

# CERTIFICATE

**Quality-Assurance System for material manufacturer  
according to directive 2014/68/EU**

**Certificate no.: QS-TUVNORD-2022/5214**

**Name and address  
of manufacturer:**

**BORUSAN MANNESMANN BORU SANAYİ VE TİCARET A.Ş.  
Ata Mah. Sanayi Cad. No: 54 / 68 16601 Gemlik - Bursa  
TURKEY**

Herewith we certify that the manufacturer has established and applies a **quality-assurance system related to the material**. This QA System has been subjected to a specific assessment acc. to directive 2014/68/EU, annex I, point 4.3 with regard to the materials mentioned within the scope of approval.

**Approved acc. to directive  
2014/68/EU:**

**QA-System in relation to materials,  
EN 764-5, section 4.2, and AD 2000-Merkblatt W0**

**Certification file no:**

**2184132186**

**Audit report file no:**

**RP-QS-TUVNORD-2022/5213**

**Scope of approval:  
(product / material)**

**Welded non alloy and alloy steel tubes  
(Details of the scope are mentioned in the annex of the certificate.)**

**Production site:**

**SAWH & ERW Pipe Factories, Gemlik - Bursa TURKEY**

**The certificate is valid until:**

**03.10.2025**

only valid with a certificate in force acc. to EN ISO 9001

**Istanbul , 30.09.2022**

**Certifier for Pressure Equipment of  
TÜV Teknik Kontrol ve Belgelendirme A.Ş.**



Annex: scope of approva

**Basıncılı Kaplar Yönetmeliği Ek I Bölüm 4.3 ve/veya AD 2000-Guideline W0'a göre malzeme üretici onay kapsamı**  
**Scope of approval for material manufacturer acc. to Pressure Equipment Directive Annex I sec. 4.3 and/or AD 2000-Guideline W0**

**Firma/firm:** BORUSAN MANNESMANN BORU SAN. VE TİC. A.Ş.  
**Yer / place:** GEMLİK, BURSA TURKEY

**Sertifika Ekl / Annex to Certificate**  
**DGRL-Nr.:** QS-TUVNORD-2022/5214  
**AD 2000-W0-Nr.:** QS-TUVNORD-2022/5214

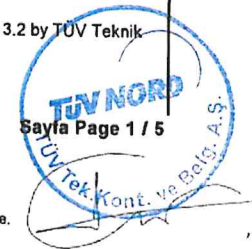
**Tarih/ Date :** 29.09.2022  
**Dosya / File:** 2184132186  
**Dosya / File:** 2184132186

Nu. No.	Malzeme İsimlendirmesi Material Name	Spesifikasyon Spekifikation	Kondisyon Condition	Malzeme Formu Product Form	Ölçü / Dimension				Teknik Gereksinimler Tech. Requirements	Bulgu / Remarks
					Kalınlık [mm] Thickness		Ø[mm] [kg/t]			
1	2	3	4	5	6	7	8	9		
1	<b>SAWH WELDED PIPE acc. to Pressure Equipment Directive Annex I sec. 4.3</b>									
1.1	P195 TR1; P195 TR2; P235 TR1; P235 TR2; P265 TR1; P265 TR2	EN 10217-1	cold form & as welded (Route 11a, 12a)	SAWH welded steel tube	6,35	25,4	508	2540	Directive 2014/68/EU	see Remarks (i), (ii), (v), (vii)  Certified acc. to PED annex I, sec. 4.3 by TÜV Teknik Kontrol ve Belgelendirme A.Ş.
1.2	PSL1 Max. Grade L485 or X70; PSL2 Max. Grade L830 or X120	EN ISO 3183 1)	cold form & as welded	SAWH steel pipe	6,35	25,4	508	2540	Directive 2014/68/EU	see Remarks (ii), (iv), (v)  1) Particular material appraisal (PMA) acc. to Pressure Equipment Directive is required.
1.3	PSL1 Max. Grade L485 or X70; PSL2 Max. Grade L555 or X80	API 5L 1)	cold form & as welded	SAWH steel pipe	6,35	25,4	508	2540	Directive 2014/68/EU	see Remarks (ii), (iv), (v)
2	<b>SAWH WELDED PIPE acc. to AD 2000-Guideline W0</b>									
2.1	P195 TR2; P235 TR2; P265 TR2	EN 10217-1	cold form & as welded (Route 12a)	SAWH welded steel tube	6,35	25,4	508	2540	Directive 2014/68/EU AD2000 W4 *)	see Remarks (i), (iii), (v), (vi)  *) Inspection certificate EN10204 - 3.2 by TÜV Teknik Kontrol ve Belgelendirme A.Ş.

