



Processing technology for production of abrasive materials

From abrasive grains to grinding wheels –
Eirich can always offer the right tool

Eirich preparation technology for high-tech grinding wheels and cutting disks

Grinding processes are undergoing constant change, and the increasing demands are leading to ever more complex products.

With steadily increasing tool speeds and tighter tolerances on shape and dimensions, the production process for abrasives has to be absolutely flawless.

Key aspects of modern grinding textures including

- grain size
- bond
- pore space

need to be perfectly tailored to precisely match the task in hand.



We really care about making sure that the end customer is happy.



The quality of an end product can only ever be as good as the quality of the mixture. Eirich mixing technology will help you to manufacture high-tech grinding tools.

Grinding is one of the most important modern manufacturing techniques.

Why not take advantage of our expertise and use it to boost your success?

Exceptional performance is only possible with reliable partners. Eirich has been supplying mixing and granulating technology for the production of abrasive materials for decades.

Eirich mixing technology for wide-ranging fields of application.

- Ceramic, synthetic resin, and metal-bonded abrasives

- Sintered corundum, zirconium corundum, SiC, CBN, diamond, and many more
- Optimized mixing-in of the binding agent for maximum grain retaining forces
- Seamless coating of the abrasive grain
- Admixture of pore-forming agents for high-porosity grinding tools with defined chip space
- Perfect homogenization of product-specific additives
- Production of perfectly defined press granules for subsequent shaping

Would you like to find out more?

Then please get in touch!



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**Globally unique
mixing principle.**

Profit from the unique Eirich mixing principle

The Eirich mixing principle is quite different from other systems, as transportation of the mix is separated from the actual mixing process. This hybrid mixing principle allows the setup to be optimally tailored to the particular mixing task in hand.

The Eirich mixing principle can be accurately tailored to the mixing task in hand. The speed of the rotor can be freely adjusted to any setting within the range to provide a variable adjustment option for controlling the output.

- The following happen at high speeds:
 - Optimized addition and admixture of additives and powder resins
 - Full disintegration of agglomerates
- At medium speeds, the coarse grains are coated with binding agent. This guarantees the best possible grain development.
- At low speeds pore-forming agents are gently added, mixed in, and optimally distributed.
- By carefully choosing the right speed, you can define the desired grain size distribution for your press granules.
- By optimizing the output, it is also possible to control the viscosity of binding systems that contain resin.
- As a result, a complete surface reaction between the grain and the binding agent is guaranteed during the firing process.
- Thanks to the unique mixing principle and the ability to optimize the operating speed, wear is reduced to a minimum.
- The mixer does not have tools that move close to the bottom or wall.
- The way in which material is circulated in the Eirich mixer achieves a unique self-cleaning effect.



The mixing technology is the key

The Eirich mixing principle with its special characteristics of a

- rotating mixing pan
 - rotating mixing tool
 - stationary multi-purpose tool as a material deflector and a bottom/wall scraper
- delivers proven best results in terms of mixing quality.

Eirich Intensive Mixers are designed with ease of maintenance in mind and are safe and reliable during operation. According to Eirich customers, they offer:

- High flexibility
- No dead zones or temperature gradients in the mixer
- Easy access and easy cleaning for the mixer
- Excellent scalability





Eirich is your competent partner for the production of abrasive mate-

The unique mixing volume

Eirich Intensive Mixers are available in many different sizes. Recipes can be freely transferred to different mixing volumes, making the task of developing recipes much easier.

From mixers to complete production lines

Preparation lines made to measure

To complement Eirich mixing machinery, we offer a full range of peripherals right through to turn-key production lines.

For larger production capacities we can offer fully automated systems for grain wetting and granulation.

Based on your recipe, we will fine-tune all the process engineering details to perfectly match your requirements.

All parts of the line will be adapted to the throughput of the mixer. As well as the conveying, weighing, and feeding equipment, this also includes the control technology and process control engineering.

Type	Capacity		Detachable container	Hinged crosshead	Tilting mixing pan
	Liters (max.)	Kg (max.)			
EL1	1	1,6	✓	✓	
R01	5	8	✓	✓	
RV01	10	12	✓	✓	
R05T	40	65		✓	✓
R08W	75	120		✓	
R09W	150	240		✓	
R09T	150	240		✓	✓
R12(W)	250	400		✓	
RV12(W)	400	650		✓	
R16(W)	600	960		✓	
RV16(W)	900	1440		✓	



Eirich

Processing technology

Mixer type EL1

This mixer type is used for many different applications in research and development as well as for small-scale production.

It is particularly well suited to the preparation and processing of diamond and CBN compounds. Although this mixer offers unrivaled flexibility, it still delivers the same features and performance as its larger siblings. Recipes can be transferred to larger Eirich Mixers without any problems whatsoever.

Mixer type R05T and R09T

For semi-manual production of abrasive compounds.

Key advantages at a glance:

- Unique mixing quality opens up wide-ranging options for all material consistencies
- Short processing times
- Excellent accessibility to the tools for incredibly easy cleaning
- Easy to fill and empty
- Intuitive control concept for simple operation and straightforward recipe development
- Wide range of different wear surfaces available
- The rotor tool can optionally rotate while the cover is being closed. This enables smooth insertion into the filled mixing pan.

Would you like to find out more?

Then please get in touch!



The Eirich Group, with Maschinenfabrik Gustav Eirich as its strategic center in Hardheim, is a supplier of machinery, systems, and services for industrial mixing, granulating/pelletizing, drying, and fine grinding. Our core expertise is in the field of processes and techniques used for the preparation of pourable materials, slurries, and sludges.

We are a family-run company that operates 15 sites around the world.

You can find more information at:

www.eirich.com