

Certificate

Quality-Assurance System for Manufacturer of Materials acc. to Directive 2014/68/EU

Certificate no.: 01 202 E/Q-02 6904

Name and address of the
manufacturer:

SIDENOR ACEROS ESPECIALES S.L.U
E-48970 BASAURI (BIZKAIA)

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.

Tested acc. to
Directive 2014/68/EU:

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

Audit report no.:

E/Q-02 6904

Area of validity:

MANUFACTURER OF BARS IN MATERIAL: CARBON,
STEEL, ALLOY STEEL, AND STAINLESS STEEL UP TO Ø
TO 230 mmØ, see annex to certificate

Manufacturing plant:

BASAURI – Headquarters + plant
E-48970 BASAURI (BIZKAIA)

REINOSA – plant
E-39200 REINOSA (CANTABRIA)

AZKOITIA – plant
E-20720 AZKOITIA (GIPUZKOA)

VITORIA- plant
E- 01013 VITORIA (ARABA)

Valid until:

January 31, 2020

Cologne, June 25, 2018

i.V. Dipl.-Ing. Oliver Theisen

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

E-008-D-Rev22

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		PLANTA BASAURI	E	20.03.18	1						
Location: E 48970 BASAURI				Rev.: 5	of : 4	TÜV Rheinland Industrie Service GmbH					
Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions				Weight max 1=t / 2=kg ↓ result	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
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.											
	P 250 GH	EN 10273 - 1.0460	N	BARS	25	100					EN 10273
	X 6CrNiMoTi 17-12-2	EN 10272 1.4571	AT	BARS	25	100					EN 10272
	X 2CrNiMo 17-12-2	EN 10272 .3 1.4404	AT	BARS	25	100					EN 10272
	X 5CrNi 18-10	EN 10272 1.4301	AT	BARS	25	100					EN 10272
	X 6CrNiTi 18-10	EN 10272 1.4541	AT	BARS	25	100					EN 10272
	X5CrNiMo 17-12-2	EN 10272 1.4401	AT	BARS	25	100					EN 10272
	X2CrNi18-9	EN 10272 1.4307	AT	BARS	25	100					EN 10272
	X 8CrNiS 18-9	EN 10272 1.4305	AT	BARS	25	100					EN 10272
	1.7218	EN 10269	+S-+AC	BARS	25	100					EN 10269
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 +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				PLANTA BASAURI		E		20.03.18		2	
Location: E 48970 BASAURI								Rev.: 5		of : 4	
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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.

1	S 235J2 S-235 JR S 275 JR S 275J2 S 355 J2 P 250 GH 16 Mo 3 13 CrMo 44 10 CrMo 9-10 P 355 NH	EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10.025.2 – 1.0577 EN 10273 - 1.0460 DIN 17243 1.5415 DIN 17243 1.7335 DIN 17243 1.7380 EN 10273 1.0565	N N N N N N QT QT QT N	BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS	25 25 25 25 25 25 25 25 25 25	100 100 100 100 100 100 100 100 100 100					AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13	a a a a a a a a a a
2	21 CrMoV 5.7	EN 10269 1.7709	QT	BARS	25	100					AD 2000 W 7	a

Remarks	+AT = solution annealed	+NT = normalized and tempered	a = PMA for the use in pressure equipment in Directive 2014/68/EU necessary
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	+N = normalized or normalizing formed	+SR = stress relieved	

