

ImpROViser 17D Class 1 to 4 Torque Tool

VALVE MANIPULATION TOOLS

Product Number:
0371-0205



The Class 1 to 4 Torque Tool provides a means of developing torque for actuation of valves, lockdown clamps and other ancillary equipment installed as part of subsea production systems that requires actuating torques within the range of 27Nm to 2710Nm (20 to 2000 ft.lb).

The torque reaction lugs on each side of the tool include an integral latching mechanism that anchors the tool into the ISO 13628-8 Figure 18 - Rotary torque receptacle. This provides a means of locking the tool into the receptacle during valve operations and also allows for secure handling of fly-to-place electro-hydraulic flying leads.

- Combines functions of class 1-4 torque tools in a single unit
- Single 5:1 torque multiplier
- Signals from torque transducer and turns counter relayed back to continuous surface readout via ROV umbilical
- Hydraulic control achieved from ROV through hydraulics manifold or separate Hydraulic Control Panel
- Torque control achieved through closed loop proportional control system or can be manually pre-set at surface and selected from topside control console
- Multi class end effector available
- Tool assembly contained in aluminium housing for corrosion and environmental protection

Product Number	ITE-0007-DR-0700-00
Materials	Housing - aluminium alloy Spring loaded sockets - stainless steel
Hydraulic Supply	Pressure: Max 207 bar (3,002 psi) & 80 bar (1,160 psi) for gear selector
Flow	Max 20 L/min (5.3 gpm)
Supply Fluid	Mineral Oil
Torque Output	27 Nm to 2710 Nm (20 to 2,000 ft.lb)
Output Speed	Variable up to 8 rpm @ 24 L/min (6.3 gpm)
Turns Counter	Accurate to ± 0.125 turns
Hydraulic Connections	Pressure + Return 3/8" Pilot Lines 1/4"
Depth Rating	3,000msw (9,842 ft)
Weight in Air	52 kg (115 lbs)
Weight in Water	40.1 kg (88.4 lbs)
Interfaces	ISO 13628-8 Figure 18 Rotary Docking Class 1-4 compatible API 17H Rev 2
Deployment	i-Tech7's FLOT or by manipulator