

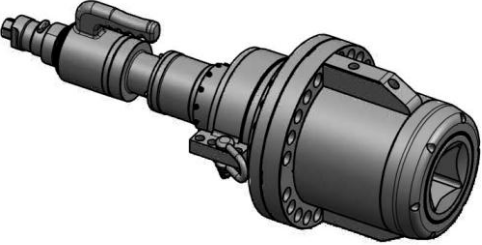
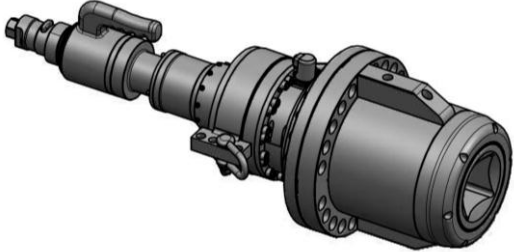




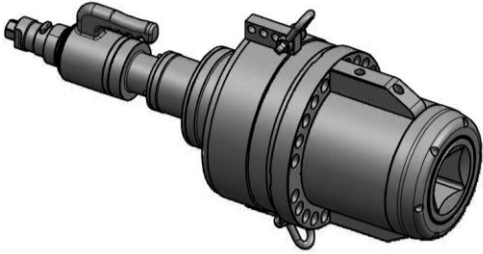
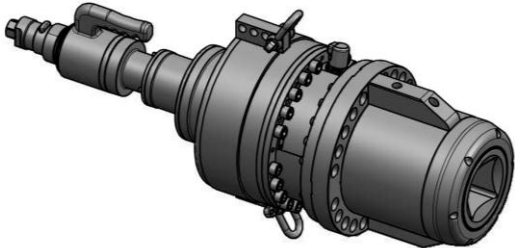


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Status:	Product Data Sheet: API Torque tool – Class 7		
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## Key Features

Class 7 Light Torque Tool	Class 7 Light Torque Tool TD
	
<b>Pneumatic Tool</b>	<b>Pneumatic Tool with Transducer</b>
Power Interface: ½" Quick Air Coupler (CW & CCW)	Power Interface: ½" Quick Air Coupler (CW & CCW)
	20KNm electronic torque transducer with angle and turns counter
	Chargeable T-Box read-out instrument (Instrument for torque only is also available (TTT))
Forward and reverse operation from 4400Nm to 20000Nm	Forward and reverse operation from 2000Nm to 20000Nm
API Class 7 nose interface with window for visual turn indicator	
Low operator fatigue – quiet, non-impacting or pulsing.	
Repeatability of ±5%	
	
<b>T-Box XL – Read-out instrument</b>	<b>Pelicase 0550</b>
Power: 230V / 115V	Shock, dust and water proof transport and storage case
162x205x60mm – 1,9Kg	130 x 70 x 58 cm – 40Kg

Class 7 Heavy Torque Tool	Class 7 Heavy Torque Tool TD
	
<b>Pneumatic Tool</b>	<b>Pneumatic Tool with Transducer</b>
Power Interface: ½" Quick Air Coupler (CW & CCW)	Power Interface: ½" Quick Air Coupler (CW & CCW)
	50KNm electronic torque transducer with angle and turns counter
	Chargeable T-Box read-out instrument (Instrument for torque only is also available (TTT))
Forward and reverse operation from 13500 to 47000Nm	Forward and reverse operation from 5000 to 50000Nm
API Class 7 nose interface with window for visual turn indicator	
Low operator fatigue – quiet, non-impacting or pulsing.	
Repeatability of ±5%	
	
<b>T-Box XL – Read-out instrument</b>	<b>Pelicase 0550</b>
Power: 230V / 115V	Shock, dust and water proof transport and storage case
162x205x60mm – 1,9Kg	130 x 70 x 58 cm – 40Kg

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## Technical Description

### Class 7 API Torque Tool

The purpose of the tool is to perform a torque controlled torqued turn on API CL7 applications, powered by pressurized air or hydraulics.