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Location: E 48970 BASAURI				Rev.: 5	of : 4	TÜV Rheinland Industrie Service GmbH						
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					from	Up to	fr o m	Up to				
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25 CrMo4	EN 10269.1 1.7218	QT	BARS	25	100					AD 2000 W 7	a
42 CrMo 4	EN 10269.1 1.7225	QT	BARS	25	100					AD 2000 W 7	a
X 6CrNiMoTi 17-12-2	EN 10272 1.4571	AT	BARS	25	100					AD 2000 W 2	a
X 2CrNiMo 17-12-2	EN 10272 1.4404	AT	BARS	25	100					AD 2000 W 2	a
X 5CrNi 18-10	EN 10272 1.4301	AT	BARS	25	100					AD 2000 W 2	a
X 6CrNiTi 18-10	EN 10272 1.4541	AT	BARS	25	100					AD 2000 W 2	a
X5CrNiMo 17-12-2	EN 10272 1.4401	AT	BARS	25	100					AD 2000 W 2	a
X2CrNi18-9	EN 10272 1.4307	AT	BARS	25	100					AD 2000 W 2	a
X 8CrNiS 18-9	EN 10272 1.4305	AT	BARS	25	100					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 necessary
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Manufacturer				Work		Nationality		Date		Page No..		
Company Name: SIDENOR ACEROS ESPECIALES, S.L.U				PLANTA BASAURI		E		20.03.18		4		
Location: E 48970 BASAURI								Rev.: 5		of : 4		
Cur -	Materials-term Materials-No.	Material Specification	Delivery y Cond.	Article Type of Product	Dimensions				Weight max 1=t / 2=kg ↓ res	Technical Specifications Requirements Technical Regulations	Remarks	
					Thick-ness mm		Ø mm					
1	2	3	4	5	from 6a	Up to 6b	fr 7	Up 7b	8a	8b	9	10
3. Materials according to international standards (e. g. ASTM, ASME, IBR etc.)												
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	X 20 Cr 13 1.7258	DIN17440 1.4021 DIN 17240	+QT +QT	BARS BARS	25 25	100 100					DIN17440 DIN 17240	3-2 Certificate 3-2 Certificate
	B7 L7 B16	ASTM A 193 ASTM A 320 ASTM A 193	+QT +QT +QT	BARS BARS BARS	25 25 25	100 100 100					ASTM A 193 ASTM A 320 ASTM A 193	a a a
	75 K + [AISI 4130] S 235J2 S-235 JR S 275 JR S 275J2 S 355 JR S 355 J2	API6A / ISO 10423 [ASTM A 29] EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10025.2 - 1.0045 EN 10.025.2 - 1.0577	+QT N-AR N-AR N-AR N-AR N-AR N-AR	BARS BARS BARS BARS BARS BARS BARS	25 25 25 25 25 25 25	100 100 100 100 100 100 100					API6A / ISO 10423 [ASTM A 29] a EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10.025.2	a a a a a a
	34 CrNiMo 6 25 CrMo4 42 CrMo 4 34 CrNiMo 6 40CrMoV4.6	EN 10083.3 1.6582 EN 10083.3 1.7218 EN 10083.3 1.7225 EN 10269 1.6582 EN 10269 1.7711	QT QT QT QT QT	BARS BARS BARS BARS BARS	25 25 25 25 25	100 100 100 100 100					EN 10083.3 EN 10083.3 EN 10083.3 EN 10269 EN 10269	a a a a a
Remarks		+AT = solution annealed +NT = normalized and tempered a = PMA for the use in pressure equipment +AR = as rolled +QT = quenched and tempered in Directive 2014/68/EU necessary +M = thermo mechanical treated +S = soft annealed +N = normalized or normalizing formed +SR = stress relieved										

