Certificado

Sistema de aseguramiento de calidad para fabricante de Materiales según la Directiva 2014/68/EU

Certificado no.: **01 202 E/Q-02 6904**

Nombre y dirección del fabricante:	**Sidenor Aceros Especiales, S.L.U.** **Bº Ugarte, s/n** **E - 48970 Basauri BIZKAIA**
	Por la presente se certifica que el fabricante de materiales ha introducido un sistema de calidad. El sistema de calidad ha sido auditado según la Directiva Europea 2014/68/EU, Apéndice I, Sección 4.3 para equipos a presión de acuerdo a los materiales listados en el ámbito de aprobación.
Comprobado según la Directiva 2014/68/EU:	**Sistema de calidad según EN 764-5, sección 4.2 y AD 2000-Merkblatt W0**
No. del informe del auditor:	E/Q-02 6904
Ámbito de aprobación:	FABRICANTE DE BARRAS DE ACERO; EN MATERIAL: ACERO AL CARBONO, ALEADO E INOXIDABLE DESDE 5 mm Ø HASTA 230 mmØ ver anexo, ver anexo del certificado
Planta de producción:	Bº Ugarte, s/n, E - 48970 Basauri BIZKAIA Portal de Gamarra, 22, E - 01013 Vitoria (Alava) Paseo de Alejandro Calonge, s/n, E - 39200 Reinosa (Cantabria) Planta de Azkoitia, E - 20720 Azkoitia (Gipuzkoa)
Válido hasta:	31 de mayo de 2023

Colonia, 18 de abril de 2020

Dipl.-Ing. (FH) Vera Ruff

TÜV Rheinland Notified Body 0035

TÜV Rheinland Industrie Service GmbH
Notifizierte Stelle für Druckgeräte, Kennnummer: 0035
Am Grauen Stein, D-51105 Köln

E-008-D-Rev22

® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval.

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U** Location: E 48970 BASAURI	**PLANT BASAURI**	**E**	28.02.22 Rev.: 9	1 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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	X 6CrNiMoTi 17-12-2 1.4571	DIN EN 10272	+AT	BARS	20	120						
	X 2CrNiMo 17-12-2 1.4404	DIN EN 10272	+AT	BARS	20	120						
	X 5CrNi 18-10 1.4301	DIN EN 10272	+AT	BARS	20	120						
	X 6CrNiTi 18-10 1.4541	DIN EN 10272	+AT	BARS	20	120						
	X5CrNiMo 17-12-2 1.4401	DIN EN 10272	+AT	BARS	20	120						
	X2CrNi18-9 1.4307	DIN EN 10272	+AT	BARS	20	120						
2	25 CrMo4 1.7218	DIN EN 10269	+S,+QT	BARS	20	120						
	34 CrNiMo 6 1.6582	DIN EN 10269	+QT	BARS	20	120						
	40CrMoV4.6 1.7711	DIN EN 10269	+QT	BARS	20	120						
	21 CrMoV 5.7 1.7709	DIN EN 10269	+QT	BARS	20	120						
	42 CrMo 4 1.7225	DIN EN 10269	+QT	BARS	20	65						b
3	P 250 GH 1.0460	DIN EN 10273	+N	BARS	20	120						
	16 Mo 3 1.5415	DIN EN 10273	+QT	BARS	20	120						
	13 CrMo 45 1.7335	DIN EN 10273	+QT	BARS	20	120						
	10 CrMo 9-10 1.7380	DIN EN 10273	+QT	BARS	20	120						

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 neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U** Location: E 48970 BASAURI	**PLANT BASAURI**	**E**	28.02.22 Rev.: 9	2 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.

