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Rovalma: 40 Years of Providing Superior Tool Material Solutions

Since ROVALMA's foundation in 1977, we have been providing Superior Tool Material Solutions to our customers. Specialized in Steels and Special alloys for Tools and Machinery, we differentiate ourselves by providing a customer service based on an exceptionally profound knowledge in metallurgy, tool material properties and application knowhow.

ROVALMA's mission is to give competitive edge and technological lead to its cooperation partners by generating solutions to current industrial needs and anticipating future technological solutions. At the same time we strive at contributing substantially to create societal, environmental and economic benefits with our technological solutions.

Our Core Business Areas



Design and Development of:

- Tools steels and special alloys
- Steel manufacturing equipment and technology
- Melting and thermo-mechanical processing technology
- Advanced test equipment and methodologies
- Metal powders for additive manufacturing
- 3D printing technology for large dies and moulds



Quality control of materials:

- Mechanical and thermal characterization
- Micro-structural analysis



Customer Support in:

- Tool steel selection
- Tool design
- Surface treatments
- Process optimization
- Key points relating to the tool and its usage



Production and Distribution:

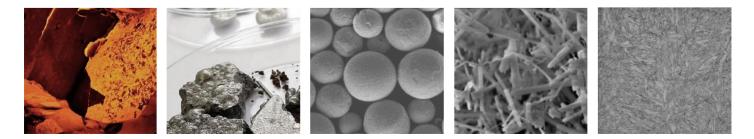
- Production of high quality & advanced tool steels & special alloys
- Distribution, stocking, cutting and milling services for our materials

Innovation Through Die material

To constantly improve the cost-effectiveness of material forming processes and to respond to new challenges in material applications, we are focused on continuous innovation, generated by our highly qualified scientists, engineers, technicians and best practice use of our very well equipped R&D center.

Our Innovation team tackles the diverse challenges that have been emerging in the tooling area and other engineering applications in a multi-modal manner, comprising tool materials, their production, processing and usage. This approach has allowed us to develop highly innovative tool materials, novel production technologies and advanced test equipment and methods for process optimization.

In pursuing innovation, we have not restricted our research to improvements of the tool materials and their production, but broadened it to analyze and optimize every single element that contributes to the tool performance, including surface treatments, tool design, process optimization and process productivity. This philosophy and approach are the guiding principles for our R&D team and its activities. Our goal is to increase the competitiveness of our customers through the most cost effective tooling material and technologically optimized approach for its usage.



Our Materials

In the early 90s, we decided to establish a R&D unit of our own in order to provide tool material solutions to applications, for which the industry had not been able to offer any technological and economic solutions. Since then, with our broad knowledge in materials and applications, we have been developing high performance materials with outstanding physical and mechanical properties that have enabled a broad range of industrial sectors to make a qualitative leap in production process productivity, as well as regarding product properties and quality.

HTCS®	High thermal conductivity, high toughness, good wear resistance, developed by Rovalma for hot forming applications. Different grades optimizing mechanical and thermal properties for different applications.	BWS®	Tool steels for the shaping of high-strength and ultra-high strength sheets. HWS grades feature high hardness with exceptional levels of wear resistance and toughness for stamping, trimming and fine blanking.
FASTCOOL®	Cost-effective Fast-Cooling Tool Steels developed by Rovalma for hot forming applications, with reduced material cost and easy hardening or in pre-hardened condition.	ICO	Tool Steels for high-load applications, with exceptional levels of mechanical resistance and toughness. Designed for applications requiring high levels of toughness and plastic deformation resistance.
EFICAST[®]	Family of improved standard hot work tool steels modified by Rovalma to provide highest tool steel quality and performance at competitive cost.	WOV [®] EWRA [®]	Extreme wear resistance tool steels , WOV [®] and EWRA [®] provide high hardness and exceptional resistance to adhesive and abrasive wear.
FECRONI®	Stainless Tool Steels providing high mechanical resistance and corrosion resistance, together with good thermal conductivity.	GTCS®	Low thermal conductivity materials with good hardenability and wear resistance. Designed for producing components with tailored properties , by combining GTCS [®] with other steels in the tool.

STANDARD
GRADESRovalma also provides high quality standard hot and cold work tool steels (1.2344/H13, 1.2343/H11,
1.2367, 1.2379/D2, 1.2767, 1.2312/P20, 1.2738, 1.2316, 1.2510/O1 etc.)



Customer Support

The final component cost depends on the cost-effectiveness of many different aspects of the chosen tooling system: die material properties, die hardness, hardening methods and path, eventual surface treatment, die geometry, die cavity microstructure configuration, working temperature and other process parameters.

Our vast experience in the application of our high performance tool materials has generated comprehensive knowhow in the most efficient usage of our tool materials for different applications according to the specific objectives of our customers. You can access this service by sending us an email to <u>ae-fast@rovalma.com</u>.

Global Presence

In recent years, ROVALMA has expanded its distribution network to respond to the worldwide growing demand for our products. We have teamed up with strong, technically experienced and customer service dedicated partners in many countries, such as Austria, Germany, Italy, Poland, Slovenia & The Balkans, Switzerland, Turkey, North America, Japan, China, India, South Korea, Czech Republic and Slovakia.





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