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Manufacturer				Work		Nationality		Date	
Company Name: SIDENOR ACEROS ESPECIALES, S.L.				PLANTA REINOSA		E		10.04.18	
Location: E 39200 REINOSA (CANTABRIA)								Rev.: 5	
Materials-term Materials-No.		Material Specification	Delivery Cond.	Article Type of Product	Dimensions		Weight max	Technical Specifications	
					Thick-ness mm		1=t / 2=kg	Requirements Technical Regulations	
					from Up to		↓ res ult		
					fr o m Up to				
1	2	3	4	5	6a	6b	7a	7b	8a
									9
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	P 250 GH	EN 10273 - 1.0460	+N	BARS	100	150			EN 10273
	X 6CrNiMoTi 17-12-2	EN 10272 1.4571	+AT	BARS	100	230			EN 10272
	X 2CrNiMo 17-12-2	EN 10272 .3 1.4404	+AT	BARS	100	230			EN 10272
	X 5CrNi 18-10	EN 10272 1.4301	+AT	BARS	100	230			EN 10272
	X 6CrNiTi 18-10	EN 10272 1.4541	+AT	BARS	100	230			EN 10272
	X5CrNiMo 17-12-2	EN 10272 1.4401	+AT	BARS	100	230			EN 10272
	X2CrNi18-9	EN 10272 1.4307	+AT	BARS	100	230			EN 10272
	X 8CrNiS 18-9	EN 10272 1.4305	+AT	BARS	100	230			EN 10272
	1.7218	EN 10269	+S, QT	BARS	100	150			EN 10269
Remarks									
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Manufacturer				Work		Nationality		Date		Page No..	
Company Name: SIDENOR ACEROS ESPECIALES, S.L.				PLANTA REINOSA		E		10.04.18		2	
Location: E 39200 REINOSA (CANTABRIA)								Rev.: 5		of : 5	
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					
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1	2	3	4	5	6a	6b	7a	7b	8a	8b	
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1	S 235J2 S-235 JR S 275 JR S 275J2 S 355 J2 P 250 GH 16 Mo 3 13 CrMo 44 10 CrMo 9-10 P 355 NH	EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10.025.2 – 1.0577 EN 10273 - 1.0460 DIN 17243 1.5415 DIN 17243 1.7335 DIN 17243 1.7380 EN 10273 1.0565	+N +N +N +N +N +N +QT +QT +QT +N	BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS	100 100 100 100 100 100 100 100 100 100	230 230 230 230 230 150 230 230 230 150				AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13	
2	21 CrMoV 5.7	EN 10269 1.7709	+QT	BARS	100	160				AD 2000 W 7	
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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Manufacturer				Work		Nationality		Date		Page No..	
Company Name: SIDENOR ACEROS ESPECIALES, S.L.				PLANTA REINOSA		E		10.04.18		3	
Location: E 39200 REINOSA (CANTABRIA)								Rev.: 5		of : 5	
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					
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	25 CrMo4 X 6CrNiMoTi 17-12-2	EN 10269. 1.7218 EN 10272 1.4571	+QT +AT	BARS BARS	100 100	150 230				AD 2000 W 7 AD 2000 W 2	
3	X 2CrNiMo 17-12-2 X 5CrNi 18-10 X 6CrNiTi 18-10 X5CrNiMo 17-12-2 X2CrNi18-9 X 8CrNiS 18-9	EN 10272 1.4404 EN 10272 1.4301 EN 10272 1.4541 EN 10272 1.4401 EN 10272 1.4307 EN 10272 1.4305	+AT +AT +AT +AT +AT +AT	BARS BARS BARS BARS BARS BARS	100 100 100 100 100 100	230 230 230 230 230 230				AD 2000 W 2 AD 2000 W 2 AD 2000 W 2 AD 2000 W 2 AD 2000 W 2 AD 2000 W 2	
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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Manufacturer				Work		Nationality		Date		Page No..		
Company Name: SIDENOR ACEROS ESPECIALES, S.L.				PLANTA REINOSA		E		10.04.18		4		
Location: E 39200 REINOSA (CANTABRIA)								Rev.: 5		of : 5		
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	
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1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	
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	X 20 Cr 13 1.7258	DIN17440 1.4021 DIN 17240	+QT +QT	BARS BARS	100 100	230 160					DIN17440 DIN 17240	3·2 Certificate 3·2 Certificate
	B7 L7 B16	ASTM A 193 ASTM A 320 ASTM A 193	+QT +QT +QT	BARS BARS BARS	100 100 100	180 230 180					ASTM A 193 ASTM A 320 ASTM A 193	a a a
	75 K + [AISI 4130] S 235J2 S-235 JR S 275 JR S 275J2 S 355 JR S 355 J2	API6A / ISO 10423 [ASTM A 29] EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10025.2 – 1.0045 EN 10.025.2 – 1.0577	+QT +N+AR +N+AR +N+AR +N+AR +N+AR +N+AR	BARS BARS BARS BARS BARS BARS BARS	100 100 100 100 100 100 100	230 230 230 230 230 230 230					API6A / ISO 10423 [ASTM A 29] EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10.025.2	a a a a a a
	34 CrNiMo 6 25 CrMo4 42 CrMo 4	EN 10083.3 1.6582 EN 10083.3 1.7218 EN 10083.3 1.7225	+QT +QT +QT	BARS BARS BARS	100 100 100	230 230 320					EN 10083.3 EN 10083.3 EN 10083.3	a a 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										