4	S 235J2	1.0117	DIN EN 10025 - 2	+N	BARS	20	120					AD 2000 W13	a
	S-235 JR	1.0038	DIN EN 10025 - 2	+N	BARS	20	120					AD 2000 W13	a
	S 275 JR	1.0044	DIN EN 10025 - 2	+N	BARS	20	120					AD 2000 W13	a
	S 275J2	1.0145	DIN EN 10025 - 2	+N	BARS	20	120					AD 2000 W13	a
	S 355 J2	1.0577	DIN EN 10025 - 2	+N	BARS	20	120					AD 2000 W13	a
5	P 250 GH	1.0460	DIN EN 10273	+N	BARS	20	120					AD 2000 W13	a
	P 355 NH	1.0565	DIN EN 10273	+N	BARS	20	120					AD 2000 W13	a

Remarks

+AT	= solution annealed	+NT	= normalized and tempered	a	= PMA for the use in pressure equipment in Directive 2014/68/EU necessary
+AR	= as rolled	+QT	= quenched and tempered		
+M	= thermo mechanical treated	+S	= soft annealed	b	= If the size of the product is outside the approved scope acc. to the standard, a PMA is requested
+N	= normalized or normalizing formed	+SR	= stress relieved		

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ PPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 48970 BASAURI	**PLANT BASAURI**	**E**	28.02.22 Rev.: 9	3 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.

6	25 CrMo4	1.7218	DIN EN 10269	+QT	BARS	20	120					AD 2000 W 7	a	and EN 10204 3·2 certificate
	21 CrMoV 5.7	1.7709	DIN EN 10269	+QT	BARS	20	120					AD 2000 W 7	a	and EN 10204 3·2 certificate
	40CrMoV4.6	1.7711	DIN EN 10269	+QT	BARS	20	120					AD 2000 W 7	a	and EN 10204 3·2 certificate
	42 CrMo 4	1.7225	DIN EN 10269	+QT	BARS	20	60					AD 2000 W 7	a ,b	and EN 10204 3·2 certificate
7	X 6CrNiTi 18-10	1.4541	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	a	
	X 6CrNiMoTi 17-12-2	1.4571	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	a	
	X 2CrNiMo 17-12-2	1.4404	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	a	
	X 5CrNi 18-10	1.4301	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	a	
	X5CrNiMo 17-12-2	1.4401	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	a	
	X2CrNi18-9	1.4307	DIN EN 10272	+AT	BARS	20	120					AD 2000 W 2	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

a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 48970 BASAURI	**PLANT BASAURI**	**E**	28.02.22 Rev.: 9	4 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm fr	Up	Weight max 1=t / 2=kg ⇓	res	Technical Specifications Requirements Technical Regulations	Remarks
1	2	3	4	5	6a	6b	7	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.

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	from	Up to	fr	Up	⇓	res	Technical Specifications	Remarks
8	34 CrNiMo 6 1.6582	EN ISO 683 -2	+QT	BARS	20	120						a
	25 CrMo4 1.7218	EN ISO 683 -2	+QT	BARS	20	120						a
	30CrNiMo8 1.6580	EN ISO 683-2	+QT	BARS	20	120						a
	41 Cr4 1.7035	EN ISO 683-2	+QT	BARS	20	120						a
	42CrMoS4 1.7227	EN ISO 683-2	+QT	BARS	20	120						a
	42 CrMo 4 1.7225	EN ISO 683 -2	+QT	BARS	20	120						a
9	B7	ASTM A 193	+QT	BARS	20	120						a
	L7	ASTM A 320	+QT	BARS	20	65						a ,b
	B16	ASTM A 193	+QT	BARS	20	120						a
10	75 K + [AISI 4130]	API6A / ISO 10423 [ASTM A 29]	+QT	BARS	20	120						a
11	S 235J2 1.0117	DIN EN 10025 - 2	+N-AR	BARS	20	120						a
	S-235 JR 1.0038	DIN EN 10025 - 2	+N-AR	BARS	20	120						a
	S 275 JR 1.0044	DIN EN 10025 - 2	+N-AR	BARS	20	120						a
	S 275J2 1.0145	DIN EN 10025 - 2	+N-AR	BARS	20	120						a
	S 355 JR 1.0045	DIN EN 10025 - 2	+N-AR	BARS	20	120						a
	S 355 J2 1.0577	DIN EN 10025 - 2	+N-AR	BARS	20	120						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

a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 48970 BASAURI	**PLANT BASAURI**	**E**	28.02.22 Rev.: 9	5 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Deliver y Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm fr	Up	Weight max 1=t / 2=kg ⇓	res	Technical Specifications Requirements Technical Regulations	Remarks
1	2		3	4	5	6a	6b	7	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.

