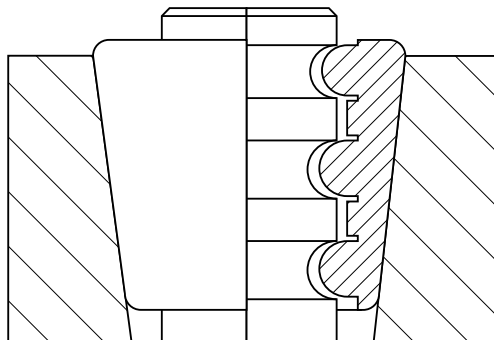


Valve Collet Fit and Valve Rotation

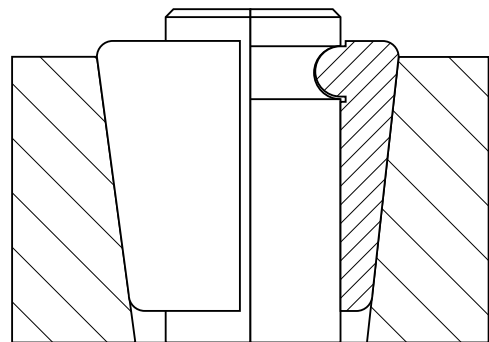
To overcome problems of localised overheating, carbon build up on the valve seat face, gas leakage and possible head distortion, valves are often made to rotate.

There are two commonly employed techniques, that of allowing the valve to rotate and that of forcing rotation.



With natural rotation, the two halves of the collets make firm contact with each other when installed. The valve stem is not gripped but is free to rotate inside the collets.

This technique is recognised by the multi-groove type design. Rotation is developed by the twisting action of the spring as it is compressed and released.



With positive action systems, the collets grip the valve and rotation is developed by mechanical rotating devices. These devices are located at either end of the valve spring and movement is created as the valve begins to open.

It is important to recognise where these systems are being employed and to ensure the correct fit required for the collets.