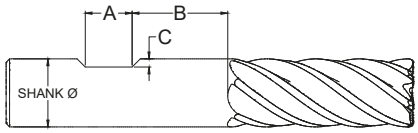
WELDON FLAT SPECIFICATIONS

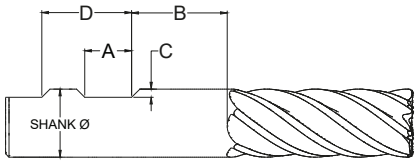
Proper tool position within the Weldon side-lock holder is very important to us. It's imperative not to have the tool flutes chucked up inside the holder, nor sticking out too far from the nose of the holder. Therefore, instead of using old High Speed Steel Weldon specs that are based on old overall lengths, we have calculated our own Weldon Flat positional specifications based on flute wash positioning or reduced neck/shank transition.

SHANK Ø	A +/- .004	B +/-.015	C +.015/-.000	D +/-.008
0.1250	0.155	0.500	0.020	—
0.1875	0.155	0.500	0.025	—
0.2500	0.155	0.500	0.030	—
0.3125	0.295	0.750	0.040	—
0.3750	0.295	0.750	0.050	—
0.4375	0.345	0.850	0.060	—
0.5000	0.345	0.850	0.060	—
0.6250	0.415	0.900	0.065	—
0.7500	0.470	0.900	0.075	—
1.0000	0.530	1.000	0.075	0.900
1.2500	0.530	1.000	0.095	0.900

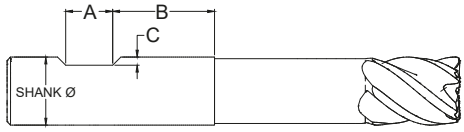
Single Weldon



Double Weldon



Weldon Flat (on reduced neck tool)



Tool Holding, an important variable

With the higher speeds and feeds demanded today, a higher performance toolholder becomes more critical. To maximize machining performance, four main things are needed from a toolholder:

> Rigidity > Accuracy > Clamping Power > Balance

Advantages of using an advanced toolholder that holds rigidity, accuracy, power, and balance is extended cutting tool life, extended spindle life, better surface finish, and accuracy of parts.

Tool Runout (TIR)

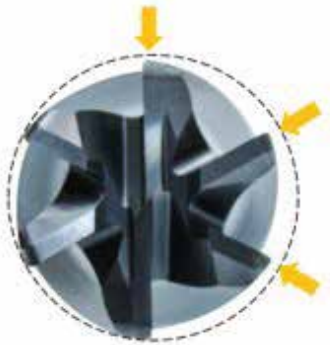
Tool runout, (with tool in holder and holder in spindle) is a very critical variance affecting tool life and success of your milling operation.

> Radial Runout is vital to minimize

> Strive for the lowest possible TIR you can get, hopefully keeping TIR to .0005 max.

> Utilize higher accuracy and full-shank-contact tool holders

> Avoid hand-ground flats on shanks, they will induce runout



Radial Runout