12	X 8CrNiS 18-9	1.4305	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X 20 Cr 13	1.4021	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X 20 Cr 13	1.4021	DIN EN 10088 - 3	+QT	BARS	20	120						a
	X 6CrNiMoTi 17-12-2	1.4571	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X 2CrNiMo 17-12-2	1.4404	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X 5CrNi 18-10	1.4301	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X 6CrNiTi 18-10	1.4541	DIN EN 10088 - 3	+AT	BARS	20	120						a
	X5CrNiMo 17-12-2	1.4401	DIN EN 10088 - 3	+AT	BARS	20	120						a
13	304, 304L	S30400S30403	ASTM 479	+AT	BARS	20	76,2						a ,b
	316,	S31600	ASTM 479	+AT	BARS	20	76,2						a
	316L	S31603,	ASTM 479	+AT	BARS	20	76,2						a
	316TI	S31635	ASTM 479	+AT	BARS	20	76,2						a ,b
	309 H	S 30909	ASTM 479	+AT	BARS	20	76,2						a , b
	303	S 30300	ASTM 479	+AT	BARS	20	76,2						a ,b
14	F5	182 K42544	ASTM A182/ ASME SA182	+QT	BARS	20	120						a
	F9	182 K90941	ASTM A182/ ASME SA182	+QT	BARS	20	120						a
	F11	182 K 11597	ASTM A182/ ASME SA182	+QT	BARS	20	120						a
	F22	182 K21590	ASTM A182/ ASME SA182	+QT	BARS	20	120						a
	F91	182 K90901	ASTM A182/ ASME SA182	+QT	BARS	20	120						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
a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: : E 20720 AZKOITIA (GUPUZKOA)	**PLANTA AZKOITIA**	**E**	09.09.20 Rev.: 8	1 of : 4	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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	X 6CrNiMoTi 17-12-2	1.4571	DIN EN 10272	+AT	BARS	19	200					EN 10272	
	X 2CrNiMo 17-12-2	1.4404	DIN EN 10272	+AT	BARS	19	200					EN 10272	
	X 5CrNi 18-10	1.4301	DIN EN 10272	+AT	BARS	19	200					EN 10272	
2	P 250 GH	1.0460	DIN EN 10273	+N	BARS	19	150					EN 10273	b
	16 Mo 3	1.5415	DIN EN 10273	+QT	BARS	19	150					EN 10273	b
	13 CrMo 44	1.7335	DIN EN 10273	+QT	BARS	19	150					EN 10273	b
	10 CrMo 9-10	1.7380	DIN EN 10273	+QT	BARS	19	150					EN 10273	b
3	25 CrMo4	1.7218	DIN EN 10269	+S,+QT	BARS	19	150					EN 10269	b
	34 CrNiMo 6	1.6582	DIN EN 10269	+QT	BARS	19	100					EN 10269	b
	40CrMoV4.6	1.7711	DIN EN 10269	+QT	BARS	19	160					EN 10269	b
	21 CrMoV 5.7	1.7709	DIN EN 10269	+QT	BARS	19	160					EN 10269	b
	42 CrMo 4	1.7225	DIN EN 10269	+QT	BARS	19	65					EN 10269	b

Remarks

+AT	=	solution annealed	+NT	=	normalized and tempered	a	=	PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
+AR	=	as rolled	+QT	=	quenched and tempered			
+M	=	thermo mechanical treated	+S	=	soft annealed	b	=	If the size of the product is outside the approved scope acc. to the standard, a PMA is requested
+N	=	normalized or normalizing formed	+SR	=	stress relieved			

