



## Media release

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### **URMA RH reamhone – reaming and honing in one operation High-precision honing on CNC machining center or lathe**

**Honing has never been so simple and efficient: URMA AG is expanding its selection of precision tools with the innovative RH reamhone combination tool. With the RH reamhone, URMA AG relies on RX reaming technology, which stands for highest precision and maximum productivity.**

URMA AG, a company with over 60 years of experience in the manufacture of precision tools, has established itself as a leading expert in the field of precise bore technology. Following the credo "Innovation is our tool", the family-run company, headquartered in Rapperswil, Switzerland, develops and produces innovative precision tool systems. They are used worldwide in industries such as machine builders, the automotive industry, hydraulics and aviation.

Honing requires precise control of the process to ensure consistent surface quality and dimensions. Even small deviations can affect the quality of the final product. The honing process is also time-consuming and cost-intensive, especially for large quantities, complex workpieces and in cases the honing process is outsourced.

The reamhoning tool has been specifically developed for use in milling centers, turning centers or general machining centers. RH reamhone reams and hones bores simultaneously by feeding-in and out in a single work step. Therefore, RH reamhone tools represent an extremely cost-efficient solution for high precision machining in company own production halls, which complies highest tolerance requirements, optimizes production processes and enables automated manufacturing.

RH reamhone offers precise diameter accuracy as well as tight shape and position tolerances and is also suitable for components with multiple journals, such as valve block spool bores.

#### **Advantages of RH reamhone at a glance**

- **Quick-change system for easy handling**  
Thanks to the precise interface accuracy of <math><0.004\text{ mm}</math> radial run-out, time-consuming adjustment of the run-out is not necessary for the user. The cutting edge can be replaced in less than two minutes, which saves up to 30 minute of downtime compared to other reaming tools.
- **High friction and honing speed with high feed rate**  
Thanks to its high feed rate, RH reamhone is ideal for larger quantities and meets the highest requirements for surface quality and precision.
- **Production of functional surfaces (cross-hatch)**  
Honing produces precise dimensions and shapes as well as extremely fine surfaces that are smoother than with grinding. The characteristic cross-hatch that occurs during honing and enables a micro-lubricant reservoir that optimizes the tribological properties.

- **Honing with emulsion or oil**  
Honing is possible directly on lathes and milling machines without modifying the machine.
- **Lean production processes**  
With RH reamhone, the honing process can be integrated directly into the machining process without the need to invest in a honing machine or outsource the honing process.
- **Process reliability**  
Innovative tool systems increase process reliability and contribute to increased efficiency.

### Key Facts

diameter	from $\varnothing$ 12mm
Achievable cylindricity	< 0.004mm
Achievable roundness	< 0.0015mm
Achievable $\varnothing$ tolerances	< 0.002mm
Achievable roughness	< Ra 0.2
Cutting speed Vc	up to 60m/min
Feed rate F	up to 1'000mm/min
Delivery time	Special tool, approx. 12 weeks

More information: [www.urma.ch/en/tools/honing/reamhone.php](http://www.urma.ch/en/tools/honing/reamhone.php)

### About URMA AG

URMA AG develops and manufactures precision tool systems. The family-owned company has had its headquarters and production facility in Switzerland since 1962. URMA also has subsidiaries in Germany, Spain, China and the USA and maintains OEM partnerships with Paul Horn (Germany) and Sumitomo (Japan).

The precision tools are used worldwide for precision bores and milling operations in the mechanical engineering, automotive, hydraulics and aviation industries. With its high-precision tool systems, URMA increases process reliability for customers and contributes to increased efficiency. URMA supports manufacturing companies with standard and special tools in the development of individual solutions and innovations. Thanks to the optimal infrastructure, test procedures are carried out in the company's own test center for prototypes, new coatings, geometries, chip formers, the influence of various coolants and special tools for specific customer applications. The Test Center also provides training and further education for customers.

In Switzerland and Liechtenstein, URMA distributes and maintains machine tools from HAAS, EMCO and ZORN. In addition to 3D printing systems from EOS and Markforged, URMA also offers the broad machine portfolio from DyeMansion for the refinement of plastic components and Solukon depowdering systems for metal components. The extensive range of 3D printing products also includes 3D scanners from Creiform, software from CADS Additive and Materialise as well as AMCM custom-made products.

More information: [www.urma.ch](http://www.urma.ch)

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