The Tool kit consists of the tool with an option of a fixed transducer and API extension. The pneumatic tools are supplied with an air control unit and a proper pneumatic hose kit. If fitted with a transducer the kit is supplied with and electronic battery operated read-out instrument in its own dedicated suitcase to read applied torque.

The kit is packed in a shock, dust and waterproof case for easy storage and transportation.

## Configuration

There are 2 main types of Class 7 tools. The Class 7 Light Torque Tool and the Class 7 Heavy Torque Tool.

Both can be fitted with an electronic torque transducer for proper torque and turn read-out.

The standard manual operated pneumatic or hydraulic tool are both build on the same design. It consists of the motor, epicyclic gearbox, a transducer - if fitted, the API extension with an API adaptor for class 7. In addition, supplied in a case, there is an electric/battery run read-out instrument.

The torque tool is developed for topside workshop testing / installation of subsea infrastructural equipment.

The tool requires external pneumatic compressor for air tools or hydraulic HPU for the hydraulic tools

The hydraulic tool is normally supplied without hoses (Please specify type of couplers when ordering).

The tool is virtually maintenance free and can take up to 30.000 cycles without service under normal running conditions. Hence, the tool is more rugged than average subsea tools. The transducer fitted versions has a very accurate torque transducer and read-out instrument (UKAS accredited BS 7882 +/-1% of reading for full dynamic range)

The T-Box XL™ is a hand held or bench mounted torque measuring instrument with a user friendly colour touch screen interface. This comprehensive instrument functions in 12 languages, has all common torque units, pre-loaded tool calibration templates and a large memory for storage of results. T-Box XL™ features a USB interface to a PC where the Torque Data Management System (TDMS) software is installed for archiving of test, calibration and graphical results. The tool can also be connected to various sample software such as Lab-view, Catman etc.

<b>Design Rating</b>
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Class 7 Light Torque Tool	Class 7 Light Torque Tool w/ TD
Total air weight: 140Kg	Total air weight: 160kg
Total length: 89cm	Total length: 97cm
Max output torque: 20000Nm	Max output torque: 20000Nm
Materials used: Structural components: - Stainless steel - Steel (gear train) - Aluminum alloy	Materials used: Structural components: - Stainless steel - Steel (gear train) - Aluminum alloy

Class 7 Heavy Torque Tool	Class 7 Heavy Torque Tool w/ TD
Total air weight: 192Kg	Total air weight: 235Kg
Total length: 92cm	Total length: 103cm
Max output torque: 47000Nm	Max output torque: 47000Nm
Materials used: Structural components: - Stainless steel - Steel (gear train) - Aluminum alloy	Materials used: Structural components: - Stainless steel - Steel (gear train) - Aluminum alloy

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### Installation / Handling

- Lifting via handle

### Scope of Supply

Hardware	Documentation for Operation
<ul style="list-style-type: none"> <li>• Pneumatic or Hydraulic API tool</li> <li>• Transportation case</li> <li>• Torque transducer</li> <li>• Read-out Unit</li> <li>• Cable kit</li> </ul>	<ul style="list-style-type: none"> <li>• General Arrangement / Assembly Drawings</li> <li>• User Manual, including: <ul style="list-style-type: none"> <li>– Transport and Handling Instructions (THI)</li> <li>– Operation and Maintenance Manual (OMM)</li> </ul> </li> <li>• Certificate of Conformity (COC)</li> </ul>

### Interfaces

#### Description

- Input - Pneumatic: Operating pressure 1,5-6,5Bar (Max 12 bar) / Hydraulic: Max 207 bar
- Output –API Class 7

### References

#### Description

- ISO 9001 – Quality management certificate no. Q6228
- BS EN ISO/IEC 17025:2005 – Calibration laboratory operation / technical competence
- Transducer UKAS calibration (certificate no. 0256) to Class 0,5 – BS7882:2008

### Design Standards and Design Codes

#### Description

- BS EN ISO/IEC 17025:2005 – Calibration laboratory operation / technical competence
- Transducer UKAS calibration (certificate no. 0256) to Class 0,5 – BS7882:2008
- Gear manufacture to ISO 1328-8 Production of high precision gears