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: : E 20720 AZKOITIA (GUPUZKOA)	**PLANTA AZKOITIA**	**E**	09.09.20 Rev.: 8	2 of : 4	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.													
4	S 235J2	1.0117	DIN EN 10025 - 2	+N	BARS	19	200					AD 2000 W13	a
	S-235 JR	1.0038	DIN EN 10025 - 2	+N	BARS	19	200					AD 2000 W13	a
	S 275 JR	1.0044	DIN EN 10025 - 2	+N	BARS	19	200					AD 2000 W13	a
	S 275J2	1.0145	DIN EN 10025 - 2	+N	BARS	19	200					AD 2000 W13	a
	S 355 J2	1.0577	DIN EN 10025 - 2	+N	BARS	19	200					AD 2000 W13	a
5	P 250 GH	1.0460	DIN EN 10273	+N	BARS	19	150					AD 2000 W13	b
	P 355 NH	1.0565	DIN EN 10273	+N	BARS	19	150					AD 2000 W13	b
6	25 CrMo4	1.7218	DIN EN 10269	+QT	BARS	19	150					AD 2000 W 7	a,b and EN 10204 3·2 certificate
	34 CrNiMo 6	1.6582	DIN EN 10269	+QT	BARS	19	100					AD 2000 W 7	a,b and EN 10204 3·2 certificate
	40CrMoV4.6	1.7711	DIN EN 10269	+QT	BARS	19	160					AD 2000 W 7	a,b and EN 10204 3·2 certificate
	21 CrMoV 5.7	1.7709	DIN EN 10269	+QT	BARS	19	160					AD 2000 W 7	a,b and EN 10204 3·2 certificate
	42 CrMo 4	1.7225	DIN EN 10269	+QT	BARS	19	65					AD 2000 W 7	a,b and EN 10204 3·2 certificate

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 neccessary

b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

TÜVRheinland® Industrial Services 85824

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: : E 20720 AZKOITIA (GUPUZKOA)	**PLANTA AZKOITIA**	**E**	09.09.20 Rev.: 8	3 of : 4	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.												
7	X 20 Cr 13 1.4021	DIN EN 10088 -3	+QT	BARS	19	200						a
9	B7	ASTM A 193	+QT	BARS	19	177,8						a,b
	L7	ASTM A 320	+QT	BARS	19	65						a,b
	B16	ASTM A 193	+QT	BARS	19	200						b
10	75 K + [AISI 4130]	API6A / ISO 10423 [ASTM A 29]	+QT	BARS	19	200						a
11	S 235J2 1.0117	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
	S-235 JR 1.0038	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
	S 275 JR 1.0044	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
	S 275J2 1.0145	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
	S 355 JR 1.0045	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
	S 355 J2 1.0577	DIN EN 10025 - 2	+N,+AR	BARS	19	200						a
12	34 CrNiMo 6 1.6582	EN ISO 683.2	+QT	BARS	19	200						a
	25 CrMo4 1.7218	EN ISO 683.2	+QT	BARS	19	160						a ,b
	30CrNiMo8 1.6580	EN ISO 683.2	+QT	BARS	19	200						a
	42 CrMo 4 1.7225	EN ISO 683.2	+QT	BARS	19	200						a
	42CrMoS4 1.7227	EN ISO 683.2	+QT	BARS	19	200						a
	41 Cr4 1.7035	EN ISO 683-2	+QT	BARS	19	100						A, b

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 neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: : E 20720 AZKOITIA (GUPUZKOA)	**PLANTA AZKOITIA**	**E**	09.09.20 Rev.: 8	4 of : 4	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Dimensions Thick-ness mm Up to	Dimensions ∅ mm from	Dimensions ∅ mm Up to	Weight max 1=t / 2=kg ⇓	Weight max result	Technical Specifications Requirements Technical Regulations	Remarks
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.

