

# RAYTECH SERVICES PTY LTD

## TECHNICAL DOCUMENT

### EXTREME ENVIRONMENT EQUIPMENT TECHNOLOGY

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#### 2700Nm API 17 D TORQUE TOOL CLASS 1 to 4



#### GENERAL DESCRIPTION

The torque tool is used to operate subsea rotational valves from 40Nm to 2700 Nm The unit is made up of Hydraulic motor that is interchangeable depending on the torque requirements coupled to a torque multiplier. This inturn is connected to a drive socket. Depending on requirement the sockets can be interchanged API17d class1-4. The unit has both mechanical and electronic turns counter sensor.

#### **Mechanical:**

Dimensions:	Length +/-560mm x Width 300mm
Weight in air:	+/-42kg
Weight in water:	+/-30kg
Interface:	ISO 1328-8
Maximum operating torque	2700nM
Square Drive Adaptors:	Class 1; 2, Class 3 and Class 4
Supply Fluid	Mineral Oil
Hydraulic Supply	200 bar for maximum tool output
Torque multiplier	planetary 5: 1
Turns counter	Accuracy to 0.2 turns mechanical and electrical
Deployment	Via manipulator handle

Ancillary equipment

Torque analyser

## API 17 D CLASS 4 Tool Pressure V Torque Test

Torque Analyzer: Smart Torque Block

Device Model No: 50684.log

System Pressure (Bar): 200 Maximum

Motor Type: OMSS200

Direction: CCW

No.	Pressure (Bar)	Torque (Nm)	Temp C°
1	10	143	40.9
2	20	384	40.9
3	30	533	41.2
4	40	676	41.3
5	50	836	41.4
6	60	948	41.5
7	70	1090	41.7
8	80	1254	41.8
9	90	1406	41.9
10	100	1527	42.1
11	110	1644	42.2
12	120	1746	42.3
13	130	1846	42.4
14	140	2003	42.5
15	150	2104	42.6
16	160	2175	42.8
17	170	2266	43
18	180	2337	43.6
19	190	2615	43.8

20	200	2753	44
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