

# *Tentec CTST* *General purpose* *bolt tensioners*



The worldwide standard for bolt tensioning tools.

*Atlas Copco*



# TENTEC CTST GENERAL PURPOSE BOLT TENSIONERS

## Topside Bolt Tensioning

The CTST range of Tentec topside bolt tensioning tools consist of 6 base tools covering bolt sizes from 3/4" to 4" (M20 to M100). The tools are designed to fit on to most ANSI B16.5, ANSI B16.47 Series 1, MSS-SP44, API-6A and API-17D flanges. Each base tool can be converted for use on a different bolt size by the use of a conversion kit.

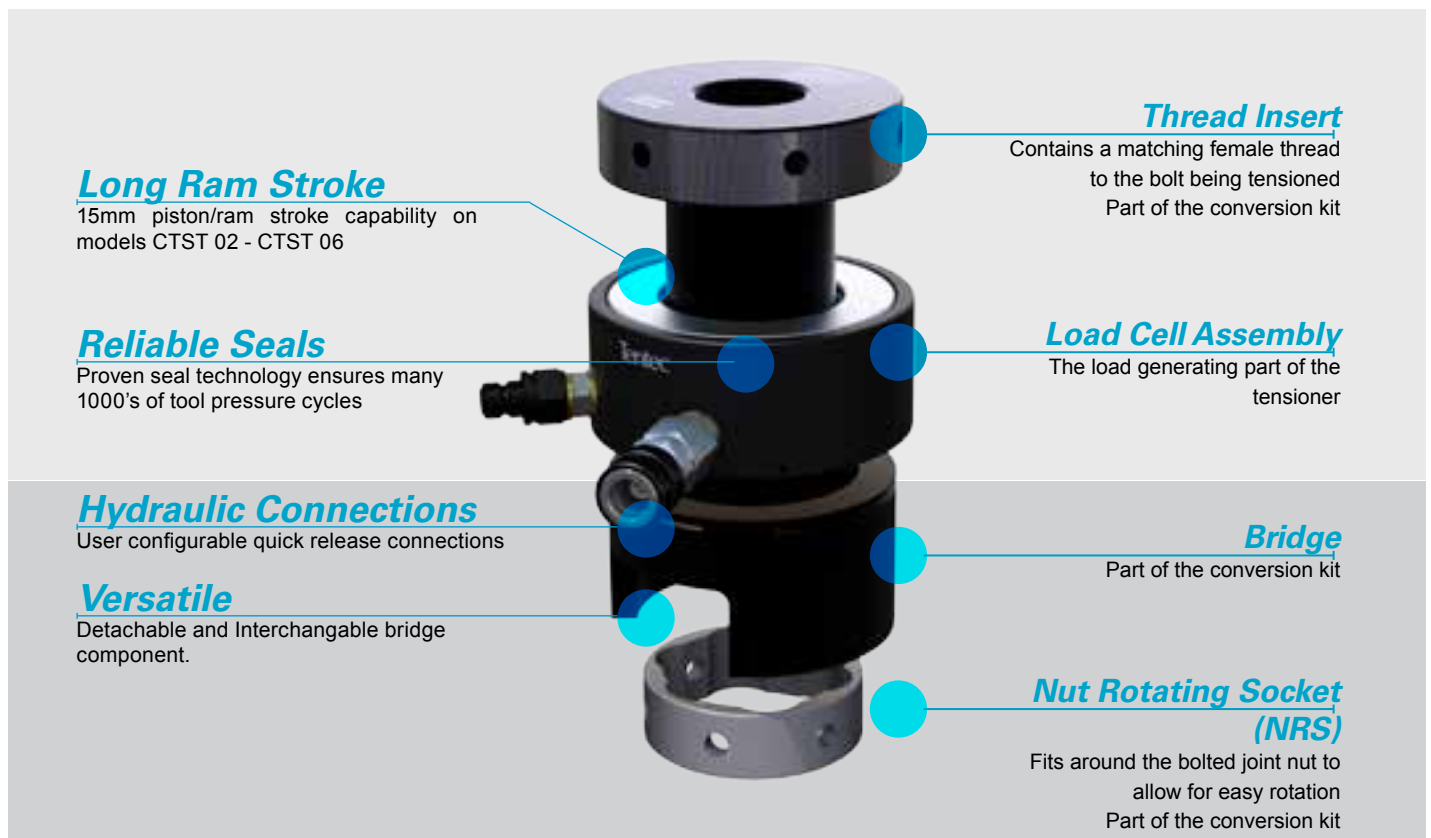
## BOLT TIGHTENING SOLUTIONS

We have many years experience of designing bespoke bolt tensioning tools for instances where standard tools are not suitable. Contact us for more information

## Conversion Kits

Conversion Kits offer a very economical way to expand your inventory of bolt tensioning tools. Kits are available to convert a CTST tensioner to suit an alternative bolt size within its size range.