13	F5	K42544	ASTM A 182/ ASME SA 182	+QT	BARS	19	200						a
	F9	K90941	ASTM A 182/ ASME SA 182	+QT	BARS	19	200						a
	F11	K 11597	ASTM A 182/ ASME SA 182	+QT	BARS	19	200						a
	F22	K21590	ASTM A 182/ ASME SA 182	+QT	BARS	19	200						a ,
	F91	K90901	ASTM A 182/ ASME SA 182	+QT	BARS	19	200						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

a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

TÜVRheinland® 85824 Industrial Services

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** LocationE 39200 REINOSA (CANTABRIA)	**PLANTA REINOSA**	**E**	09.09.20 Rev.: 8	1 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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	X 6CrNiMoTi 17-12-2	1.4571	DIN EN 10272	+AT	BARS	100	230						
	X 2CrNiMo 17-12-2	1.4404	DIN EN 10272	+AT	BARS	100	230						
	X 5CrNi 18-10	1.4301	DIN EN 10272	+AT	BARS	100	230						
	X 6CrNiTi 18-10	1.4541	DIN EN 10272	+AT	BARS	100	230						
	X 5CrNiMo 17-12-2	1.4401	DIN EN 10272	+AT	BARS	100	230						
	X 2CrNi18-9	1.4307	DIN EN 10272	+AT	BARS	100	230						
	X 8CrNiS 18-9	1.4305	DIN EN 10272	+AT	BARS	100	230						
2	25 CrMo4	1.7218	DIN EN 10269	+S, +QT	BARS	100	150						b
	34 CrNiMo 6	1.6582	DIN EN 10269	+QT	BARS	100	120						b
	40CrMoV4.6	1.7711	DIN EN 10269	+QT	BARS	100	160						b
	21 CrMoV 5.7	1.7709	DIN EN 10269	+QT	BARS	100	160						b
	42 CrMo 4	1.7225	DIN EN 10269	+QT	BARS	100	65						b
3	P 250 GH	1.0460	DIN EN 10273	+N	BARS	100	150						b
	16 Mo 3	1.5415	DIN EN 10269	+QT	BARS	100	150						b
	13 CrMo 45	1.7335	DIN EN 10269	+QT	BARS	100	150						b
	10 CrMo 9-10	1.7380	DIN EN 10269	+QT	BARS	100	150						b

Remarks

+AT = solution annealed
+AR = as rolled
+M = thermo mechanical treated
+N = normalized or normalizing formed
+NT =
+QT = quenched and tempered
+S = soft annealed
+SR = stress relieved

b = in Directive 2014/68/EU neccessary
If the size of the product is outside the approved scope acc. to the standard, a PMA is requested
Over limits will need PMA

TÜVRheinland® Industrial Services 85824

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** LocationE 39200 REINOSA (CANTABRIA)	**PLANTA REINOSA**	**E**	09.09.20 Rev.: 8	2 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.

8	S 235J2	1.0117	DIN EN 10025 - 2	+N	BARS	100	230					AD 2000 W13	a
	S-235 JR	1.0038	DIN EN 10025 - 2	+N	BARS	100	230					AD 2000 W13	a
	S 275 JR	1.0044	DIN EN 10025 - 2	+N	BARS	100	230					AD 2000 W13	a
	S 275J2	1.0145	DIN EN 10025 - 2	+N	BARS	100	230					AD 2000 W13	a
	S 355 J2	1.0577	DIN EN 10025 - 2	+N	BARS	100	230					AD 2000 W13	a
5	P 250 GH	1.0460	DIN EN 10273	+N	BARS	100	150					AD 2000 W13	a ,b
	P 355 NH	1.0565	DIN EN 10273	+N	BARS	100	150					AD 2000 W13	a ,b
6	25 CrMo4	1.7218	DIN EN 10269	+QT	BARS	100	150					AD 2000 W 7	a,b EN 10204 3·2 certificate
	34 CrNiMo 6	1.6582	DIN EN 10269	+QT	BARS	100	120					AD 2000 W 7	a,b EN 10204 3·2 certificate
	40CrMoV4.6	1.7711	DIN EN 10269	+QT	BARS	100	160					AD 2000 W 7	a,b EN 10204 3·2 certificate
	21 CrMoV 5.7	1.7709	DIN EN 10269	+QT	BARS	100	160					AD 2000 W 7	a,b EN 10204 3·2 certificate
	42 CrMo 4	1.7225	DIN EN 10269	+QT	BARS	100	65					AD 2000 W 7	a,b EN 10204 3·2 certificate

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 neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** LocationE 39200 REINOSA (CANTABRIA)	**PLANTA REINOSA**	**E**	09.09.20 Rev.: 8	3 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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.

