

Scope Directive 2014/68/EU according to Annex I §4.3						☐ EN 764-4						AD 2000- erkblatt W0	FPC, Regulation (EU) No. 305/2011(System 2+)			
Manufacturer					Work						nality	Date	Pa	age No		
Com	pany Name: Grá	if Verbindungsteile	GmbH											1	TÜV Rheinland	
	Die	selstrasse 26			54634 Bitbu	rg, Die	selstr	aße 26		Ger	man	24.04.2024			Industrie Service	
Loca	tion: D-5	4634 Bitburg								1		Rev.:10	of :	4	GmbH	
Cur -		ials-term rials-No.	Material Specification	Delivery Cond.	Article Type of Product		Dime	nsions			ight ax	Technical Specification	s	i	Remarks	
						Thic		Q	Ø			Requirements				
					mm		m	m	1=t / 2=kg		Technical Regulations					
						from	Up to	from	Up to	₩	res ult	-				
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 ap	oplicable code re	spectively the PED n	nust be observed for the	he use of ma	aterial grades listed	in col	umn 2	to 4.								
							1	1					-			
	stainle	ess steel	EN 10269 EN 10272	AT	fasteners			1	200			EN ISO 3500	6			
	carbon steel		EN 10269 EN 10272	N,QT	fasteners			1	200			EN ISO 898	3			
	Carbon/austenic steel		EN 10269 EN 10272	AT	fasteners			1	200							
	special materials EN 10269 AT EN 10272 AH				fasteners			1	200							
Remarks +AT = solution annealed +NT = normalized and tempered a = PMA for the use in pressure equipment of the solution annealed +AR = as rolled +QT = quenched and tempered in Directive 2014/68/EU neccessary +M = thermo mechanical treated +S = soft annealed +N = normalized or normalizing formed +SR = stress relieved																



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		Work					Natio	nality	Date	Р	age No				
Company Name: Gräf Verbindungsteile GmbH														2	TÜV Rheinland
	Die	selstrasse 26			54634 Bitburg					Gerr	man	24.04.2024			Industrie Service
Locat	ion: D-5	4634 Bitburg			99996 Menteroda, Holzthalebenerstr. 30							Rev.:10	of:	4	GmbH
Cur		ials-term rials-No.	Material Specification	Delivery Cond.	Article Type of Product	Article Dimensions Type of Product					Weight Te		s	i	Remarks
						Thic		Q	Ø	Requirements			s		
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						£	11	£	11-	2=	kg	Regulations	;		
						from	Up to	from	Up to	1	res ult				
1		2 ording to the A	3	4	5	6a	6b	7a	7b	8a	8b	9			10
applic	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.														
	carbon steel		EN 10269 EN 10272	N, QT	fasteners			1	200			AD2000 W7/ EN ISO 898			
	stainless steel		EN 10269 EN 10272	AT	fasteners			1	200			AD2000 W7/ EN ISO 3500	_		
	carbon/austenic EN 10269 EN 10272		AT	fasteners			1	200			AD2000 W2	2			
	special	special materials VdTÜV WB EN 10269 EN 10272 AH		AT,S AH	fasteners			1	200			AD2000 W2		basic material requirements o	
Remai		as rolledthermo mecharnormalized or r	+QT = qu +S = so		d and aled	temper temper				a =			n pressure equipment 68/EU neccessary		