Kits consist of a Puller, Bridge and Nut Rotating Socket. Get in touch with us and we can advise on suitable Conversion Kits part numbers.



## BOLT TIGHTENING SOLUTIONS

### Consistent, Dependable and Safe.

**Consistent:** Using multiple bolt tensioning tools on a bolted joint gives a much improved uniform bolt load across all bolts.

**Axial Bolt Load:** Bolt load is applied axially to the bolt. Inconsistencies such as friction, bending and lubricant are not a factor when using bolt tensioners. No torsional stresses are involved.

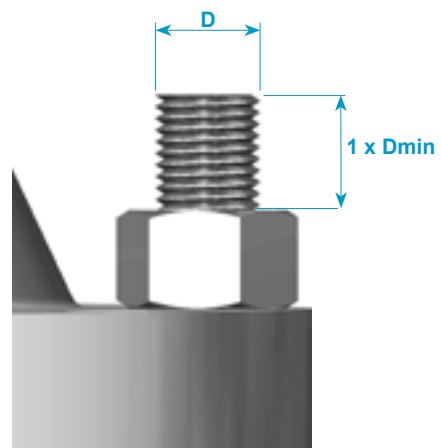
**Rapid:** Multiple bolt tensioners offer a rapid and accurate method of tightening a bolt.

**Adaptable:** Conversion kits are available to convert a tensioner from one bolt size to another offering an economical and versatile solution.

**Accurate:** Bolt load is directly proportional to the pressure applied to the tensioner.

## Bolt Protrusion

CTST-Series tensioners need a minimum of 1 x bolt diameter protruding above the hexagon or round nut.





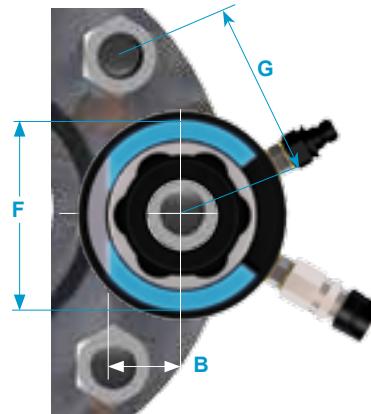
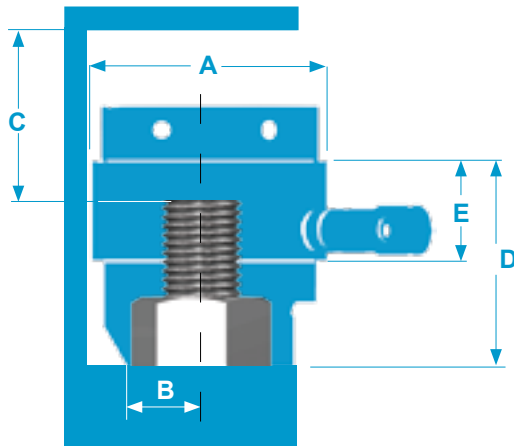
## Safety & Reliability

Integrated into the design of each CTST tensioners are enhanced safety features including mechanisms to remove the hazard of over-stroking the tensioner rams. All CTST Models feature a mechanism which directs oil flow away from the operator in the instance the ram is over-stroked and exhausts oil harmlessly into the internal section of the tensioner.

## Seal Technology

Over the years Tentec has developed a class leading high pressure seal technology. This innovative seal technology is industry proven and offers many 1000's of reliable and safe pressure cycles.

