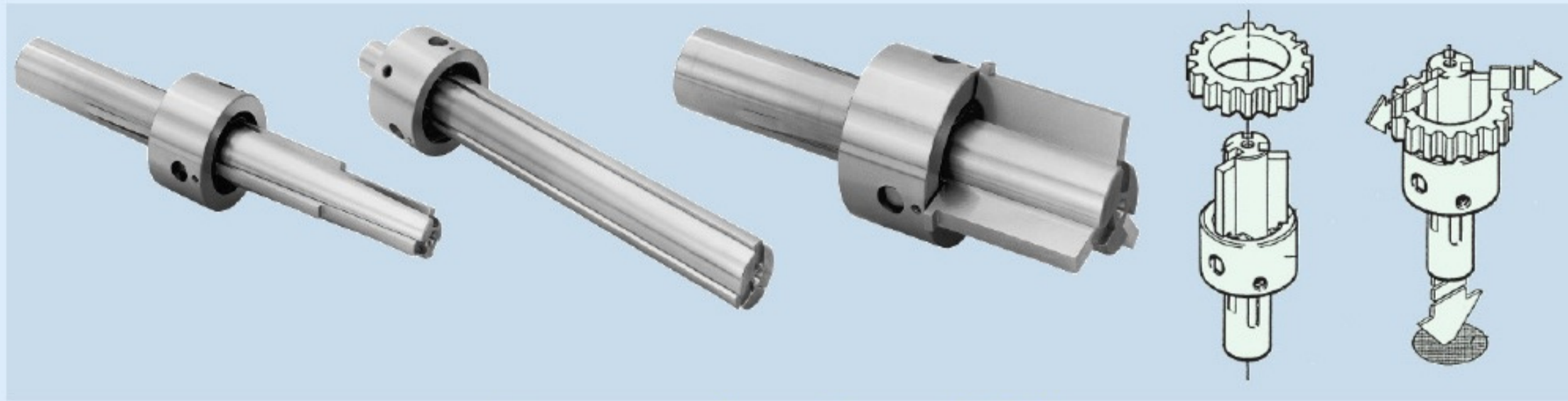


## Expansion & Spline Mandrills for inspection applications from Germany



### Expansion Mandrills

- Our expanding mandrels cover a range from diameter 6.35 mm to 177.80 mm.
- Guaranteed accuracy 0,0025 mm over entire range of expansion.
- Expansion range up to 25.40 mm on a single mandrel.

They are available as:

- A-Types (extra wide expansion range)
- M-Types (extra small mandrels < 10 mm)
- B-Types (extra long jaws)
- C-Types (compact design)

#### Application:

Our expanding mandrels are used for inspection applications. Standard mandrels listed are for location on inside diameters and rotating between centers.



### Spline Mandrills

Spline Rotalock - Mandrels are designed to clamp internal splined work pieces during mechanical work processes, such as turning, milling, grinding etc. They are also used when work pieces are measured and calibrated. Generally one differentiates between the following types:

1. Rotalock - Mandrels, full form spline, clamps along the lead of the entire spline profile of the work piece. They are suitable for both, in - process work and calibration purposes.
2. Key - Type - Mandrels, full form spline, clamps on the root diameter in partial areas of the spline profile of the work piece. They are suitable for in - process work.
3. Collet - Type - Mandrels clamps on the tooth flanks of the tooth space of the spline profile of the work piece. They are suitable for both, in - process work and calibration purposes.
4. Taper - Splined - Mandrels, full form spline, clamps on either tooth flanks or root diameter of the spline profile of the work piece. They are suitable for calibration purposes

**Spline Mandrels are available in various executions:**

- Rotalock-Mandrills
- Key - Type - Mandrills
- Collet Type Mandrills
- Taper - Spline - Mandrills

- **Made in Germany**
- **All products are delivered complete with design drawings and calibration certificates.**
- **Our clamping systems are perceived and known for longevity, reliability, flexibility and highest precision.**