7	X 6CrNiMoTi 17-12-2	1.4571	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	a
	X 2CrNiMo 17-12-2	1.4404	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	a
	X 5CrNi 18-10	1.4301	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	a
	X 6CrNiTi 18-10	1.4541	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	a
	X5CrNiMo 17-12-2	1.4401	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	a
	X2CrNi18-9	1.4307	DIN EN 10272	+AT	BARS	100	230					AD 2000 W 2	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

a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** LocationE 39200 REINOSA (CANTABRIA)	**PLANTA REINOSA**	**E**	09.09.20 Rev.: 8	4 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Dimensions Thick-ness mm Up to	Dimensions ∅ mm from	Dimensions ∅ mm Up to	Weight max 1=t / 2=kg ⇓	Weight max 1=t / 2=kg result	Technical Specifications Requirements Technical Regulations	Remarks
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.

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Thick-ness from	Thick-ness Up to	∅ from	∅ Up to	Weight ⇓	Weight result	Technical Specifications	Remarks
8	B7	ASTM A 193	+QT	BARS	100	177,8						b
	L7	ASTM A 320	+QT	BARS	100	65						b
	B16	ASTM A 193	+QT	BARS	100	200						b
9	75 K + [AISI 4130]	API6A / ISO 10423 [ASTM A 29]	+QT	BARS	100	230						**a**
10	S 235J2 1.0117	DIN EN 10025 - 2-	+N+AR	BARS	100	230						a
	S-235 JR 1.0038	DIN EN 10025 - 2	+N+AR	BARS	100	230						a
	S 275 JR 1.0044	DIN EN 10025 - 2	+N+AR	BARS	100	230						a
	S 275J2 1.0145	DIN EN 10025 - 2	+N+AR	BARS	100	230						a
	S 355 JR 1.0045	DIN EN 10025 - 2	+N+AR	BARS	100	230						a
	S 355 J2 1.0577	DIN EN 10025 - 2	+N+AR	BARS	100	230						a
11	F5 K42544	ASTM A 182/ ASME SA 182	+QT	BARS	100	230						a
	F9 K90941	ASTM A 182/ ASME SA 182	+QT	BARS	100	230						a
	F11 K 11597	ASTM A 182/ ASME SA 182	+QT	BARS	100	230						a certificate 3.1 reviewed by NoBo
	F22 K21590	ASTM A 182/ ASME SA 182	+QT	BARS	100	230						a certificate 3.1 reviewed by NoBo
	F91 K90901	ASTM A 182/ ASME SA 182	+QT	BARS	100	230						a certificate 3.1 reviewed by NoBo

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 neccessary
b = If the size of the product is outside the approved scope acc. to the standard, a PMA is requested

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** LocationE 39200 REINOSA (CANTABRIA)	**PLANTA REINOSA**	**E**	09.09.20 Rev.: 8	5 of : 5	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up	Weight max 1=t / 2=kg ⇓	res	Technical Specifications Requirements Technical Regulations	Remarks
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.

