

smartTensioner®
Hamburg · Germany

Integrated Bolt Tensioner



Tools for Highly Loaded Bolted Connections

HTU
Hydraulic Tensioning Unit

HMTU
Hydraulic Mechanic Tensioning Unit

BT
Bolt Tensioner

IBT
Integrated Bolt Tensioner

STD
Subsea Tensioning Devices

HP
Hydraulic Pump

IBT

Integrated Bolt Tensioner



The IBT are made for tensioning situations where extremely high bolt forces are needed and very little free area on the flange is available.



Lightweight, fast to mount and easy to operate - perfect for difficult tensioning situations.

The IBT is an integrated BT with hydraulic pump, nut turning drive and spring-operated piston return in one small unit.

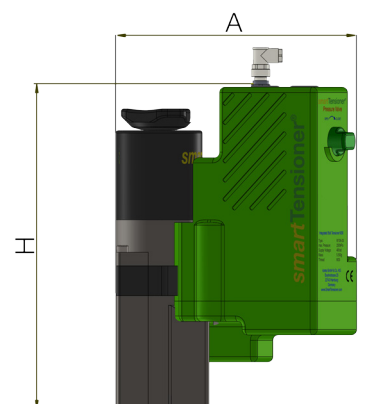
After mounting on the flange, the operator just needs to connect the power cord to the IBT and select the appropriate bolt force. The IBT then tensions or detensions the bolt and turns the nut automatically.

As with all smartTensioner pumps, several IBTs can be synchronized wirelessly and can be operated via a single PC.

Very high forces

IBTs are able to stress bolts up to 1000 MPa - sufficient for even highly loaded flanges. Bolt forces according to EN ISO 898-1:1999 (bolt quality 10.9) are possible.

smartTensioner®



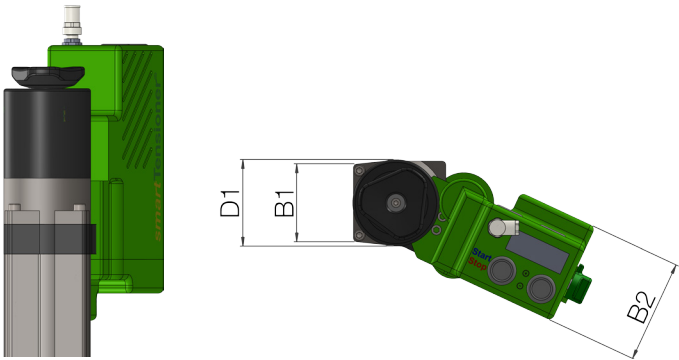
Lightweight, fast to mount and easy to operate - perfect for difficult tensioning situations.



Specifications

Thread		Diameter D [mm]	Height H [mm]	Weight [kg]	Force [kN]	Stroke mm
M30	1 1/8-8UN	64.00	238.00	8.13	484.40	10.00
M33	1 1/4-8UN	71.00	240.00	9.00	697.38	10.00
M36	1 3/8-8UN	77.00	245.00	9.88	851.55	10.00
M39	1 1/2-8UN	83.00	250.00	10.75	970.77	10.00
M42	1 5/8-8UN	95.00	256.00	12.50	1.586.19	10.00
M45	1 3/4-8UN	94.50	256.00	13.50	1.416.72	10.00
M48	1 7/8-8UN	100.50	263.00	14.13	1.498.64	10.00
M56	2 1/8-8UN	115.00	263.00	16.88	2.166.19	10.00
M64	2 1/2-8UN	124.00	270.00	18.75	2.452.93	10.00

IBT are available for other threads on request.



Advantages of IntegratedBoltTensioner:

All-in-one solution

smartTensioner IBT features our Hydraulic-Pump, AutomatedPistonReturn LINK and AutomatedNutDrive. IBT reduces manual action during the tensioning process.

Very high bolt forces

High pressure and multi-stepped cylinders allow very high bolt forces.

Made for narrow spaces

If there is little free space on the flange, our IBT is the right solution.

Light

IBT is very light and fast to mount.

Tools for highly loaded bolted connections.

Our products:

HTU

HydraulicTensioningUnit

M8 - M200 / 1/4" – 8"



The HTU replaces conventional (hexagonal) nuts. The bolt force is locked hydraulically.

HMTU

HydraulicMechanicTensioningUnit

M22 - M200 / 7/8" – 8"



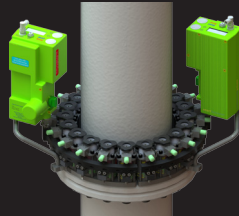
The HTU replaces conventional (hexagonal) nuts. The bolt force is locked mechanically.

BT & CFBT

BoltTensioner

CompactFlangeBoltTensioner

M08 - M100 / 1/4" – 4"



The conventional (hexagonal) nut remains on the bolt. Bolt strained torque-free with Bolt-Tensioner. Nut is turned by manually.

IBT

IntegratedBoltTensioner

M30 - M64 / 1 1/8" – 2 1/2"



Made for tensioning situations where extremely high bolt forces are needed and very little free area on the flange is available.

STD

SubseaTensioningDevices

M8 - M200 / 1/4" – 8"



Made for environments where handling is very difficult, e.g. in subsea-projects.

HP

HydraulicPump



The heart of our innovations: Very high pressure, low pressurized volume. Perfect for bolt tensioning!

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