## TECHNICAL SPECIFICATIONS



**Maximum Working Pressure = 1500bar : 21750psi**

Tool Ident	Part No Imperial	Thread Size		Part No Metric	Bolt Load		Ram Area		Stroke mm	Weight kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Metric Conversion Kit	Inch Conversion Kits
		Inch	mm		Kn	Ton	In <sup>2</sup>	mm <sup>2</sup>											
1	HTT.9551.034	3/4"-10UNC	M20x2.5	HTT.9551.020	227.81	22.86	2,354	1518.76	10	2.0	73.50	21.0	67.00	71.0	45	62	49.5	HTT.9551.521	HTT.9551.536
	HTT.9551.078	7/8"-9UNC	M22x2.5	HTT.9551.022						1.9		24.0	64.00	71.0		63	53	HTT.9551.523	HTT.9551.580
	HTT.9551.100	1"-8UN	M24x3	HTT.9551.024						1.9		24.0	69.00	78.0		69	58.5	HTT.9551.525	HTT.9551.502
	HTT.9551.118	1.1/8"-8UN	M27x3	HTT.9551.027						1.9		24.0	66.00	79.0		74	63.5	HTT.9551.528	HTT.9551.520
2	HTT.9552.118	1.1/8"-8UN	M27x3	HTT.9552.027	443.00	44.46	4,578	2953.69	15	4.8	102	27.0	85.50	92.0	54	82	67.5	HTT.9552.528	HTT.9552.520
			M30x3.5	HTT.9552.030						4.9		32.0	85.00	93.0		85	69	HTT.9552.532	
	HTT.9552.114	1.1/4"-8UN	M33x3.5	HTT.9552.033						4.6		31.0	84.00	95.0		85	72	HTT.9552.534	HTT.9552.516
	HTT.9552.138	1.3/8"-8UN	M36x4	HTT.9552.036						4.6		34.0	84.00	98.0		91	78	HTT.9552.537	HTT.9552.540
3	HTT.9552.112	1.1/2"-8UN	M39x4	HTT.9552.039						4.7		36.5	82.00	100.0		90	80	HTT.9552.514	HTT.9552.511
	HTT.9553.112	1.1/2"-8UN	M39x4	HTT.9553.039	810.85	81.38	8,379	5405.70	15	9.5	133	36.5	98.00	109.0	56	97	83.5	HTT.9553.540	HTT.9553.514
	HTT.9553.158	1.5/8"-8UN	M42x4.5	HTT.9553.042						9.0		37.5	93.00	107.0		110	92.5	HTT.9553.543	HTT.9553.516
	HTT.9553.134	1.3/4"-8UN	M45x4.5	HTT.9553.045						9.3		40.5	98.50	116.0		115	98	HTT.9553.546	HTT.9553.536
	HTT.9553.178	1.7/8"-8UN	M48x5	HTT.9553.048						9.0		42.5	95.00	116.0		116	101	HTT.9553.549	HTT.9553.580
	HTT.9553.200	2"-8UN	M52x5	HTT.9553.052						8.6		50.0	93.50	117.0		120	106	HTT.9553.553	HTT.9553.502
4	HTT.9554.178	1.7/8"-8UN	M48x5	HTT.9554.048	1273.16	127.78	13,159	8489.96	15	16.1	183	43.5	106.00	118.0	57	130	108	HTT.9554.549	HTT.9554.580
	HTT.9554.200	2"-8UN	M52x5	HTT.9554.052						15.7		46.0	102.50	117.0		124	108	HTT.9554.553	HTT.9554.502
	HTT.9554.214	2.1/4"-8UN	M56x5.5	HTT.9554.056						15.8		55.0	103.00	123.0		134	118.5	HTT.9554.557	HTT.9554.516
	HTT.9554.212	2.1/2"-8UN	M64x6	HTT.9554.064						18.3		54.0	121.50	145.5		150	127	HTT.9554.562	
5	HTT.9555.212	2.1/2"-8UN	M64x6	HTT.9555.064	1828.99	183.56	18,905	12196.45	15	22.7	193	64.0	107.50	133.0	60	147	130.5	HTT.9555.565	HTT.9555.514
			M68x6	HTT.9555.068						23.6		80.0	111.00	141.0		160	138	HTT.9555.570	
	HTT.9555.234	2.3/4"-8UN	M72x6	HTT.9555.072						24.7		72.0	115.00	147.0		161	143	HTT.9555.573	HTT.9555.536
6	HTT.9555.300	3"-8UN	M76x6	HTT.9555.076	2643.43	265.30	27,323	17627.48	15	22.2	233	77.0	108.00	146.0		170	153	HTT.9555.577	HTT.9555.502
	HTT.9556.300	3"-8UN	M76x6	HTT.9556.076						38.5	233	77.0	120.00	153.0	64	170	153	HTT.9556.577	HTT.9556.502
			M80X6	HTT.9556.080						38.3		78.0	117.00	154.0		178	155.5	HTT.9556.582	
	HTT.9556.314	3.1/4"-8UN	M85X6	HTT.9556.085						38.1		78.0	114.00	154.0		182	165.5	HTT.9556.586	HTT.9556.516
	HTT.9556.312	3.1/2"-8UN	M90X6	HTT.9556.090						37.0		86.0	114.00	160.0		191	174.5	HTT.9556.591	HTT.9556.511
	HTT.9556.334	3.3/4"-8UN	M95X6	HTT.9556.095						37.0		99.0	116.00	168.0		210	189.5	HTT.9556.596	HTT.9556.536
HTT.9556.400	4"-8UN	M100X6	HTT.9556.100						36.4		105.0	116.00	174.0		220	200	HTT.9556.501	HTT.9556.542	

Designs and specifications are subject to change without notice or obligation. Read all safety instructions in the manual before usage.

## Tentec BTS-Bolt Tightening Software

Tentec software allows users to manage and rapidly calculate bolt tensioner pressures. Tentec Bolt Load Software has been designed with the philosophy of minimal input, maximum output.

Documentation for multiple bolted joint projects can be created very quickly with minimal operator input. The software package contains data for all standard flanges along with the correct tensioner pressures to apply.



**COMMITTED TO SUSTAINABLE PRODUCTIVITY**

[www.bolttighteningsolutions.com](http://www.bolttighteningsolutions.com)

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