

Quality concrete with Eirich

Plannable & reproducible concrete mixing with Eirich technology - thanks to decades of experience in the concrete industry.



The Pioneer in Material Processing®

Vision becomes Reality

Modern buildings made of concrete are masterpieces of art.

Thanks to the know-how gained from more than a century of mixing technology experience, Eirich mixers enable you to produce concrete with the right properties in a reliable manner.

Your product is only as good as the mixture!

The mixing plant is the heart of every concrete production. Meet all requirements: design, quality and efficiency! No matter what type of concrete you need, you will achieve your goals with mixing technology from Eirich.

As a manufacturer and user of concrete products, you can rely on production conditions that enable predictable, consistent results.

Mixing quality and production parameters can be checked and verified at any time in the Eirich test center using original raw materials!



Eirich mixing technology enjoys an excellent international reputation due to its reliability and variability.

Eirich is a research partner of many universities, technical schools and training institutes. In our technical centers, the latest findings are implemented and incorporated into the design of the mixers. This means that you, as the main user, are always at the cutting edge of technology. Existing mixing plants can be adapted to new developments at any time.



**Eirich mixing technology:
Cubic meter for cubic meter
identical properties for
highest quality require-
ments!**

Those who want quality concrete mix with Eirich

With an Eirich mixer, you can easily handle all consistencies. You set the required raw material properties and obtain reproducible results at the highest level in all types of concrete.

For you as a manufacturer of stones and panels, of pipes or large-format architectural elements, of roofing products or large power engineering components, of bridges, stadiums or other infrastructure projects applies:

An Eirich mixer provides reliable results at the highest quality level.



Types of concrete:

- Roof tile concrete
- Facing concrete
- Railroad sleeper concrete
- Foamed concrete
- Fiber concrete
- Self-compacting concrete
- Polymer concrete
- Sulfur concrete
- High-performance concrete
- Ultra-high-performance concrete





Architects and builders appreciate this very much!

Eirich customers report

- Concretes of any type and consistency are prepared quickly and in high quality
- The concrete is easier to process and less prone to "bleeding"
- In many cases, cement, pigments and chemical additives can be saved thanks to better distribution
- Binding agents are activated. The early and final strength of the concrete increases
- Scrap - especially on visible surfaces is significantly reduced
- Low scattering of property values

Unique 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.

With an Eirich mixer you achieve:

- Highest quality mixes
- Homogeneous and gentle mix of Lightweight aggregates (e.g. expanded clay, pumice, expanded glass, etc.)
- Homogeneous fiber distribution in mixture (e.g. mineral fibers, glass fibers, plastic fibers and steel fibers)
- Mixing without demixing effects; 100 % material circulation in every rotation of the mixing pan



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

- The addition of binders, pigments and chemical additives can be reduced (by up to 10 %) thanks to enhanced homogenizing!
- Higher strength values, even higher early strength values can be obtained despite a reduced amount of binders added
- Pigments are completely broken down
- 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

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 (ice water, chopped ice, liquid nitrogen, hot vapor, etc.) which is placed within the operating radius of the mixing tool 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.



- 1 Robust, service-friendly mixing tool
- 2 Static combination-tool as bottom / wall scraper
- 3 Rotating mixing pan



Pin-type rotor
in different wear protection designs



Star-type rotor
Beaters in different wear protection designs



With only one rotation
100% material circulation

The Eirich 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.

For research and development are laboratory mixers from 1 to 150 liters available.

Selected installations (partially to replace planetary and ring trough mixers)



Overview Eirich mixer types



Mixer type D23

Set concrete output approx. m ³ / batch*	Type of mixer	Fill quantities		Examples of mixer sizes for selected types of concrete				
		Liters	kg	Facing concrete	Core concrete	Precast concrete	SCC	UHPC
0,05	R08	75	120	•	•	•	•	•
0,1	R09	150	240	•	•	•	•	•
0,17	R12	250	400	•	•	•	•	•
0,33	RV12**	500	800	•	•	•	•	•
0,4	R16	600	960	•	•	•	•	•
0,6	RV16	900	1.440	•	•	•	•	•
0,75	R19	1.125	1.800	•		•	•	•
1	RV19	1.500	2.400	•		•	•	•
1,5	R24	2.250	3.600			•	•	•
1,8	RV24	2.750	4.400			•	•	•
2,6 / 3,3	R28	4.000 bis 5.000	6.400 / 8.000		•	•	•	•
4 / 5,3	R33	6.000 bis 8.000	9.600 / 12.800			•	•	•
1	D23-1	1.500	2.400		•	•		
1,5	D23-2	2.250	3.600		•	•		
2	D23-3	3.000	4.800		•	•		

