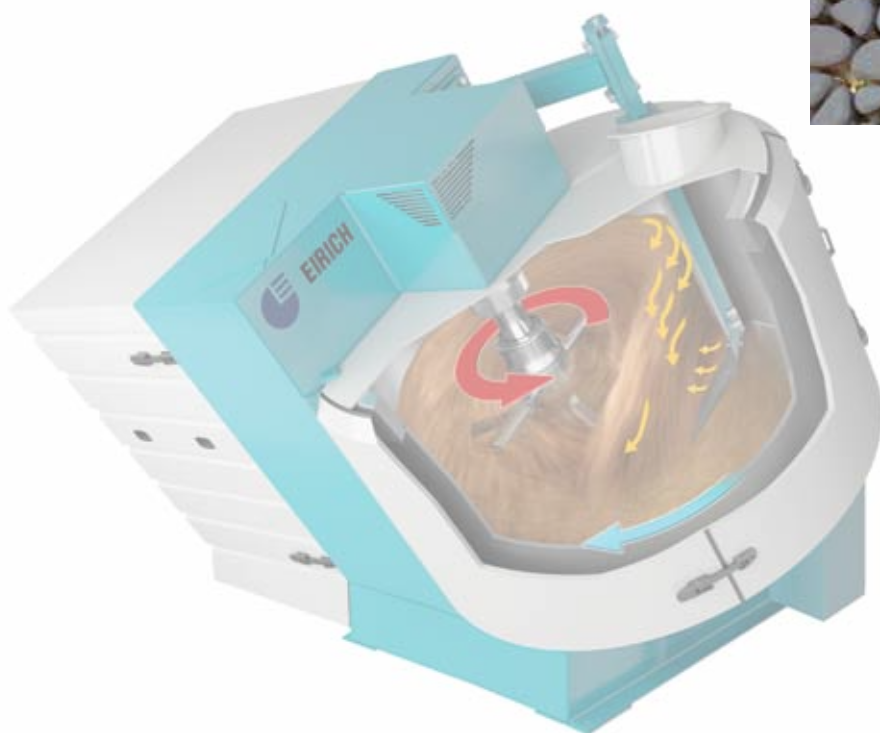


# Concrete processing with EIRICH mixing technology

predictable product characteristics  
reproducible results  
lower reject rate



# A vision becomes reality: with the right expertise and the right mixing technology!

Clients and architects who construct modern buildings made of or with concrete want to be sure that the properties of the materials they use are predictable. With more than 100 years of mixing technology experience, EIRICH has the expertise to ensure this level of predictability.

## **The quality of your end product can never be better than the quality of the mix!**

The most essential piece of equipment in concrete production is the mixing system. It has a crucial influence on the ability to meet design, quality and cost-efficiency expectations. No matter what type of concrete is selected for the project, EIRICH mixers ensure that the concrete which is supplied will definitely have the target properties. Construction companies and producers who make a wide range of concrete products know that they can deliver predictable, consistent results with this production equipment. The quality of the mix can be verified and documented at any time at the EIRICH Test Center using original materials.

EIRICH concrete mixing technology has an excellent international reputation. Engineers and architects working on a large number of projects around the world know that they can rely on the dependability and versatility of EIRICH mixing systems. They can be confident that they will achieve highly efficient process flows.

EIRICH maintains a research partnership with many leading universities and technical colleges as well as training centers in the user industries.

We implement the latest research results in our Test Center operations and incorporate them into the process engineering design of our mixers. All of our users benefit from the state of the art in technology with no time lag. Existing mixing systems can be modified at any time to bring them up to date with the latest advances.