Annex to Certificate No. : 01 202 E/Q-02 6904 03


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.				PLANTA REINOSA		E		10.04.18		5		
Location: E 39200 REINOSA (CANTABRIA)								Rev.: 5		of : 5		
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	
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	34 CrNiMo 6 40CrMoV4.6	EN 10269 1.6582 EN 10269 1.7711	+QT +QT	BARS BARS	100 100	120 160					EN 10269 EN 10269	a a
Results		+AT = solution annealed +NT = normalized and tempered a = PMA for the use in pressure equipment +AR = as rolled +QT = quenched and tempered in Directive 2014/68/EU necessary +M = thermo mechanical treated +S = soft annealed +N = normalized or normalizing formed +SR = stress relieved										



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Manufacturer				Work		Nationality		Date		Page No..		
Company Name: SIDENOR ACEROS ESPECIALES, S.L.				PLANTA AZKOITIA		E		26.03.18		1		
Location: : E 20720 AZKOITIA (GUPUZKOA)								Rev.: 5		of : 4		
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	
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	X 5CrNi 18-10	EN 10272 1.4301	+AT	BARS	19	200					EN 10272	
	1.7218	EN 10269	+S	BARS	19	200					EN 10269	
Remarks												
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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.				PLANTA AZKOITIA		E		26.03.18		3		
Location: : E 20720 AZKOITIA (GUPUZKOA)								Rev.: 5		of : 4		
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	fro m	Up to				
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.												
	25 CrMo4 42 CrMo 4	EN 10269.1 1.7218 EN 10269.1 1.7225	+QT +QT	BARS BARS	19 19	200 200					AD 2000 W 7 AD 2000 W 7	
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										



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.				PLANTA AZKOITIA		E		26.03.18		4	
Location: : E 20720 AZKOITIA (GUPUZKOA)								Rev.: 5		of : 4	
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
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.											
	X 20 Cr 13 1.7258 B7 L7 B16 75 K+[AISI 4130] S 235J2 S-235 JR S 275 JR S 275J2 S 355 JR S 355 J2 34 CrNiMo 6 25 CrMo4 42 CrMo 4 34 CrNiMo 6 40CrMoV4.6	DIN17440 1.4021 DIN 17240 ASTM A 193 ASTM A 320 ASTM A 193 API6A / ISO 10423 [ASTM A 29]	+QT +QT +QT +QT +QT +QT +N-AR +N-AR +N-AR +N-AR +N-AR +N-AR +QT +QT +QT +QT +QT +QT	BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS	19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19	200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200	API6A / ISO 10423 [ASTM A 29]		DIN17440 DIN 17240 ASTM A 193 ASTM A 320 ASTM A 193	3·2 Certificate 3·2 Certificate a a a a	
		EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10025.2 - 1.0045 EN 10.025.2 - 1.0577 EN 10083.3 1.6582 EN 10083.3 1.7218 EN 10083.3 1.7225 EN 10269 1.6582 EN 10269 1.7711	+N-AR +N-AR +N-AR +N-AR +N-AR +N-AR +QT +QT +QT +QT +QT	BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS	19 19 19 19 19 19 19 19 19 19 19	200 200 200 200 200 200 200 200 200 200 200			EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10.025.2 EN 10083.3 EN 10083.3 EN 10083.3 EN 10269 EN 10269	a a a a a a a a a a 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 necessary									



