



# VALVE TESTING SYSTEMS

WWW.PLARAD.DE

## **VTD***ValveTorqueDirect*

#### **TORQUE AND ANGLE TEST EQUIPMENT UP TO 500.000 Nm**

Valve rotation test is an essential testing procedure to guarantee the high standard quality of ball valves. Checking and measure the torque while rotating the ball valve, allows to recognize defects and certify the proper ball functions. All manufacturers involved on supply of ball valves for API and ANSI standard, need to perform these tests. Rotation tests can be executed on the main valve shaft (direct version) or on the actuator (gear version). Rotation test measures torque, angle, and the most significant testing values (BTO, ETO, ETC, BTC) values along all the turning process.

ValveTorque<sup>®</sup> is the Plarad state of the art system designed to test huge dimension ball valve. It allows to perform the very high torque rotation and to measure and store the torque and angle values. Most important ValveTorque<sup>®</sup> can be customized based on customer need both on mechanical and software in order to suits even the most demanding application. BRUSHLESS MOTOR TORQUE GEARBOX TORQUE TRANSDUCER ADAPTOR

- ▶ Torque up to 500.000Nm
- ▶ Torque accuracy better than 1%
- ▶ Angle accuracy better than 0,1°
- Multi turns system (system can turn continuously, eg. for lapping)
- High performances electrical motor (up to 10KW brush less motor)
- Auto detect gearbox actuator
- High resolution 17" Touchscreen control panel
- Remote access

**VTD FEATURES:** 

- ▶ Wireless remote control
- Bar-code input
- Temperature and Pressure monitoring (up to 10+10 inputs)
- OEM and custom version on request
- Field-bus interface with pressure benches
- Full cage protected motor
- Data cable protection
- Quick industrial connectors



- Fastest testing system in the market
- Single electric hose connection: quicker and safer
- No external position transducer: position is managed by encoder

**/ALVETORQUE® KEY ADVANTAGES** 

- Fully customizable testing positions: angle can be set with tenth angle accuracy
- Fully customizable report
- Wireless remote control
- Manual buttons on gearbox actuator
- Low noise
- High quality components

### **VTG***ValveTorqueGear*

#### FOR VALVES WITH GEARBOX UP TO 500 NM

The ValveTorque<sup>®</sup>-family also offers a gear version: it has been specifically designed for testing of valves equipped with gearbox. The system is based on an high speed torque actuator (up to 80rpm) and a portable controller that can placed outside the testing chamber. Torque actuator can be equipped with an articulated arm that allow a quick and easy positioning and reaction. Available in a trolley or a wall mount version.

- Torque up to 500Nm
- Cycles counter

**/TG FEATURES** 

- Open/Close counter
- Torque limits
- Data archive
- Gearbox suitcase





#### VALVETORQUE DIRECT MODELS

Тур	Leistung (Nm)		
<b>VTD</b> 10	1.000 - 10.000 Nm		
VTD 20	2.000 - 20.000 Nm		
<b>VTD</b> 50	5.000 - 50.000 Nm		
VTD 100	10.000 - 100.000 Nm		
VTD 200	20.000 - 200.000 Nm		
VTD 300	30.000 - 300.000 Nm		
VTD 500	50.000 - 500.000 Nm		

#### VALVETORQUE GEAR MODELS

Тур	Leistung (Nm)		
VTG .1	0-50 Nm		
VTG .2	20-200 Nm		
VTG .5	50-500 Nm		

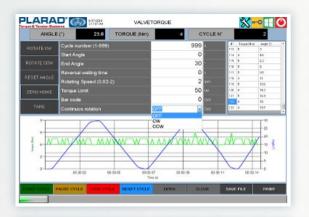
Other sizes and dimensions of the VTD and VTG ValveTorque® tools on request

### **CS** ControlSoftware

#### **VALVETORQUE® CONTROL SOFTWARE**

ValveTorque<sup>®</sup> Control software has been specifically designed for valve testing and is the result of the close cooperation with the most important valve manufactures worldwide.

SOME FEATURES:



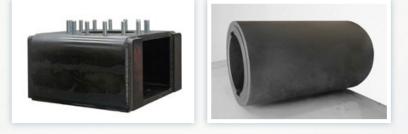
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Grafico Coppia+"	Aggiorna	Gancella	Dati	Salva Dati	Report

- Real output torque and angle measurement
- Manual CW and CCW valve rotation
- Automatic cycle testing (up to 999 cycles)
- Continuous rotation
- Automatic 0°degrees back home
- Variable rotation speed
- Automatic release system (parametric angle)
- Three speed option (cycle, manual, continuous)
- Safety max torque limit
- Graphs Torque over Angle, Torque over Time, Angle over Time

- Bar code reader
- Store of torque and angle data files
- Independent measuring of temperature sensors and pressure sensors
- USB port for CSV report file download
- Print test result certificate (with custom print fields)
- Light tower
  - User authentication
  - Ethernet connection and GSM connection for remote assistance
  - USB/Ethernet output for data export
  - Command connection with thirty party pressure benches

#### **OPTION AND CUSTOM REQUEST**

- Flange and shaft valve adaptors
- ROV adaptors
- Angle Light Indicator
- Cable length and connectors
- Industry 4.0 software interface



### **PLARAD**<sup>®</sup>

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