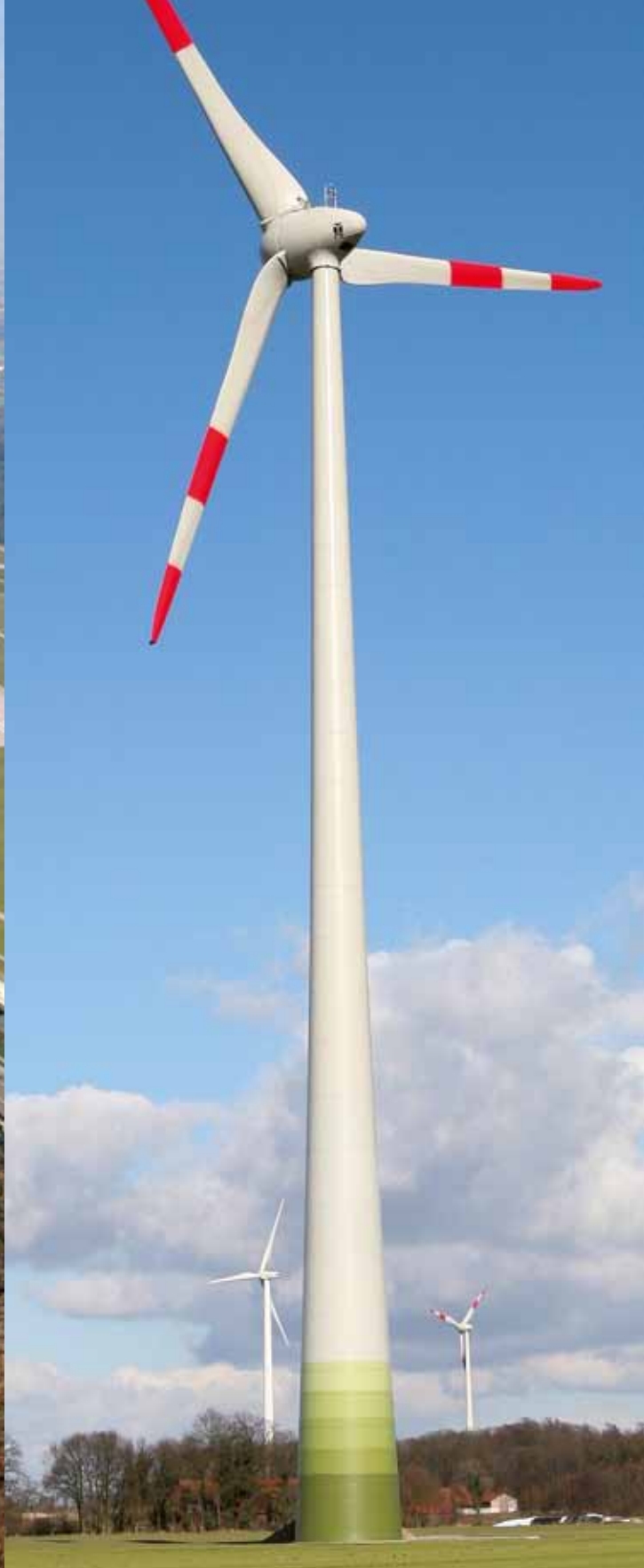
## **EIRICH mixing technology: Identical properties m³ for m³ for top quality!**

### **e.g.:**

Expansion of the Frankfurt/Main airport  
Concrete was used to produce pre-cast elements  
for a bridge across the existing motorway

FNB Stadium, Johannesburg, South Africa  
Concrete for cladding panels

Wind turbines  
High-performance concrete for concrete elements





# People who mix with EIRICH want quality

EIRICH mixers can easily produce concrete of any consistency. They can be adjusted to handle any type of raw material properties. They are synonymous with reproducible top-quality results for any type of concrete.

The list of products includes:

- concrete for roofing tiles
- facing concrete
- railroad tie concrete
- foamed concrete
- fiber concrete
- self-compacting concrete
- polymer concrete
- sulfur concrete
- high-strength concrete
- ultra high-strength concrete

Manufacturers of bricks, slabs, pipes, roofing products, large architectural elements, large items for power generation stations, bridges, stadiums and other infrastructure projects know:

**EIRICH mixers deliver predictable, top-quality results. Architects and clients will really appreciate that!**

## What EIRICH customers say:

"EIRICH mixers deliver fast, top-quality results no matter what the type or consistency of the concrete."

"Processing results are superior, and the concrete has less of a tendency to 'bleed'."

"We can often reduce the quantities of cement, pigment and chemical additives because distribution is better."

"Binders are activated. The initial and final strength of the concrete increases."

