

Project Description	Pneumatic tool shut-off controller with valve testing functions		
Date created	20 August 2019	Project Number	Q4673

INTRODUCTION & APPLICATION

Testing of ball valves requiring cyclical rotation 0-90° / 90-0°, whilst recording torque vs angle data.
 Testing of gate valves / valve actuators by opening & closing whilst recording torque vs angle / turns data.
 The test must be remotely controlled from outside of the test chamber, where the test valve is pressurised.

SOLUTION

Tool controller for PneuTorque remote tools fitted with annular torque & angle transducer + solenoid operated valve assemblies, and having the following features: -

- 10" touchscreen HMI & PLC housed in a painted steel enclosure for indoor / workshop use.
- Data entry fields for test valve details, operator, time, date, torque limits & angle / turns limits.
- Forward / reverse cycling to user programmable number of cycles, variable up to 32,000°.
- One torque transducer port, for '.LOGA' or '.LOG' connection via # 60308 / 60217 series lead.
- Automatic recognition of Smart enabled transducers.
- One twin solenoid port for connection to valve assembly # 60309 / 60310 via # 60298 series lead.
- One hand pendant input port, for use with 10m remote pendant # 61142.1000.
- Two proximity limit switch ports (for use where angle is not measured at the transducer).
- One customer pressure sensor port, (2mV/V), for data recording (not tool shut-off).
- One RS232 + one USB data output ports.
- Real time torque & angle or torque & turns data streaming via RS232 serial port.
- Test data capture and output in CSV format onto external USB drive, for the generation of customer test reports & graphs.
- Emergency stop button and torque overload limit function.



TECHNICAL SPECIFICATION / DATA HIGHLIGHTS

- Versions with additional ports & features can be supplied via Engineer To Order.
- The tool controller can be used to upgrade existing valve testing kits.