

# ISO 13628-8 Class 1-4 (API 17D) Torque Tool

This torque tool has been specifically developed to provide the highest level of performance. It has integral torque and turns counting sensors for closed loop control. When matched with an FET supplied torque tool control manifold, it can provide precise feedback on torque response of any subsea operation. These can alternatively be utilised by connecting an FET Universal Subsea Display, which would give a visual read-out of live torque feedback and/or turns counter. USD sold separately.



The tool conforms to the ISO 13628-8 Fig 18 Class 1-4 bucket interface used extensively in the subsea industry for valve overrides operated by ROV. The tool has latching wings allowing the tool to hold on to the interface. The latching wings are hydraulically driven forward and spring retracted.

Thus in the case of a loss of hydraulic power the wings will release. The tool uses a high specification drive motor for consistent torque output characteristics, even if used with direct hydraulic pressure control without the feedback sensor. The motor shares casing oil with the gearbox therefore avoiding the need for a separate compensator.

Note that for applying torques less than 108Nm (80 ft lbs) the class 1&2 tool is recommended.

## Specifications

Torque Interface:	ISO 13628-8 fig 18 Class 1-4
Torque Range:	540-2700Nm (400-2000 ft lbs) (gearbox fitted) 108-540Nm (80-400 ft lbs) (direct drive)
Motor Size:	236 cc
Latching Strength:	1 tonne @ 160 Bar
Weight (Air/Water):	45/35 kg (98/76lbs)
Hydraulic:	Mineral Oil
Electrical Connector:	8 Pin Burton
Sensors:	Dual Sensor Inductive Turns count sensor Internal Strain Gauge

# ISO 13628-8 Class 1-4 (API 17D) Torque Tool

## Part Numbers

A019-959-959/01	Torque Tool System with sockets, case, hoses, handle
A019-959-959/02	As A019-959-959/01 plus subsea Torque & Turns Display
A019-959-202/S	Spares Kit
A019-958-152/2	Surface Verification Unit
A019-958-601	Subsea Verification Unit
TL0017-0000-00	Flying Lead Tool
A286-001-050/04	Torque Tool Control System (alternative to USD)
A019-959-150	17H (High Torque) Nose Adapter
A019-959-400	Petrobras Nose Adapter Kit
A019-904-400/01	Subsea Torque and Turns Display

## Features

- ISO 13628-8 Fig 18 (API 17D) Class 1-4
- Max Torque 2,700 Nm (2,000 ft lbs)
- Dual range
- Dual Sensor Electronic Turns Counter
- Internal Strain Gauge
- Latching Wings
- Supplied in offshore suitable transit case

## What's in the box

- Torque Tool
- Class 1 & 2 Socket (11/16" Sq)
- Class 3 socket (1-1/8" Sq)
- Class 4 socket (1-1/2" Sq)
- Fish Tail handle. (Change to D-type after June 2013)
- Cage with USD mount
- Hose Set
- (JIC with Swagelok adaptors)
- Low range convertor
- Operations & Maintenance Manual