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 U = Tavlama / without annealing; S = Gerilim Giderme / stress relieved; A = Soft annealed; CR = Haddelenme / controlled hot rolled

**Yönetmelik 2014/68/EU'ya göre malzeme kullanmak için bilgi / Hints for materials use acc. to Directive 2014/68/EU :**

**Özel malzeme operasyon istekleri basınçlı kap üreticisi ve ilgili yetkilendirilmiş kuruluş tarafından onaylanmalıdır. / The specific material operation conditions have to be approved by pressure equipment manufacturer and by the notified body in charge.**



**Basıncılı Kaplar Yönetmeliği Ek I Bölüm 4.3 ve/veya AD 2000-Guideline W0'a göre malzeme üretici onay kapsamı**  
**Scope of approval for material manufacturer acc. to Pressure Equipment Directive Annex I sec. 4.3 and/or AD 2000-Guideline W0**

**Firma/firm:** BORUSAN MANNESMANN BORU SAN. VE TIC. A.Ş.  
**Yer / place:** GEMLİK, BURSA TURKEY

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Nu. No.	Malzeme İsimlendirmesi Material Name	Spesifikasyon Speclfikation	Kondisyon Condition	Malzeme Formu Product Form	Ölçü / Dimension			Teknik Gereksinimler Tech. Requirements	Bulgu / Remarks
					Kalınlık [mm] Thickness	Ø[mm]	[kg/t]		
1	2	3	4	5	6	7	8	9	
3	<b>HFW WELDED PIPE acc. to Pressure Equipment Directive Annex I sec. 4.3</b>								
3.1	P195 TR1; P195 TR2; P235 TR1; P235 TR2; P265 TR1; P265 TR2	EN 10217-1	2), 3) 4)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU	see Remarks (i), (iii), (v), (vii)  2) cold form & as welded (Route 1a, 2a) 3) cold form & NW or NP (Route 1b, 1c, 2a, 2b) 4) cold form & hot stretch (Route 3)
3.2	P195 GH TC1; P235 GH TC1; P265 GH TC1	EN 10217-2	5) 6)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU	see Remarks (i), (iii), (v)  5) cold form & NW or NP (Route 1, 2a) 6) cold form & hot stretch (Route 2c)
3.3	P355N; P355NH	EN 10217-3	7) 8)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU	see Remarks (i), (iii), (v)  7) cold form & NW or NP (Route 1a, 1b, 2a) 8) cold form & hot stretch (Route 2c)

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**Basıncılı Kaplar Yönetmeliği Ek I Bölüm 4.3 ve/veya AD 2000-Guideline W0'a göre malzeme üretici onay kapsamı**  
**Scope of approval for material manufacturer acc. to Pressure Equipment Directive Annex I sec. 4.3 and/or AD 2000-Guideline W0**

Firma/firm: BORUSAN MANNESMANN BORU SAN. VE TİC. A.Ş.  
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Nu. No.	Malzeme İsimlendirmesi Material Name	Spesifikasyon Speçifikation	Kondisyon Condition	Malzeme Formu Product Form	Ölçü / Dimension			Teknik Gereksinimler Tech. Requirements	Bulgu / Remarks
					Kalınlık [mm] Thickness	Ø[mm]	[kg/t]		
1	2	3	4	5	6	7	8	9	
3.4	PSL1 Max. Grade L485 or X70; PSL2 Max. Grade L485 or X70	EN ISO 3183 1)	9) 10) 11) 12)	HFW steel pipe	2,0	12,7	114,3 339,7 114,3 219,3 21,3 219,3 21,3 88,9	Directive 2014/68/EU	see Remarks (ii), (iv), (v)  9) cold forming & heat treating of weld area only 10) cold forming & heat treating of weld area only and stress relieving of entire pipe 11) cold forming & normalizing 12) cold forming & hot stretch
3.5	PSL1 Max. Grade L485 or X70; PSL2 Max. Grade L485 or X70	API 5L 1)	9) 10) 11) 12)	HFW steel pipe	2,0	12,7	114,3 339,7 114,3 219,3 21,3 219,3 21,3 88,9	Directive 2014/68/EU	see Remarks (ii), (iv), (v)
4 4.1	HFW WELDED PIPE acc. to AD 2000-Guideline W0 P195 TR2; P235 TR2; P265 TR2	EN 10217-1	3) 4)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU AD2000 W4 *)	see Remarks (i), (iii), (v)

