

## Tool Control Unit & Control system for hydraulic operation of subsea Torque Tools & tools in general.

### Description:

The control system & Tool Control Unit (TCU) is a state-of-the-art system when combined with Depro's hydraulic torque tool (TT) range. The system communicates with the TT during operation and give live data from TT performance.

TCU is designed to control hydraulic tooling by delivering accurate flow and pressure to consumers. The unit can deliver 2 separate hydraulic lines containing 2 off 4/3-way proportional valves, gives individual flow control. All functions are controlled and monitored from surface control room. Open source protocol gives the opportunity to connect to existing control system, or use Depro's HMI Control & Logging Software. The enclosure is oil filled and pressure compensated.

During operation of the TT the operator can set operational limits to secure the TT to perform on target. Input values are Torque Tool Class to define max torque, thereafter the following settings are available: Target torque, Target speed, Target turns(rpm). All data is monitored live from the HMI, and target data is logged for documentation purposes. All data is exported via a USB connection as a csv file. For documentation purposes the equipment ID is entered into each operation and used in export data. The tool can be operated from the auto mode allowing the control system to reach target set points, or by manual input and operational control based on live feedback and controlling the hydraulic pressure supplied. The system has an auxiliary port allowing operator to run a separate function while operating the torque tool.



## Specification - TCU:

Depth Rating:	3000 m
Hydraulic inlet:	2 off 1/2" BSP
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Hydraulic outlet:	2 off 3/8" BSP
Hydraulic line 1:	0-60l/min @ 0-207 bar
Hydraulic line 2:	0-20l/min @ 207 bar
TCU board - Analog Inputs:	4 (4-20mA & 0-5V) One port can receive ASCII Code
TCU board - Digital Inputs:	4
TCU board - PWM Outputs:	6 x 2 (A&B)
Communication:	RS232, RS485 and Ethernet Supply Voltage: 24VDC
Material:	Aluminium 6082-T6
Dimensions H x W:	301 x Ø175mm
Depro drawing:	DEP-GA-0751

## Specification - HMI:

Display size:	7" touch display
Wired Communications:	RS232, RS485, RJ45
Wireless Communication:	4G
Data Storage:	USB connected storage device
Supply Voltage:	110/230VAC
Material:	Pelicase
Weight in air:	13,09 Kg
Dimensions L x W x H:	500 x 380 x 190 mm
Depro drawing:	DEP-GA-0738

## Base Unit:

- Tool Control Unit, TCU with Topside HMI suitcase

DEP-GA-0873

Tools designed for submersion over long periods on request.  
Customized torque range on request.



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