"The reject rate is much lower, particularly on visible surfaces."

"Little variation in product characteristics."

*EIRICH mixing technology is synonymous with reproducible top-quality results for any type of concrete.*







**e.g.:**

Renovation of the facade of the LEO Haus, Frankfurt am Main  
Facade of white, fiber-reinforced high-performance concrete,  
prepared in an EIRICH mixer



# Unique machinery technology for predictable process design

There is no known type of concrete in the market which cannot be processed with EIRICH mixers. Different types of concrete can be produced on the same mixer. So you can expand your portfolio and continue to grow your business systematically. The special EIRICH mixing principle ensures outstanding concrete processing results. In contrast to other systems, the transportation of the mix is separate from the actual mixing process. This division of work is achieved by a rotating mixing pan, which does the job of transporting the mix, and a mixing tool for mixing the material.

**As a result, production conditions are predictable. You get reproducible results from one type of concrete to the next along with high operational reliability:**

- Fine materials dispersion is excellent
  - Water is distributed quickly and very effectively
  - A stable moisture signal is quickly reached
  - Mixing times can often be substantially reduced
- This allows very high quality mixes to be produced
  - Lightweight aggregates (e.g. expanded clay, pumice, expanded glass, etc.) are mixed in gently and homogeneously
  - Fiber separation (e.g. mineral fibers, glass fibers, plastic fibers and steel fibers) is excellent
  - Pigments are completely broken down

