

Scope Directive 2014/68/EU according to Annex I §4.3			Ü	□ EN 764-4							AD 2000- erkblatt W0	FPC, Regulation (EU) No. 305/2011(System 2+)			
		Manufactur	er		Work						onality	Date	Page No		
Com	pany Name: TS	Verbindungsteile G	mbH											1	TÜV Rheinland
Dieselstrasse 1					54634 Bitburg	g, Diesel	straß	e 1+5+	10	German		16.06.2021			Industrie Service
Location: D-54634 Bitburg					99996 Menterod	da, Holz	thalek	penersti	r. 30			Rev.:7	of :	4	GmbH
Cur -		als-term ials-No.	Material Specification	Delivery Cond.	Article Type of Product		Dime	ensions			eight ax	Technical Specification	S		Remarks
						Thic		Q	ð			Requirements			
						nes		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
1. M	laterials acc	ording to harm	onized Europear	n standa	rds (hEN) and	d Euro	pear	n App	roval	for	Mater	rials (EAM)	acc.	Directive 2	2014/68/EU
			ring reliability for equived for the use of materia				er sta	ndards ((e.g. BS	S, AFN	IOR, AS	ME) is proved. 1	he requ	uirements and	I limits of the applicable
	stainless steel		EN 10269 EN 10272	AT	fasteners							EN ISO 350	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			·							
		special materials EN 10269 AT EN 10272 AH			fasteners										
Rema	+AR +M +N	= solution anneal = as rolled = thermo mechar = normalized or r = hardened/aged	nical treated normalizing formed		+QT = qq +S = sq	ormalize uenched oft annea ress reli	and aled					a =			n pressure equipment 68/EU neccessary



Scope Directive 2014/68/EU according to Annex I §4.3			U	☐ EN 764-4						AD 2000- Merkblatt W0			FPC, Regulation (EU) No. 305/2011(System 2+)		
		Work						onalit y	Date	Page No					
Company Name: TS Verbindungsteile GmbH											-			2	TÜV Rheinland
	Die	selstrasse 1			54634 Bitburg	, Diesel	straß	e 1+5+	10	Ger	man	16.06.2021			Industrie Service
Loca	tion: D-5	4634 Bitburg			99996 Menteroo	la, Holz	thale	penerst	r. 30			Rev.:7	of :	4	GmbH
Cur -	Materials-term Material Materials-No. Specification			Delivery Cond.	Article Dir Type of Product			ensions	Weight max		Technical Specification			Remarks	
						Thio		Ç	Ø			Requirement			
						mm mm			ım	1=t /		Technical			
						from	Up	from	Up	_	=kg res	Regulations			
						110111	to	110111	to	1	ult				
1		2 ording to the A	3	4	5	6a	6b	7a	7b	8a	8b	9			10
			EN 40000	N OT								4 D0000 W/			
	carbon steel		EN 10269 EN 10272	N, QT	fasteners							AD2000 W7 EN ISO 898			
	stainle	ess steel	EN 10269	AT	fasteners							AD2000 W2			
			EN 10272					1 200		.		EN ISO 3506			
	carbon/austenic		EN 10269 EN 10272	AT	fasteners			'	200			AD2000 W2	2		
	special	materials	VdTÜV WB EN 10269 EN 10272	AT,S AH	fasteners							AD2000 W2		basic materia requirements	al according to s of VdTÜV
Rema	+AR +M +N +AH	= as rolled = thermo mecha = normalized or	+QT = qu +S = so	ormalize uenched oft anne ress reli	l and aled			1		a :			in pressure equipment 1/68/EU neccessary		



