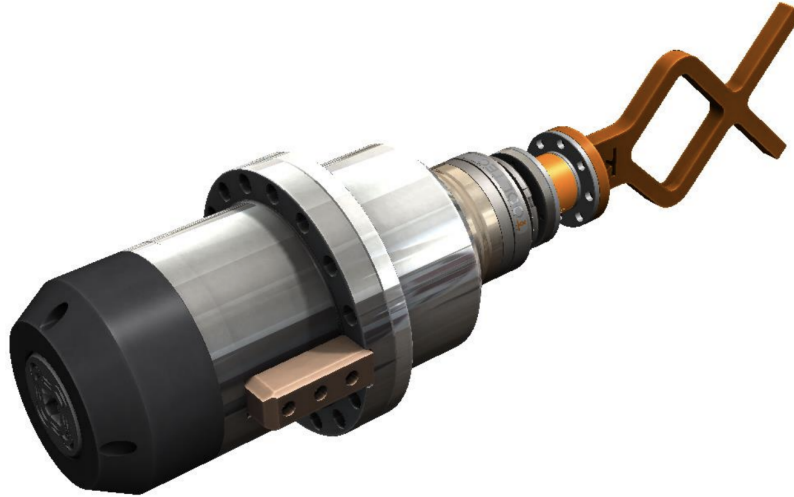


Manual Torque Multiplier Tool

API 17D, ISO 13628-8 CLASS 1-4 /
API 17H, ISO 13628-8 TYPE A, B & C



The Manual Torque Multiplier Tool is designed to allow ROV manipulator operation of API 17D / ISO 13628-8 Class 1-4 rotary valve interfaces. The tool features a torque multiplication stage that increases the manipulators wrist torque beyond its typical output, with two options available for increased torque output. Also, by removal of the torque multiplier stage completely, the tool can be readily reconfigured to operate as low torque tool only. The tool features an adjustable torque limiting clutch mechanism, which acts to limit the maximum torque that can be transmitted from the ROV manipulator to the valve interface during an ROV intervention operation. This mitigates against any possibility of over-torque and damage to the valve or valve stem. The end effector is designed so that it is capable of operating Class 1-2, Class 3 or Class 4 valves by way of the smart multi-socket interface. This allows the option for operations to be conducted on these different valve types without the requirement for retrieval to surface for tool reconfiguration. An optional end effector is available to convert the tool to operate type A (flat paddle) or type B & C (T-bar) valve handles.

Key Features

- Without multiplier 20-200Nm
- Standard multiplier 170-850 Nm
- High multiplier 500-1700 Nm
- Fitted with torque resistant compliant mount
- Multi Socket cl 1-4
- Mechanically operated by ROV
- Low weight

Specifications

Torque range	20 - 200Nm /170 - 850Nm /500 - 1700Nm
Weight in air/submerged	~28/~24 kg
Depth rating	Any water depth