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		Work					Natio	onality	Date	P	age No				
Company Name: Gräf Verbindungsteile GmbH														3	TÜV Rheinland
	Die	selstrasse 26			54634 Bitburg, I	Diesels	traße	1 + 5 +	10	Ge	rman	24.04.2024			Industrie Service
Locat	on: D-5	4634 Bitburg			99996 Menteroda, Holzthalebenerstr. 30							Rev.:10	of :	4	GmbH
		ials-term	Material	Delivery	Article Dimensions					We	eight	Technical			Remarks
Cur		ials-No.	Specification	Cond.	Type of Product					max		Specifications			
-						Thic	·k_		×			Requirements			
						Thick-					Requirements				
						mn	n	mm		1=t /		Technical			
											=kg	Regulations			
						from	Up to	from	Up	\downarrow	res ult				
1		2	3	4	5	6a	6b	7a	to 7b	8a	8b	9			10
3. M	aterials acco	_	national standard	ds (e. a.	-				1.0	Ju	0.0		1		10
materi	al appraisal. Wit	h that the manufact	R 2014/68/EU is bound curing reliability for equ at be observed for the u	ivalent mate	erial grades accordi	ing to o	ther s	andard	ards or Is (e.g.	to the	qualific	cation by a Euro ASME) is prove	pean d. The	material appro requirements	oval or to the particular and limits of the
		ainless steel	ASTM A193/	AT,N,QT	bolts			М3	M39			ASTM A193	/ a	1	
			ASME SA193									ASME SA19	-		
	carbon/st	ainless steel	ASTM A194/	AT,N,QT	nuts			М3	M39			ASTM A194	-	1	
	etaink	ess steel	ASME SA194 ASTM A276/	AT	fasteners			1	200			ASME SA19 ASTM A276			
	Stallin	555 51661	ASME SA276	_ ^ı	lasteriers			,	200			ASME SA27	-	1	
	stainle	ess steel	ASTM A479/	AT	fasteners			1	200			ASTM A479		1	
			ASME SA479									ASME SA47	9		
	nickel and	nickel alloys	ASTM B637/	AT,AH	fasteners			1	200			ASTM B637		1	
			ASME SB637									ASME SB63	-		
	titatium and	titanium alloys	ASTM B348/	S	fasteners			1	200			ASTM B348		a	
		manta minda	ASME SB348		factorion			4	200			ASME SB34			
		materials uperduplex	ASTM A479/ ASME SA479	AT	fasteners			1	200			ASTM A479 ASME SA47	-	1	
	dupicx/3	арстаартох	7 TOWL OF THE									TOME OF HT	J		
	carbo	on steel	ASTM A320/ ASME SA320	N,QT	fasteners			1	200			ASTM A320 ASME SA32		ì	
Result	s +AT	= solution annea			+NT = no	rmalize	d and	tempe	red					for the use i	n pressure equipment
		= as rolled				emper			in Directive 2014/68/EU neccessary						
	+M	= thermo mecha			+S = soft annealed										Rhoin
+N +Al		= normalized or = hardened/aged	+SR = str	ess reli	eved								P A		



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Dieselstrasse 26					54634 Bitbu	rg, Die	selstr	aße 26		Ge	rman	24.04.2024			Industrie Service
Location: D-54634 Bitburg												Rev.:10	of :	4	GmbH
Cur	Materials-term Material Delivery Materials-No. Specification Cond.			Delivery Cond.	Article Dimensions Type of Product						eight max	Technical Specification	ıs	I	Remarks
						Thic		Q	Ø			Requirement	ts		
						nes mr		m	m	1	=t /	Technical			
										2=kg		Regulations	;		
						from	Up to	from	Up to		res ult				
1		2	3	4	5	6a	6b	7a	7b	8a	8b	9			10
			ational standard	<u> </u>	<u> </u>										
			R 2014/68/EU is bound iring reliability for equ												oval or to the particular and limits of the
			be observed for the u							1	· ·				
	carbo	on steel	ASTM F467	N,QT	nuts			М3	M39			ASTM F467	' a		
	carbo	on steel	ASTM F468	N,QT	bolts			М3	M39			ASTM F468	3 a		
	stainle	ess steel	ASTM F593	AT	bolts			МЗ	M39			ASTM F593	3 a		
	stainle	ess steel	ASTM F594	AT	nuts			М3	M39			ASTM F594	l a		
	stainle	ess steel	ASTM B408/ ASME SB408	AT	fasteners			1	200			ASTM B408 ASME SB40			
	stainless steel ASTM A		ASTM A453/ ASME SA453	AT	fasteners			1	200			ASTM A453 ASME SA45			
	nickel and nickel alloys A		ASIME SA455 ASTM B446/ ASME SB446	S,AT,AH	fasteners			1	200			ASTM B446 ASME SB44	/ a		
Results	+M +N	= solution anneal = as rolled = thermo mechar = normalized or n = hardened/aged	+QT = qu +S = so		d and aled	I tempe temper				a =			n pressure equipment 68/EU neccessary		