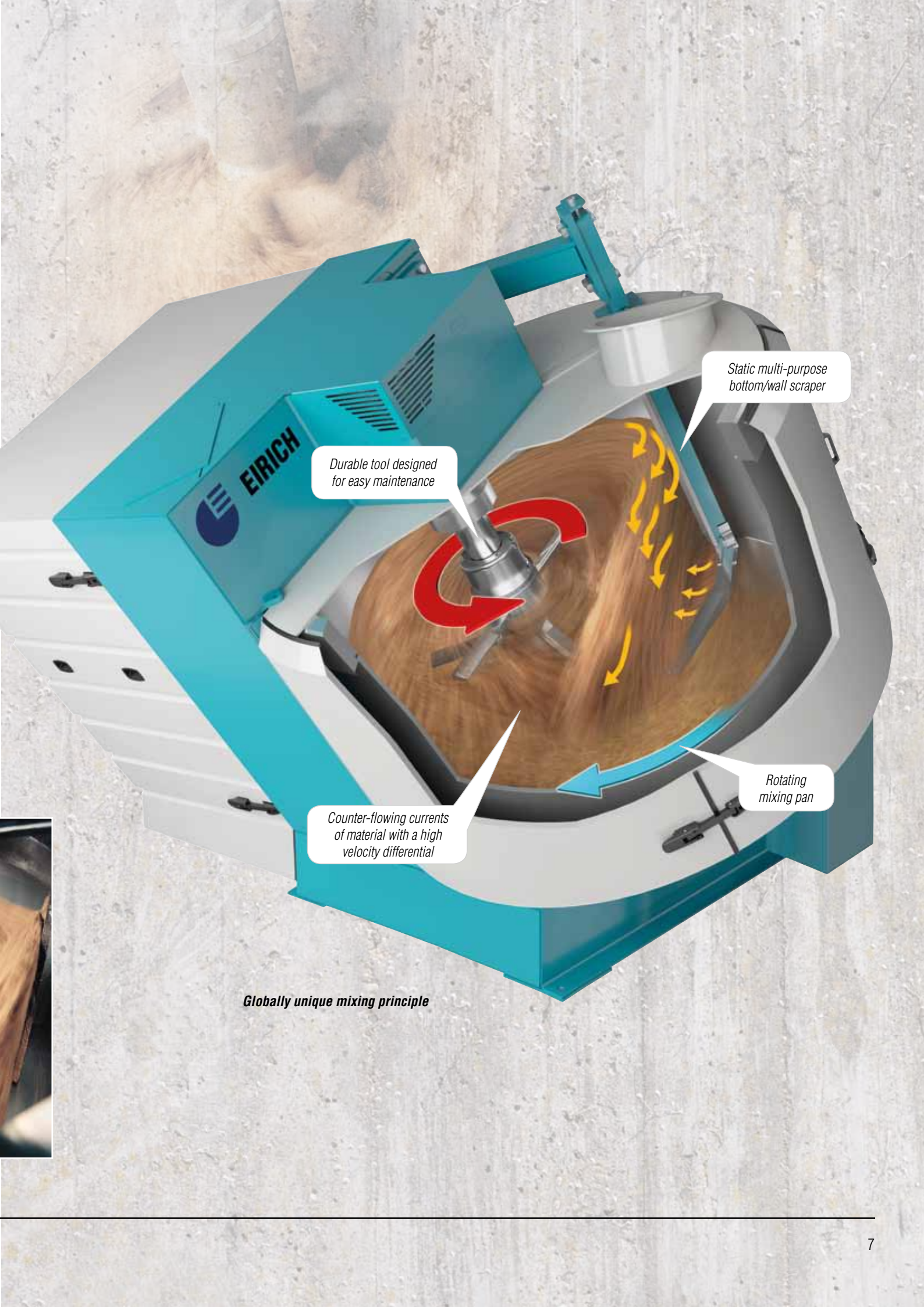
## Controlling concrete temperature

The temperature of the concrete can also be easily controlled in an EIRICH mixer if the required optional features are used. Material which is placed within the operating radius of the mixing tool (ice water, chopped ice, liquid nitrogen, hot vapor, etc.) is immediately drawn in and distributed in the mix. There is no local super-cooling in the freshly mixed concrete or thermal stress in the mixer.

**When quality is required, people mix with EIRICH!**



*Material stream in the EIRICH mixer  
Deliberately generated material streams ensure  
predictable preparation processes*



Static multi-purpose  
bottom/wall scraper

Durable tool designed  
for easy maintenance

Rotating  
mixing pan

Counter-flowing currents  
of material with a high  
velocity differential

**Globally unique mixing principle**





# Mixer program for the concrete industry

EIRICH mixers offer outstanding flexibility and performance. Service-proven mixing technology from EIRICH has been the trusted choice for leading concrete manufacturers for decades.

The EIRICH range of mixers covers a wide variety of sizes to meet user-specific requirements with great efficiency.

| Type of mixer | Fill quantities |               | Set concrete output<br>approx. m <sup>3</sup> /batch* | Examples of mixer sizes for selected types of concrete |                 |                 |                          |     |      |
|---------------|-----------------|---------------|-------------------------------------------------------|--------------------------------------------------------|-----------------|-----------------|--------------------------|-----|------|
|               | Liters          | kg            |                                                       | Concrete for lab use                                   | Facing concrete | Coarse concrete | Concrete for factory use | SCC | UHPC |
| <b>R08</b>    | 75              | 120           | 0.05                                                  | ■                                                      |                 |                 |                          |     | ■    |
| <b>R09</b>    | 150             | 240           | 0.1                                                   | ■                                                      |                 |                 |                          |     | ■    |
| <b>R12</b>    | 250             | 400           | 0.17                                                  |                                                        | ■               |                 | ■                        | ■   | ■    |
| <b>RV12</b>   | 400             | 640           | 0.27                                                  |                                                        | ■               |                 | ■                        | ■   | ■    |
| <b>R16</b>    | 600             | 960           | 0.4                                                   |                                                        | ■               | ■               | ■                        | ■   | ■    |
| <b>RV16</b>   | 900             | 1,440         | 0.6                                                   |                                                        | ■               | ■               | ■                        | ■   | ■    |
| <b>R19</b>    | 1,125           | 1,800         | 0.75                                                  |                                                        |                 | ■               | ■                        | ■   | ■    |
| <b>RV19</b>   | 1,500           | 2,400         | 1                                                     |                                                        |                 | ■               | ■                        | ■   | ■    |
| <b>R24</b>    | 2,250           | 3,600         | 1.5                                                   |                                                        |                 | ■               | ■                        | ■   | ■    |
| <b>RV24</b>   | 3,000           | 4,800         | 2                                                     |                                                        |                 |                 | ■                        | ■   | ■    |
| <b>R28</b>    | 4,000 to 5,000  | 6,400 / 8,000 | 2.6 / 3.3                                             |                                                        |                 |                 | ■                        | ■   |      |

