



# Driven Tools





For more than 60 years, **ROMAI** has stood for the highest level of precision and process reliability in machining.

ROMAI's driven tools can take your production into several new dimensions. Machining axes in any place, process monitoring in real time, digital documentation.

Sounds special? That's standard for us. Try us out.



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# Driven Tools by ROMAI



- Complete machining for your lathe
- Additional machining axes
- Machining which requires a drive (milling, drilling, tapping)
- Processing of otherwise inaccessible parts of the workpiece (internal machining)
- Multi-spindle machining on a lathe
- Increased process reliability
- Expanding possibilities and increasing productivity



Established Rotational Mechanics

# Spectrum, Flexibility and Reliability

- For any kind of machining
- For all machine tools
- Any tool interface
- Internal and/or external coolant supply with up to 70 bar (up to 140 bar depending on application, more on request)
- Design, production, quality assurance and service made by ROMAI in Germany

# Possibilities for Configuration:

- Any angle and offset of machining axis
- Threaded spindles with master screws
- Coolant supply (emulsion, air, MMS, one-/multi-channel, etc.) possible
- Highest cutting speeds when using carbide or PCD tools
- ROlog capturing of production data in real time



# VERSIONS



### Driven tools at a 90° angle with set-back output

For machining tasks at a 90° angle. Set-back output to maximise the usable tool length. Internal coolant/MMS optional.

# Driven tools at a 90° angle with set-back output (slim design)

For machining tasks at a 90° angle. Ideal for internal machining. Internal coolant/MMS optional.

## Driven tools at a fixed angle

For special machining tasks in a fixed, angled location. Internal coolant/MMS optional.



### Driven tools 0°-90° with fine adjustment

For machining tasks in a variable, angled location. Due to the fine adjustment, any angle between 0°-90° can be set on the tool (process-reliably). ±110° and internal coolant/MMS optional.



Form

# Driven tools at a 90° angle with one output or outputs on both sides (compact design)

Extremely compact design. Ideal for producing bearing seats e.g. in hydraulic pumps or crankcases. Internal coolant/MMS optional.





Established Rotational Mechanics

# **Design of Driven Tools**

### Drive

The tool is driven by the processing machine. All kinds of drive are realisable, e.g. DIN 5482, DIN 5480, DIN 1809. (see page 10)

### Connecting to turret (type of connection)

The driven tool is mounted in the processing machine. All kinds of machine interfaces are realisable, e.g. VDI, CDI, BMT. (see page 10)

### **Connecting plate**

Supports the driven tool, so it cannot tip during processing.

### **Tool alignment**

Fine adjustment and alignment of the exact location of the driven tool on the turret in relation to the workpiece.

### Output (tool holding system)

Clamping of the cutting tool for machining. All kinds of tool holding systems are realisable, e.g. collet, WFB, HSK, SK. (see page 12)

# **TYPES OF CONNECTION & DRIVES**





Established Rotational Mechanics

# OUTPUTS





# Capturing Production Data in Real Time. Ready for Industry 4.0

ROlog (ROMAI-Operation-Logger) systematically determines the production data of ROMAI gearboxes and transmits these via bluetooth to a tablet, smartphone or the machine control system.

# Monitoring:

- Speed (maximum/average)
- Temperature (maximum/average)
- Impulses/impacts in several axes
- Hours of operation
- Moisture



The system can be integrated in almost any ROMAI transmission gear.

ROlog optimises maintenance cycles and prolongs the service life of your gearboxes. It enables longevity and process reliability in a new dimension.



# SPECIAL DEVELOPMENTS



# Couldn't find exactly what you need?

If you require different or very specific solutions, you're exactly right at ROMAI. We specialise in developing new solutions. According to your requirements and the highest quality standards, driven and stationary.

Long years of experience, high expertise and short delivery times make ROMAI one of the most sought-after transmission gear providers in all areas of machining - from automotive to aeronautics and astronautics through to wind turbines.

Try us out! We would be delighted to fulfil your wishes as well.





# ESTABLISHED ROTATIONAL MECHANICS

Angular Heads

Multi-Spindle Heads

Driven Tools

High-Speed Spindles

Machine Components

Heads for Large-Scale Machines



**ROMAI Robert Maier GmbH** 

Tool and Machine Building Florianstraße 22 71665 Vaihingen/Enz-Horrheim Germany

Telephone:+49 70 42 / 83 21 - 0Telefax:+49 70 42 / 83 21 - 22E-mail:info@romai.de

www.romai.de