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.				PLANTA VITORIA		E		15.03.18		1	
Location: E 01013 VITORIA (ARABA)								Rev.: 5		of : 3	
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
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.											
	P 250 GH	EN 10273 - 1.0460	+N	BARS	--	26					EN 10273
	X 6CrNiMoTi 17-12-2	EN 10272 1.4571	+AT	BARS	--	26					EN 10272
	X 2CrNiMo 17-12-2	EN 10272 .3 1.4404	+AT	BARS	--	26					EN 10272
	X 5CrNi 18-10	EN 10272 1.4301	+AT	BARS	--	26					EN 10272
	1.7218	EN 10269	+S	BARS	--	26					EN 10269
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 +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.				PLANTA VITORIA		E		15.03.18		2	
Location: E 01013 VITORIA (ARABA)								Rev.: 5		of : 3	
Cur -	Materials-term Materials-No.	Material Specification	Delivery Con d.	Article Type of Product	Dimensions				Weight max 1=t / 2=kg ↓ res ult	Technical Specifications Requirements Technical Regulations	Remarks
					Thick- ness mm	Ø mm					
1	2	3	4	5	6a	6b	7a	7b	8a	8b	9

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.

1	S 235J2 S-235 JR S 275 JR S 275J2 S 355 J2 P 250 GH 16 Mo 3 13 CrMo 44 10 CrMo 9-10 P 355 NH	EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10.025.2 – 1.0577 EN 10273 - 1.0460 DIN 17243 1.5415 DIN 17243 1.7335 DIN 17243 1.7380 EN 10273 1.0565	+N +N +N +N +N +N +QT +QT +QT +N	BARS BARS BARS BARS BARS BARS BARS BARS BARS BARS	-- -- -- -- -- -- -- -- -- --	26 26 26 26 26 26 26 26 26 26					AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13 AD 2000 W13	
2	21 CrMoV 5.7 25 CrMo4 42 CrMo 4	EN 10269 1.7709 EN 10269.1 1.7218 EN 10269.1 1.7225	+QT +QT +QT	BARS BARS BARS	-- -- --	26 26 26					AD 2000 W 7 AD 2000 W 7 AD 2000 W 7	

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	
	+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.				PLANTA VITORIA		E		15.03.18	3
Location: E 01013 VITORIA (ARABA)								Rev.: 5	of : 3
Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions		Weight max	Technical Specifications	
					Thick-ness mm		1=t / 2=kg	Requirements	
					from Up to		↓ res ult	Technical Regulations	
1	2	3	4	5	6a	6b	7a	7b	8a
									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.									
	X 20 Cr 13 1.7258	DIN17440 1.4021 DIN 17240	+QT +QT	BARS BARS	-- --	26 26			DIN17440 DIN 17240
	B7 L7 B16	ASTM A 193 ASTM A 320 ASTM A 193	+QT +QT +QT	BARS BARS BARS	-- -- --	26 26 26			ASTM A 193 ASTM A 320 ASTM A 193
	75 K + [AISI 4130] S 235J2 S-235 JR S 275 JR S 275J2 S 355 JR S 355 J2	API6A / ISO 10423 [ASTM A 29] EN 10025.2-1.0117 EN 10025.2 - 1.0038 EN 10025.2 - 1.0044 EN 10025.2 - 1.0145 EN 10025.2 - 1.0045 EN 10.025.2 – 1.0577	+QT N-AR N-AR N-AR N-AR N-AR N-AR	BARS BARS BARS BARS BARS BARS BARS	-- -- -- -- -- -- --	26 26 26 26 26 26 26	API6A / ISO 10423 [ASTM A 29] EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10025.2 EN 10.025.2		g g g g g g g
	34 CrNiMo 6 25 CrMo4 42 CrMo 4 34 CrNiMo 6 40CrMoV4.6	EN 10083.3 1.6582 EN 10083.3 1.7218 EN 10083.3 1.7225 EN 10269 1.6582 EN 10269 1.7711	QT QT QT QT QT	BARS BARS BARS BARS BARS	-- -- -- -- --	26 26 26 26 26	EN 10083.3 EN 10083.3 EN 10083.3 EN 10269 EN 10269		g g g g g
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 g = PMA for the use in pressure equipment in Directive 2014/68/EU necessary								