

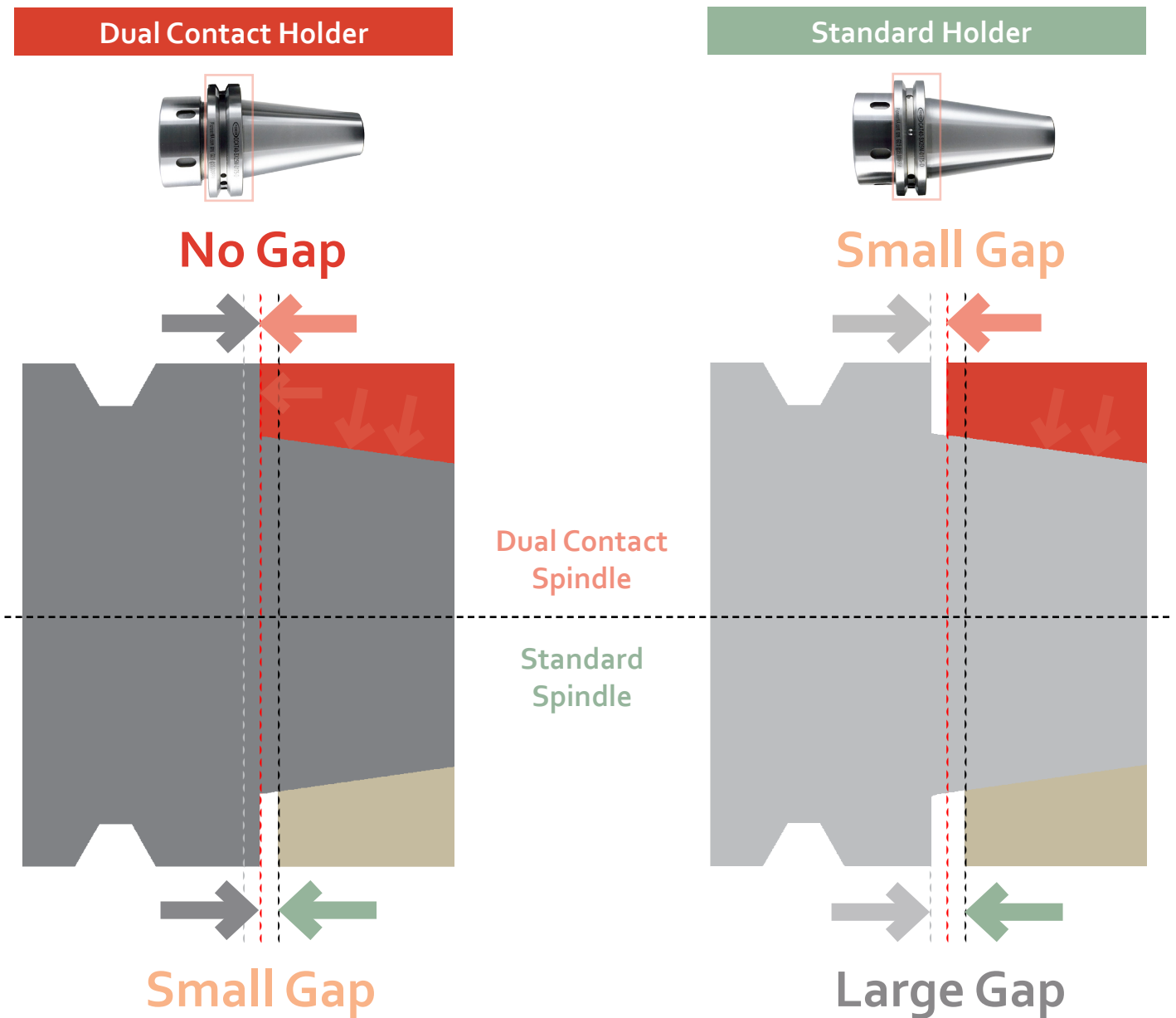
PIONEER DUAL CONTACT

What is Dual Contact

Dual Contact spindle gageline is ground to a controlled dimension to the taper of the spindle and tool holder. Standard spindles have a 0.078"/0.125" gap from the back of the tool holder flange to the spindle face. Dual contact reduces the gap to microns.

How is Dual Contact Effective

If enough side pressure (radial load) is applied to a milling tool it will cause the tool taper to disengage from the spindle, causing the tool to dog tail, effecting assembly runout and rigidity. Dual Contact uses the face of the spindle for additional support creating a higher displacement pressure point allowing the machine to operate at a higher radial load. The amount of pressure is dependent on the draw bar system in the machine. Lower draw bar pressure machines will see a greater improvement in side load applications than higher machines.



Verify Machine Spindle warranty and Machine Tool manufacturers recommendation when using standard tooling in Dual Contact Spindles. Standard tooling can wear dual contact spindle tapers causing dual contact tooling to lock on the face before locking on the taper requiring a spindle repair to regain taper & face lockup. The reverse is also true, Dual Contact tooling used in standard spindles can wear the taper of the dual contact tool holder and cause lock up issues over time when used in dual contact spindles.