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions from	Up to	∅ from	Up	Weight max ⇓	res	Technical Specifications	Remarks
12	34 CrNiMo 6 1.6582	EN ISO 683.2	+QT	BARS	100	230						a
	25 CrMo4 1.7218	EN ISO 683.2	+QT	BARS	100	160						a,b
	30CrNiMo8 1.6580	EN ISO 683.2	+QT	BARS	100	230						a
	42 CrMo 4 1.7225	EN ISO 683.2	+QT	BARS	100	230						a
	42CrMoS4 1.7227	EN ISO 683.2	+QT	BARS	100	230						a
	41 Cr4 1.7035	EN ISO 683-2	+QT	BARS	100	100						a,b
13	304, 304L S30400, S30403	ASTM 479	+AT	BARS	100	76,2						b
	316, 316L, S31600 S31603,	ASTM 479	+AT	BARS	100	76,2						b
	316TI S31635		+AT	BARS	100	76,2						
	309 H S 30909	ASTM 479	+AT	BARS	100	76,2						b
	303 S 30300	ASTM 479	+AT	BARS	100	76,2						b
14	X 8CrNiS 18-9 1.4305	DIN EN 10088 - 3	+AT	BARS	100	160						b
	X 20 Cr 13 1.4021	DIN EN 10088 - 3	+AT	BARS	100	160						b
	X 20 Cr 13 1.4021	DIN EN 10088 - 3	+QT	BARS	100	230						a
	X 6CrNiMoTi 17-12-2 1.4571	DIN EN 10088 - 3	+AT	BARS	100	230						a
	X 2CrNiMo 17-12-2 1.4404	DIN EN 10088 - 3	+AT	BARS	100	230						a
	X 5CrNi 18-10 1.4301	DIN EN 10088 - 3	+AT	BARS	100	230						a
	X 6CrNiTi 18-10 1.4541	DIN EN 10088 - 3	+AT	BARS	100	230						a
	X5CrNiMo 17-12-2 1.4401	DIN EN 10088 - 3	+AT	BARS	100	230						a

Results

+AT = solution annealed	+NT = normalized and tempered	a =	PMA for the use in pressure equipment in Directive 2014/68/EU neccessary
+AR = as rolled	+QT = quenched and tempered		
+M = thermo mechanical treated	+S = soft annealed	b =	If the size of the product is outside the approved scope acc. to the standard, a PMA is requested
+N = normalized or normalizing formed	+SR = stress relieved		

TÜVRheinland® Industrial Services 85824

Annex to Certificate No. : 01 202 E/Q-02 6904 02

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 01013 VITORIA (ARABA)	**PLANTA VITORIA**	**E**	10.07.20 Rev.: 7	1 of : 3	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thickness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
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	X 6CrNiMoTi 17-12-2	EN 10272 1.4571	+AT	BARS	--	26					EN 10272	
	X 2CrNiMo 17-12-2	EN 10272 1.4404	+AT	BARS	--	26					EN 10272	
	X 5CrNi 18-10	EN 10272 1.4301	+AT	BARS	--	26					EN 10272	
	X 6CrNiTi 18-10	EN 10272 1.4541	+AT	BARS	--	26					EN 10272	
	X5CrNiMo 17-12-2	EN 10272 1.4401	+AT	BARS	--	26					EN 10272	
	X2CrNi18-9	EN 10272 1.4307	+AT	BARS	--	26					EN 10272	
1	25 CrMo4	EN 10269 1.7218	+S, +QT	BARS	--	26					EN 10269	
	21 CrMoV 5.7	EN 10269 1.7709	+QT	BARS	--	26					EN 10269	
	42 CrMo 4	EN 10269 1.7225	+QT	BARS	--	26					EN 10269	
	34 CrNiMo 6	EN 10269 1.6582	+QT	BARS	--	26					EN 10269	
	40CrMoV4.6	EN 10269 1.7711	+QT	BARS	--	26					EN 10269	
3	P 250 GH	EN 10273 - 1.0460	+N	BARS	--	26					EN 10273	
	16 Mo 3	EN 10273 1.5415	+QT	BARS	--	26					EN 10273	
	13 CrMo 44	EN 10273 1.7335	+QT	BARS	--	26					EN 10273	
	10 CrMo 9-10	EN 10273 1.7380	+QT	BARS	--	26					EN 10273	

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 neccessary

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 01013 VITORIA (ARABA)	**PLANTA VITORIA**	**E**	10.07.20 Rev.: 7	2 of : 3	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thickness mm from	Dimensions Thickness mm Up to	Dimensions ∅ mm from	Dimensions ∅ mm Up to	Weight max 1=t / 2=kg ⇓	Weight max result	Technical Specifications Requirements Technical Regulations	Remarks
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.