Scope 🗵 D			rective 2014/68/E	ΞU		ΕN	764-	4		\boxtimes		AD 2000-		FPC,	Regulation (EU)
according to Annex I §4.3					Merkblatt W								No. 305	/2011(System 2+)	
		Manufactui	er		Work						Nationality Date		Pa	age No	
Comp	Company Name: TS Verbindungsteile GmbH													3	TÜV Rheinland
Dieselstrasse 1					54634 Bitburg,	Diesels	traße	1 + 5 +	+ 10	Ger	man	16.06.2021			Industrie Service
Location: D-54634 Bitburg					99996 Menterod	a, Holz	thalel	penerst	r. 30				of :	4	GmbH
		als-term	Material	Delivery	Article		Dime	ensions	<u> </u>	We	ight	Technical			Remarks
Cur -		Materials-No. Specification		Cond.	Type of Product			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1010110		nax	Specification	ns		Tomane
						Thic		Q	Ø	Req		Requiremen	ts		
						nes mr		m	ım	1=	=t /	Technical			
							mm mm		2=kg		Regulations				
						from	Up	from	Up	\downarrow	res				
1		2	3	1	5	6a	to 6b	7a	to 7b	8a	ult 8b	9			10
3 M	atorials acco		ational standar	de (o	l .			/а	70	oa	on	9			10
			2014/68/EU is bound t	<u> </u>	· · · · · · · · · · · · · · · · · · ·			tandard	ls or to	the a	ualificat	tion by a Europe	an mat	erial approva	or to the particular
mater	ial appraisal. With	that the manufactu	ring reliability for equi	valent materi	ial grades accordin	g to oth									d limits of the applicable
code			ed for the use of mater			4.	1	ſ				ASTM A193)/ -		
	carbon/sta	ainless steel	ASTM A193/ ASME SA193	AT,N,QT	bolts							ASTIMATES ASME SA19			
	carbon/sta	ainless steel	ASTM A194/	AT,N,QT	nuts							ASTM A194			
			ASME SA194									ASME SA19			
	stainle	ess steel	ASTM A276/ ASME SA276	AT	fasteners							ASTM A276 ASME SA27			
	stainle	ess steel	ASTM A479/	AT	fasteners							ASTM A479			
			ASME SA479					1	200			ASME SA47			
	nickel and	nickel alloys	ASTM B637/	AT,AH	fasteners							ASTM B637	-		
	titatium and	titanium alloys	ASME SB637 ASTM B348/	S	fasteners							ASME SB63 ASTM B348			
	illatium and	ilianium alloys	ASME SB348	3	lasteriers							ASME SB34			
	special	materials	ASTM A479/	AT	fasteners							ASTM A479			
	duplex/s	uperduplex	ASME SA479									ASME SA47	'9		
	carbo	on steel	ASTM A320/	N,QT	fasteners							ASTM A320	1/		
	oarbe		ASME SA320	14,001	lasteriers							ASME SA32			
Resul		= solution annea	led					d tempe				a =	= PMA	for the use	in pressure equipment
	+AR					temper	ed				in Di	rective 2014	/68/EU neccessary		
	+M +N		To a soft difficulty								A CO				
		= hardened/aged	normalizing formed												[=[4]
				•						_					4355



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		Manufactur	er		Work						onality	Date	I	Page No	
Company Name: TS Verbindungsteile GmbH														4	TÜV Rheinland
Dieselstrasse 1					54634 Bitburg	, Diesel	straß	e 1+5+	10	Gei	man	16.06.2021			Industrie Service
Location: D-54634 Bitburg					99996 Menterod	a, Holz	thalel	penerst	r. 30	Rev.:7			of:	4	GmbH
Cur -	Materials-term Ma		Material Specification	Delivery Cond.	Article Type of Product	Dimensions			•	Weight max		Technical Specifications			Remarks
						Thic		Q	Ø			Requirements			
						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
3. Mate	erials acco	ording to intern	ational standard	ds (e. g. <i>l</i>	ASTM, ASME,	IBR e	etc.)								
material	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.														
	carbo	on steel	ASTM F467	N,QT	nuts							ASTM F467	7	а	
	carbo	on steel	ASTM F468	N,QT	bolts							ASTM F468	3	а	
	stainle	ess steel	ASTM F593	AT	bolts							ASTM F593	3	а	
	stainle	ess steel	ASTM F594	AT	nuts			1 200				ASTM F594	1	а	
	stainless steel		ASTM B408/ ASME SB408	AT	fasteners			'	200			ASTM B408 ASME SB40			
	stainle	ess steel	ASTM A453/ ASME SA453	AT	fasteners							ASTM A453 ASME SA45	3/	а	
	nickel and	nickel alloys	ASTM B446/ ASME SB446	S,AT,AH	fasteners							ASTM B446 ASME SB44	6/	a	
Results	+AT +AR +M +N +AH	+QT = qu +S = so	ormalize lenched oft anne ress reli	l and aled					a =			n pressure equipment 68/EU neccessary			