\*Outputs may vary according to the specific formula



R12 / R19 / R24 / R28 mixers for processing of different concrete formulas  
(partially to replace planetary and ring trough mixers)





# Users who do their sums know that EIRICH is a good investment.

## High return on investment

The amount of money you invest is normally only part of the cost equation. The cost-efficiency of a concrete mixer only becomes apparent after you have run a number of long production cycles to gain reliable data for calculations, which in many cases highlight the advantages of an EIRICH concrete mixer. It is designed to take the punishment in the harsh production environment of a concrete mixing system, which means it keeps running for a long time. There is a wealth of user experience over a period of many decades to back up this claim.

EIRICH mixing technology has an enviable worldwide reputation which is based not just on the actual mixers, but also on the high-performance accessories. The combination of efficient EIRICH mixing technology and tailored peripheral devices delivers outstanding cost-efficiency.

## Mixer accessories

- moisture probes and temperature sensors
- mixing pan cleaning equipment (wet)
- mixing pan and mixing tool speed monitoring

## Wear protection

- vulcanized rubber coatings and special plastics
- armor coating and tungsten carbide plating
- multi-layer armor plates

## Peripherals to optimize your process

- belt conveyors, screw conveyors
- pneumatic conveyors and skip hoists
- electro-mechanical scales
- feeding units with electro-pneumatic control
- instrumentation, control and process data technology

## Concrete material processing services

- trials and process optimization at the EIRICH Test Center
- process engineering support
- training for your operators and maintenance team
- full service worldwide



*EIRICH process control and instrumentation equipment*



*EIRICH scales and feeding systems*





*Hardheim Test Center  
- partial view of  
mixing technology*



*Comprehensive  
range of services  
directly from the  
manufacturer*

## Industrial Mixing and Fine Grinding Technology

### Tradition and innovation since 1863

EIRICH stands worldwide for a comprehensive range of products and services in the field of preparation technology. Its particular focus is on mixing and fine grinding technology, with know-how developed over 150 years of close cooperation with industrial users, universities and research institutions.

Pursuing a corporate philosophy of operating internationally and thereby ensuring close proximity to every customer, the EIRICH Group has secured its place in all the key economic regions of the world.

The focus is on innovative technology for machinery and systems engineering designed to offer solutions for high-standard preparation tasks from a single source.

Applications and process technology with own test centers, a high vertical range of production and comprehensive after-sales service provide the ideal basis for the development of modern and economical processes for a multitude of industries.

**Building materials – Ceramics – Glass – Carbon bodies – Battery pastes**  
**Friction linings – Metallurgy – Foundries – Environmental protection**

#### The EIRICH Group worldwide:



**Maschinenfabrik Gustav Eirich  
 GmbH & Co KG**  
 Postfach 11 60  
 74732 Hardheim, Germany  
 Phone: +49 (0) 6283 51-0  
 Fax: +49 (0) 6283 51-325  
 E-mail: [eirich@eirich.de](mailto:eirich@eirich.de)  
 Internet: [www.eirich.com](http://www.eirich.com)



**Eirich France SARL**  
 Villeurbanne, France



**OOO Eirich Maschinentchnik**  
 Moscow, Russia



**OOO Eirich Maschinentchnik**  
 Dnepropetrovsk, Ukraine



**Eirich Machines, Inc.**  
 Gurnee, IL, USA



**Eirich Industrial Ltda.**  
 Jandira S.P., Brazil



**Nippon Eirich Co. Ltd.**  
 Chiba, Japan



**Eirich East Asia/Pacific**  
 Seoul, Republic of Korea



**Eirich Group China Ltd.**  
 Shanghai & Beijing, P.R. China  
**Eirich Machinery Jiangyin Co., Ltd.**  
 Jiangyin, Jiangsu Province, P.R. China



**Eirich India Pvt. Ltd.**  
 Mumbai, India



**H. Birkenmayer (Pty.) Ltd.**  
 Isando, Republic of South Africa

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