

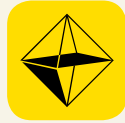
## ADJUSTING GUIDELINE THREADED WEDGE ADJUSTMENT (TWA) CARTRIDGES INSTALLATION

### 1. ASSEMBLY

- 1.1 Lightly lubricate the bottom and the wall of the location bore of the TWA as well as the thread of the setting screw with MOS2 assembly paste.
- 1.2 Enter the hexagonal key through the wedge into the hexagonal socket of the setting screw and insert together into the location bore of the adjustment unit to the bottom of the bore. (fig.1).
- 1.3 Using hexagonal key push setting screw into the radial recess at the bottom of the bore and screw-in the wedge anti-clockwise into the location bore to the block. In doing so the cartridge contact surface must be positioned opposite to the radial recess. Push the wedge from above onto the setting screw, so that the thread of the wedge can thread onto the setting screw (fig.2). If when screwing in the wedge the setting screw collar "jams" in the location bore (noticeable through the threaded pin being difficult to turn), press the entire adjustment unit into the location bore with the hexagonal key, if necessary resolve "jam" via clockwise rotation.
- 1.4 Lightly lubricate cartridge contact surface on the threaded key and the cartridge clamping screw thread with MOS2 assembly paste and screw in the cartridge clockwise into the cartridge seat with the cartridge clamping screw.
- 1.5 Screw in the indexable insert into the indexable insert seat of the cartridge (see tightening torque indexable insert clamping screws).
- 1.6 The disassembly is carried out in the reverse order.

### 2. OPERATION

- 2.1 Using key lightly tighten the cartridge clamping screw in a clockwise direction to the smallest dia. setting.
- 2.2 Adjust taper or diameter respectively via the TWA adjustment (fig. 7), whilst doing so move to within 0.05 mm in diameter of the setting dimension of the indexable insert (if necessary loosen cartridge clamping screw again).
- 2.3 Using key tighten cartridge clamping screw in clockwise direction (see tightening torque for cartridge clamping screws).
- 2.4 Adjust indexable insert setting dimension via TWA adjustment, if the dimension is exceeded simply loosen the TWA again and re-adjust.
- 2.5 If required lubricate the contact surfaces and the thread of the TWA adjustment unit.



## ADJUSTING GUIDELINE THREADED WEDGE ADJUSTMENT (TWA) CARTRIDGES INSTALLATION

### 3.1 MAX. TIGHTENING TORQUE CARTRIDGE SCREWS:

| Thread Size | Torque Size | Tightening Torque [Ncm] |
|-------------|-------------|-------------------------|
| M6          | 25          | 1,300                   |
| M5          | 20          | 900                     |
| M3.5        | 15          | 345                     |

### 3.2 MAX. TIGHTENING TORQUE INDEX. INS. CLAMP. SCREWS:

| Thread Size   | Torque Size | Tightening Torque [Ncm] |
|---------------|-------------|-------------------------|
| M4 / M4 x 0.5 | 15          | 515                     |
| 3.5           | 15          | 345                     |
| M2.5          | 8           | 128                     |
| M2.5 / M2.2   | 7           | 101                     |

### 4 KEY SIZES OF THE TWA ADJUSTMENT UNITS/TRAVEL OF CARTRIDGES

| Cartridges Size | Torque Size | Cartridges adjustment travel in radius  |
|-----------------|-------------|-----------------------------------------|
| 06              | SW 1.5      | 0.024 mm at ¼ rotation of setting screw |
| 09              | SW 2.0      |                                         |
| 12              | SW 3.0      |                                         |

Axial adjustment: ±0.3mm (all sizes)

FIG. 1: Assembly (s. No. 1.2)

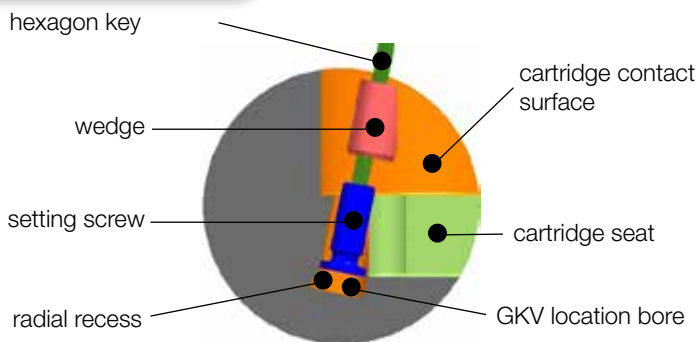


FIG. 2: Assembly (s. No. 1.3)

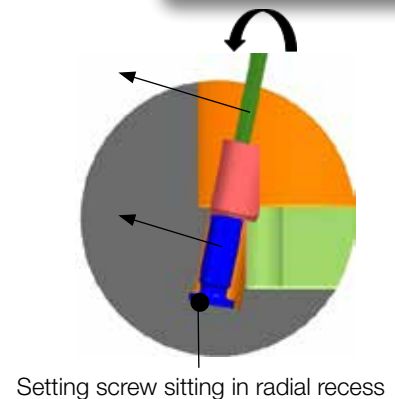


FIG. 3: Operation (s. No. 2.1)

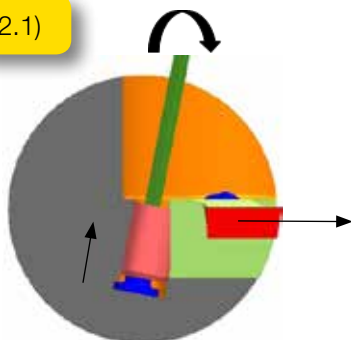


FIG. 4: Operation (s. No. 2.2)

