Smart Setting Motion Tools

Pre-setting and re-adjusting of inserts within seconds
Crankshaft bearing seat machining
Individual fine adjustment of all finishing inserts. One graduation line equals 0.002 mm in diameter (fig. 1)

Diameter adjustment in both directions, plus and minus

No special equipment required for pre-setting (i.e. V-gauges)

Cartridges available with eccentric adjustment, also available with standard ISO insert

Retraction of the inserts via drawbar, therefore no workpiece adjustment required (fig. 2)

Mechanical operation, using either compressed air or machine coolant

Time saving of more than 90% per setting cycle

Fig. 1 – Individual micro-adjustment

Fig. 2 – Retracting the inserts
Crankshaft bearing seat machining

Pre- and finish-machining including chamfers

Concept with counter-bearing, SSMT-micro-adjustment and drawbar for insert retraction

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Chamfer machining

Diameter machining
Crankshaft bearing seat machining

Finish-machining in two steps

Concept with workpiece adjustment, counter-bearing and SSMT-micro-adjustment

Bearing position 2

$|l| \leq 0.002$ mm in $\Phi$

Finish-machining

Semi-finish-machining

Machining direction
Cylinder bore machining
Simple pre-setting without special equipment

Cartridges available with eccentric adjustment, also available with standard ISO insert

**Diameter adjustment in both directions, plus and minus via central adjustment screw**

Automatic readjustment if required. One rotation equals 0.03 mm on radius *(fig. 1)*

Retracting of the finishing cartridge by means of compressed air *(fig. 2)*

Expanding of the finishing cartridge inside the honing undercut

**Fig. 1 – Automatic readjustment capability**

**Fig. 2 – Retracting inserts integrated drawbar**

Different adjustment screws
Cylinder bore machining with central micro-adjustment

Concept with central SSMT-micro-adjustment, 2 teeth / „backwards machining“, alternative 1 tooth / 3 teeth

Concept with central SSMT-micro-adjustment, 3 teeth, alternative 1 tooth / 2 teeth
Concept with central SSMT-micro-adjustment and integrated drawbar for insert retraction
3 teeth for semi-finish and 2 teeth for finish-machining

Bore machining with SSMT concept and integrated drawbar

Scan QR-code to watch film.
Bore machining with central micro-adjustment
Concept in lightweight design for larger diameters
Bore machining with central micro-adjustment
Concept for semi-finish and finish-machining