels	ASTM A403	AT	Elbow r/da>1.0 Tee Reducer	1,6	50	15	600			ASTM A 403	made from seamless and welded pipe a)			
Results		+AT = solution annealed		+NT = normalized and tempered		+QT = quenched and tempered		+S = soft annealed		+SR = stress relieved		a = PMA for the use in pressure equipment in Directive 2014/68/EU necessary			

Scope according to		<input checked="" type="checkbox"/> Directive 2014/68/EU Annex I §4.3			<input type="checkbox"/> EN 764-4				<input checked="" type="checkbox"/> AD 2000-Merkblatt W0		<input type="checkbox"/> Regulation (EU) No. 305/2011(System 2+)				
Manufacturer					Work				Nationality		Date		Page No..		
Company Name: Wilhelm Schulz GmbH Location: Kuhleshütte 111 47809 Krefeld Germany					Wilhelm Schulz GmbH Kuhleshütte 111 47809 Krefeld Germany				D		25.05.21		12		TÜV Rheinland Industrie Service GmbH
											Rev.:20		of : 12		
Cur	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions				Weight max		Technical Specifications Requirements Technical Regulations	Remarks			
					Thick- ness mm		Ø mm		1=t / 2=kg						
					from	Up to	from	Up to	↓	res ult					
1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	10			
3. Materials according to international standards (e. g. ASTM, ASME, IBR etc.)															
The use of the materials according to DGR 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.															
38	N 08825	ASTM B366	S	Elbow r/da>1.5 Tee Reducer	1,6	45	15	600			ASTM B366	made from seamless pipe / Welded pipe and plates; a)			
39	N06625	ASTM B366	S	Elbow r/da>1.5 Tee Reducer	1,6	45	15	600			ASTM B366	made from seamless pipe / Welded pipe and plates; a)			
40	S32750 / S 32760	ASTM A 928	AT	Welded pipe	3	60	60,3	914			ASTM A 928	a)			
41	S31803/S32205	ASTM A 928	AT	Welded pipe	3	75	60,3	914			ASTM A 928	a)			
Results		+AT = solution annealed +AR = as rolled +M = thermo mechanical treated +N = normalized or normalizing formed				+NT = normalized and tempered +QT = quenched and tempered +S = soft annealed +SR = stress relieved				a = PMA for the use in pressure equipment in Directive 2014/68/EU necessary					

