

## Key Features:

- Compact intelligent valvepack
- Proportional pressure and flow control
- Real time torque and turns feedback
- Compatible with all standard smart torque tools
- Fully automated calibration capability

# Fathom Torque Tool Control System

## Torque Tools and Accessories

The TTCS is a long established field proven intelligent valve pack based on industry standard wandfluh valves. The system can be interfaced with all standard API17D and Petrobras torque tools.

The fully integrated subsea unit is supplied with a dedicated PC operating Fathom Systems Windows® based control software. It can be operated in 4 different modes:

### **Open loop pressure**

Pressure and tool speed is manually controlled by the operator.

### **Closed loop pressure**

This maintains a set pressure regardless of tool speed.

### **Smart pressure**

This tracks speed and maintains the lowest pressure that keeps the tool turning at a constant speed.

### **Smart torque**

This mode gives closed loop control of torque.



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Torque Tools and Accessories



Specifications		
Dimensions	Length	500mm
	Width	250mm
	Height	200mm
Weight	Weight in air	16Kg
Hydraulic requirements	Max operating pressure	207 Bar
	Flow range	0-24 LPM
Depth rating		3000 MSW
Electrical requirements	Power	24v DC smoothed & regulated
	Data	RS232 / RS422 (for use with ROV MUX)
Sensors	Turns Count	24 bit, Single Pulse or Quadrature
	Depth TXD	300 Bar 0-5v
	System & regulated pressure TXD	600 Bar 0-10v
	Strain Gauge Input	Constant current source to 4 wire strain gauge TXD
	Set-up for 350 or 700 ohm bridges for 10v excitation	
Standard features	NG6 Valve type WDPF-A06 x 1	
	NG3 Valve type WDPF-A03 x 4	
	PO Check Valve type BDERV3 x 2	
	Pressure Control Valve type TS-1036	
	High Flow Pressure Relief Valves	
	Upstream, Downstream & Depth Pressure TXD's	

System Components		
5 station IVP	Transit case	
Topside laptop plus control software	Compensator & fill kit	
Operating Manual	Deck test box	
Video overlay unit	Deck test cable	