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Thickness mm from	Thickness mm Up to	∅ mm from	∅ mm Up to	Weight max ⇓	Weight max result	Technical Specifications	Remarks
4	S 235J2	EN 10025.2 1.0117	+N	BARS	--	26					AD 2000 W13	a
	S-235 JR	EN 10025.2 1.0038	+N	BARS	--	26					AD 2000 W13	a
	S 275 JR	EN 10025.2 1.0044	+N	BARS	--	26					AD 2000 W13	a
	S 275J2	EN 10025.2 1.0145	+N	BARS	--	26					AD 2000 W13	a
	S 355 J2	EN 10.025.2 1.0577	+N	BARS	--	26					AD 2000 W13	a
5	P 250 GH	EN 10273 - 1.0460	+N	BARS	--	26					AD 2000 W13	a
	P 355 NH	EN 10273 1.0565	+N	BARS	--	26					AD 2000 W13	a
6	25 CrMo4	EN 10269 1.7218	+QT	BARS	--	26					AD 2000 W 7	a and 3·2 certificate
	21 CrMoV 5.7	EN 10269 1.7709	+QT	BARS	--	26					AD 2000 W 7	a and 3·2 certificate
	42 CrMo 4	EN 10269 1.7225	+QT	BARS	--	26					AD 2000 W 7	a and 3·2 certificate
	40CrMoV4.6	EN 10269 1.7711	+QT	BARS	--	26					AD 2000 W 7	a and 3·2 certificate

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 neccessary

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☒ EN 764-4	☒ AD 2000-Merkblatt W0	☐ FPC, Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: **SIDENOR ACEROS ESPECIALES, S.L.U.** Location: E 01013 VITORIA (ARABA)	**PLANTA VITORIA**	**E**	10.07.20 Rev.: 7	3 of :3	TÜV Rheinland Industrie Service GmbH

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Dimensions Thick-ness mm Up to	Dimensions ∅ mm from	Dimensions ∅ mm Up to	Weight max 1=t / 2=kg ⇓	Weight max 1=t / 2=kg r	Technical Specifications Requirements Technical Regulations	Remarks
1	2	3	4	5	6a	6b	7a	7b	8	8	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.												
7	34 CrNiMo 6	EN ISO 683-2 1.6582	+QT	BARS	--	26					EN ISO 683-2	a
	25 CrMo4	EN ISO 683-2 1.7218	+QT	BARS	--	26					EN ISO 683-2	a
	42 CrMo 4	EN ISO 683-2 1.7225	+QT	BARS	--	26					EN ISO 683-2	a
	41 Cr4	EN ISO 683-2 1.7035	+QT	BARS	--	26					EN ISO 683-2	a
	42CrMoS4	EN ISO 683-2 1.7227	+QT	BARS	--	26					EN ISO 683-2	a
8	X 20 Cr 13	EN 10088.3 1.4021	+QT	BARS	--	26					EN 10088.3	a
9	B7	ASTM A 193	+QT	BARS	--	26					ASTM A 193	a
	L7	ASTM A 320	+QT	BARS	--	26					ASTM A 320	a
	B16	ASTM A 193	+QT	BARS	--	26					ASTM A 193	a
10	75 K + [AISI 4130]	API6A / ISO 10423 [ASTM A 29]	+QT	BARS	--	26					API6A / ISO 10423 [ASTM A 29]	a
11	S 235J2	EN 10025.2-1.0117	N-AR	BARS	--	26					EN 10025.2	a
	S-235 JR	EN 10025.2 - 1.0038	N-AR	BARS	--	26					EN 10025.2	a
	S 275 JR	EN 10025.2 - 1.0044	N-AR	BARS	--	26					EN 10025.2	a
	S 275J2	EN 10025.2 - 1.0145	N-AR	BARS	--	26					EN 10025.2	a
	S 355 JR	EN 10025.2 – 1.0045	N-AR	BARS	--	26					EN 10025.2	a
	S 355 J2	EN 10.025.2 – 1.0577	N-AR	BARS	--	26					EN 10025.2	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
a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary

TÜVRheinland® Industrial Services 858241