

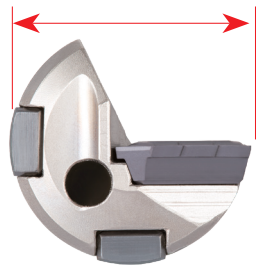
# Shim Combinations for Various Diameters

Diameter Adjustments (mm)	Shim (s) for Measuring Guide Pad	Shim (s) for Supporting Guide Pad	Number of Shim Sets Needed
+0.01	0.01	0.01	2
+0.02	0.02	0.02	2
+0.03	0.03	0.01+0.02	1
+0.04	0.04	0.01+0.03	1
+0.05	0.05	0.02+0.03	1
+0.06	0.01+0.05	0.02+0.04	1
+0.07	0.02+0.05	0.03+0.04	1
+0.08	0.03+0.05	0.04+0.04	2
+0.09	0.04+0.05	0.04+0.05	2
+0.10	0.05+0.05	0.04+0.04+0.02	2

## Assembly Instructions

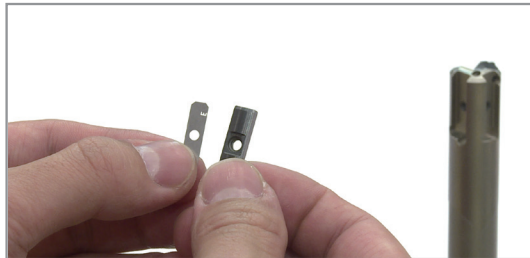
### STEP 1

Measure the DTD drill diameter between the measuring guide pad and the insert cutting edge. If a pre setter is not available, use a micrometer or caliper. For a precise drill diameter measurement, it is recommended to test-drill a hole and measure the hole diameter.



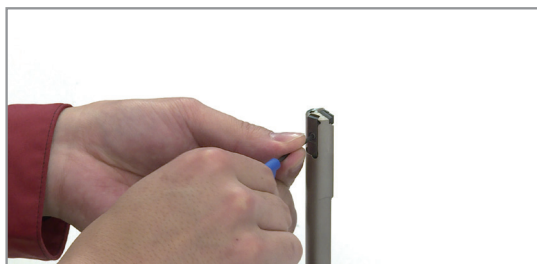
### STEP 2

Select the shim combinations according to the chart on Page 4 to obtain the required hole diameter. Take into consideration that the actual diameter of the drilled hole tends to be slightly larger (usually +20 μm to +30 μm) than the drill's nominal diameter — i.e. add 20 μm-30 μm to the measured drill diameter in Step 1 above before the final drill diameter.



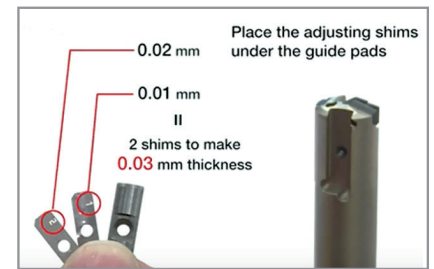
### STEP 3

Remove the guide pads.



### STEP 4

Install the adjusting shims underneath the guide pads, respectively. Put the guide pads back on the tool.



### STEP 5

Measure the drill diameter again to confirm that the required diameter is obtained on the DTD.



### STEP 6

Drill a hole to confirm that the required hole diameter is achieved.

