



# MAXXOS

The hexagonal, super-strong mandrel





MAXXOS T211 is a mandrel with a hexagonal pyramid shape instead of a round taper – perfect for demanding and reliable process manufacturing. Through the hexagonal clamping pyramid, maximum transmission forces can be realized. The segmented clamping bushing with the hexagon socket sits on the clamping pyramid with an absolute positive fit, which enables maximum machining capacity with less vibration and thereby less tool wear. The lubrication, combined with its leak-tightness ensures an extremely constant production flow and therefore maximum reliability. By the way, our segmented clamping bushings offer a factory-standard run-out accuracy of  $\leq 10 \mu\text{m}$ . If you need even greater precision, there are two additional levels of run-out quality to choose from. Even a run-out accuracy of  $\leq 2 \mu\text{m}$  is possible upon request.

Overall the mandrel covers a clamping diameter range from 18 to 100 mm. The clamping ranges of the respective sizes are designed to overlap. As a rule – depending on the clamping diameter – you can choose from two to three different mandrel sizes. The larger mandrel always means more stability and rigidity, the smaller mandrel can cover a greater quantity of smaller workpieces if necessary.

Those who place more value on process reliability and optimum torque transmissions are very happy with the MAXXOS T211.

**MAXXOS mandrel with hexagonal pyramid shape reduces your costs!**

#### Key advantages

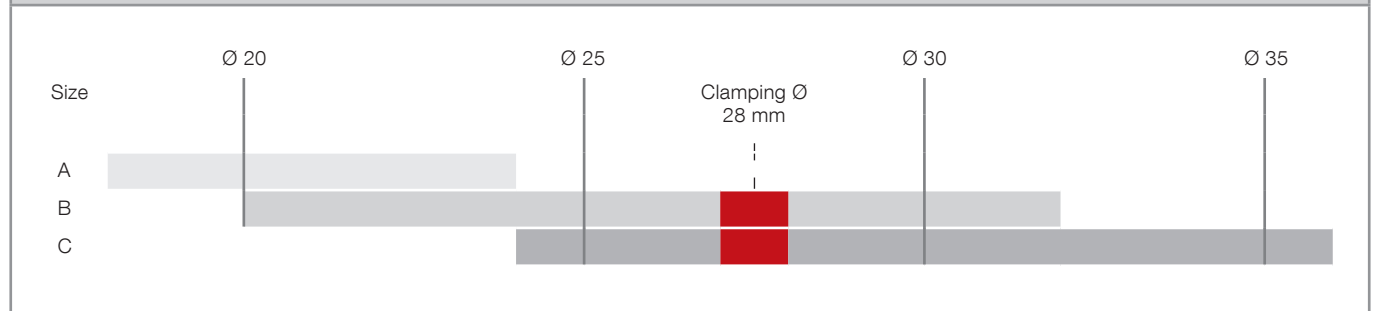
- I.D. clamping mandrel for clamping diameter 18 mm to 100 mm, in stock
- High transferable torques and holding forces
- Reduced tool wear through high rigidity
- Run-out accuracy  $\leq 0.01 \text{ mm}$  /  $0.007 \text{ mm}$  possible
- Run-out accuracy  $\leq 0.002 \text{ mm}$  possible upon request
- Resistant to contamination due to its hexagonal pyramid shape
- Reliable manufacturing process



**MAXXOS T211 in detail**

| Designation   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC] with positioning</li> <li>2 Draw bolt [with safeguard to prevent unscrewing when in open position]</li> <li>3 Lubricating grooves, for optimal holding power</li> <li>4 End-stop</li> <li>5 Prepared for air sensing control</li> <li>6 Spindle flange suitable for all standard mandrel sizes</li> </ol> |  |

**Overlapping clamping ranges of the different mandrel sizes**



**Example of the right selection of the mandrel size**

**Clamping diameter 28 mm:**

- Condition: flexibility for additional workpieces with smaller clamping diameters → **Size B**
- Condition: higher process reliability due to greater rigidity and holding power → **Size C**



**Max. run-out accuracy of the segmented clamping bushing**

|                    |  |                |
|--------------------|--|----------------|
|                    |  |                |
| <b>Variant</b>     | <b>Standard</b>  | <b>Premium</b> |
| <b>Run-out</b>     | ≤ 10 μm  | ≤ 7 μm         |
| <b>Description</b> | Measured on a ground run-out control ring in accordance with the HAINBUCH standard |                |

**Order overview. MAXXOS mandrels**

| Size | Clamping range [mm] | In stock | Material no. |
|------|---------------------|----------|--------------|
| A    | 18 – 24             | ✓        | 10001324     |
| B    | 20 – 32             | ✓        | 10001325     |
| C    | 24 – 39             | ✓        | 10001326     |
| D    | 32 – 50             | ✓        | 10001327     |
| E    | 39 – 68             | ✓        | 10001328     |
| F    | 50 – 100            | ✓        | 10001329     |

**Scope of delivery**

- Mandrel without spindle flange / without air sensing adapter
- Draw bolt

Mandrels

Stationary clamping devices

Adaptation clamping devices

Measuring technology/ Automation

Quick change-over systems

Special solutions

Clamping elements/ Accessories

Services

Multi spindles