*Outputs may vary according to the specific formula **from 2019

The Eirich solution pays off Go the most profitable way

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 current 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 sensor 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



Hardheim Test Center -
partial view of mixing technology



Process & control
unit



Moisture detection:
Moisture sensor and transmitter



Overall service directly from Eirich



Modernization with Eirich

Use the possibilities!

Let the experts take a look at your production.

After all, they will take a very careful look at your preparation system. We use our expertise to the benefit of your efficiency with future-oriented consulting from our experts. With our „conversion and modernisation“ service, we focus on your wishes.

The advantages to you:

- Quick and straightforward conversion to new technology
- Increased efficiency thanks to technical improvement
- Tailored solutions



With our services, we specifically address to your wishes.



The patented SmartFix quick-change system



SmartFix 2.0

The patented SmartFix 2.0 quick-change system

- Replacement of individual beaters within shortest times
- Suitable for all Eirich mixers*, also suitable for retrofitting
- No need to replace the whole system, existing parts can continue to be used

TopClean

The high-pressure mixer cleaning system was designed by Eirich as a retrofit to provide fast, effective cleaning on an existing mixer.

- Modular retrofit kit, flexible, adaptable to individual needs
- Suitable for all standard production mixer types
- User-friendly operation

* except except table top mixers



- Stand-alone control unit – no intervention in the mixer control system needed
- Communications with the existing control system can be enabled - interface provided

Control solutions

Your requirements are always the number one priority!

- We work with you to develop the control and operation concept that is right for you
- from a service-proven standard to a high-end solution
- Easy and clear operability of the machine or system

The services at-a-glance

1. Analysis phase

Analysis and identification of the potential of your Eirich technology

2. Development phase

Development of concepts for optimization, with a corresponding quotation

3. Implementation phase

- Assembly and commissioning of new machine and system components
- Provision of documentation for the new components
- Training of your staff

Complete plant engineering on request

Eirich design systems to meet specific user requirements featuring single or multiple mixer lines as either a core package solution or a complete system. Depending on customer-specific requirements, our solutions feature tower systems, in-line systems or combination systems.

Technikum

The Eirich Test Center is an experimental laboratory for testing, trialing, and development. We can offer a wide range of test facilities and pilot plants for preparation of your original materials under real-life production conditions. Our process engineering experts at Eirich will support you at every step of the way – right up to when you successfully start production and beyond.

Engineering

Data collected at the Eirich test center is used as basis for selecting the right machines and equipment.

Systems engineering

The machines and equipment developed and built by Eirich itself but also products from efficient and experienced partners are used to turn the engineering into reality.

Control and process control

Standardized systems with hardware and software developed by Eirich itself are used for the control of stand-alone machines and for the process control of complete preparation plants. The range of products and services covers new installations as well as the modernization or extension of existing machines and plants. All components are exactly

configured, i.e. tailor-made, to the user's needs – from the conventional keyboard control system and special batch controllers with formula management.

Installation and commissioning

An experienced service team is available for installation and commissioning. Local partners assist us, and the customer's personnel are instructed in the course of the work.

Training

Training for your operating and maintenance team is provided by expert instructors to ensure that you get the most out of your investment over the long term. It includes instructions concerning the system's operation, safety regulations, process optimization, maintenance intervals and repair work.

Customer service

Eirich After Sales Service is your guarantee of expertise, high availability and comprehensive support. It includes the dependable delivery of original spare parts worldwide, prompt reaction to servicing needs, the fast repair of machines and system components, and expert advice if the process requirements should change. A particularly efficient option is remote diagnosis by data link (teleservice), which provides quick and cost-saving support if trouble occurs during operation. Software packages for condition monitoring and maintenance round off the service offering.

From the control system, batching system and single mixer to the complete system - everything from one source.



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Working with Eirich has its advantages - use them!





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 16 sites around the world.

For more information please visit:

www.Eirich.com