

Opening and Closing Valves

Observing a few simple rules when opening and closing valves can prevent damage to valves and equipment and add years of useful service life to the valves. The proper way to open any cylinder valve is to first crack the valve, then open it slowly by turning the handle or stem counterclockwise. This allows equipment to gradually adjust to full pressure. Stop turning as soon as there is any resistance. Turning the valve handle or stem too far in the open position can jam the stem causing damage and leaks and preventing later closure.

Likewise, overtightening when closing a valve can damage or permanently distort the seat and result in leakage. Typical closing torques are as follows:

Packed Stem Valve	30 to 40 ft-lb
Diaphragm Seal Valve	85 to 96 in-lb
Pressure Seal Valve	60 to 85 in-lb
Pin-Indexed Valve	20 to 25 in-lb

Caution: Never open a cylinder valve that is not connected to a pressure regulating device.