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**Basınçlı Kaplar Yönetmeliği Ek I Bölüm 4.3 ve/veya AD 2000-Guideline W0'a göre malzeme üretici onay kapsamı**  
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Nu. No.	Malzeme İsmi/ Material Name	Spesifikasyon Specification	Kondisyon Condition	Malzeme Formu Product Form	Ölçü / Dimension			Teknik Gereksinimler Tech. Requirements	Bulgu / Remarks
					Kalınlık [mm] Thickness	Ø[mm]	[kg/t]		
1	2	3	4	5	6	7	8	9	
4.2	P195 GH TC1; P235 GH TC1; P265 GH TC1	EN 10217-2	5) 6)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU AD2000 W4 *)	see Remarks (i), (iii), (v), (viii)
4.3	P355N; P355NH	EN 10217-3 & VdTÜV- Werkstoffblätter 354/1	7) 8)	HFW welded steel tube	2,0	12,7	21,3 339,7 21,3 88,9	Directive 2014/68/EU AD2000 W4, W10 *)	see Remarks (i), (iii), (v), (ix)

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					Kalınlık [mm] Thickness	Ø[mm]	[kg/t]		
1	2	3	4	5	6	7	8	9	
REMARKS:	<p>(i) For pressure equipment in categories II, III, and IV of Pressure Equipment Directive, the welding operating procedures and the welding personnel shall be approved by a notified body (NoBo) or by a recognised third-party organisation (RTPO). Tubes not conforming to this requirement shall be marked "C1". (refer to EN 10217-1 paragraph 7.3.3)</p> <p>(ii) For pressure equipment in categories II, III, and IV of Pressure Equipment Directive, the welding operating procedures and the welding personnel shall be approved by a notified body (NoBo) or by a recognised third-party organisation (RTPO). Tubes not conforming to this requirement shall be properly marked and identified.</p> <p>(iii) For pressure equipment in categories III and IV of Pressure Equipment Directive, the non destructive personnel shall be approved by a recognised third-party organisation (RTPO). Tubes not conforming to this requirement shall be marked "C2", unless a requirement to mark "C1" applies. (refer to EN 10217-1 paragraph 7.3.1)</p> <p>(iv) For pressure equipment in categories III and IV of Pressure Equipment Directive, the non destructive personnel shall be approved by a recognised third-party organisation (RTPO). Tubes not conforming to this requirement shall be properly marked and identified.</p> <p>(v) When the use of the welded tube is limited to pressure equipment in category I of Pressure Equipment Directive, a statement in the test report confirming that personnel and welding procedures are qualified according to suitable internal operating procedures is sufficient. When the use of the welded tube is pressure equipment in category II, III and IV of Pressure Equipment Directive, the inspection document shall take the form of a certificate of specific product control, where shall be found the references to the notified body (NoBo) or to the recognised third-party organisation (RTPO) approval of welding procedures and personnel (for categories II, III and IV) and to the recognised third party organization (RTPO) approval of non destructive personnel (for categories III and IV). (refer to Pressure Equipment Directive Guideline G-25)</p> <p>(vi) Requirements of AD-2000 HP 7/2 shall be check to verify that heat treatment is not required for the specific deformation percentage.</p> <p>(vii) Tubes made to material grades P195TR1, P235TR1 &amp; P265TR1 are unlikely to support the essential requirements of Pressure Equipment Directive unless other criteria are taken into account, see Annex I section 7.5 of the Directive. (refer to EN 10217-1 Table 4 note e).</p> <p>(viii) An impact test shall be carried out from nominal wall thickness <math>\geq 10\text{mm}</math> (refer to AD-2000 W4 paragraph 3.6)</p> <p>(ix) Tubes shall be as specified EN 10217-3 in conjunction with VdTÜV-Werkstoffblätter 354/1. For tubes of qualities with elevated temperature properties and high-impact strength at low temperatures, if the proof stresses at elevated temperature are to apply, one hot tensile test per cast is required at working temperature (rounded up to the nearest 10 K), or at 400 °C (refer to AD-2000 W4 paragraph 2.2.6 &amp; paragraph 3.7).</p>								

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