



## EIRICH Service Directly from the manufacturer



Worldwide always close at hand





The Pioneer in Material  $\mathsf{Processing}^{\circledast}$ 

**SERVICE** 

# Service is a matter of trust Place your trust in EIRICH!

#### Think global, act local!

Customers are not interested in how big our company is. Nor are they interested in our organizational structure or the number of business units we have. What they want is for the person in front of them to solve their problems. To satisfy this simple realization or requirement, we are represented worldwide with our own companies.

Local proximity meets one of the most important customer requirements in the service business – reaction time.

With the strategy of a worldwide presence based on a global network of our own companies, we provide our customers with the same high level of expertise wherever they are in the world. Our international teams have a clear understanding of customer requirements and are competent contact persons for our customers. Our global network provides the assurance for the speed, competence and quality of our services.

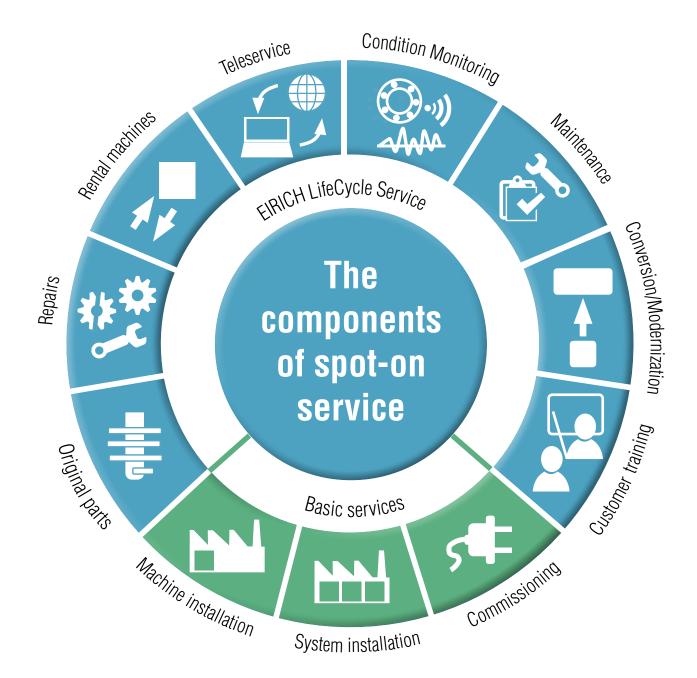
This objective is further supported by targeted training programs developed inhouse, which also generate a culture of dedication. After all, for us it is not only important that something gets done, but how it gets done. With increasing networking, concentration and digitalization in many industries, companies and value-added processes, the importance of service business becomes increasingly critical and the requirements to be met in terms of service quality and the service portfolio increase accordingly. The focus of our efforts is no longer just the minimization of the risk of failure, but on resource- and energy-efficiency too, with a view to optimizing the complete value-added process of our customers and continuously adapting it to changing requirements.

The performance that we promise and our service organization go beyond the classical services. We concentrate on what customers actually want and have a clear customer focus. The edge in knowledge that we have as an OEM (Original Equipment Manufacturer) is put to direct use in product development, for your benefit.

That and much, much more is what we mean by lifecycle service and customer orientation.



Hubert Sajonz Head of Global Customer Support



Our range of products and services includes comprehensive customer service for EIRICH machinery and systems throughout the whole lifecycle. This means that we offer you a broad basis for securing optimum operating conditions. **EIRICH LifeCycle Service** begins right at the machine design and systems planning stage. This is where contributions from the highly qualified service team, with many years of experience, count. This dovetailing of presales and aftersales service serves to optimize your processes. These basic services then become actually visible on site when it comes to the assembly/installation and commissioning of the machines and systems.

On the principle: "All's well that starts well".

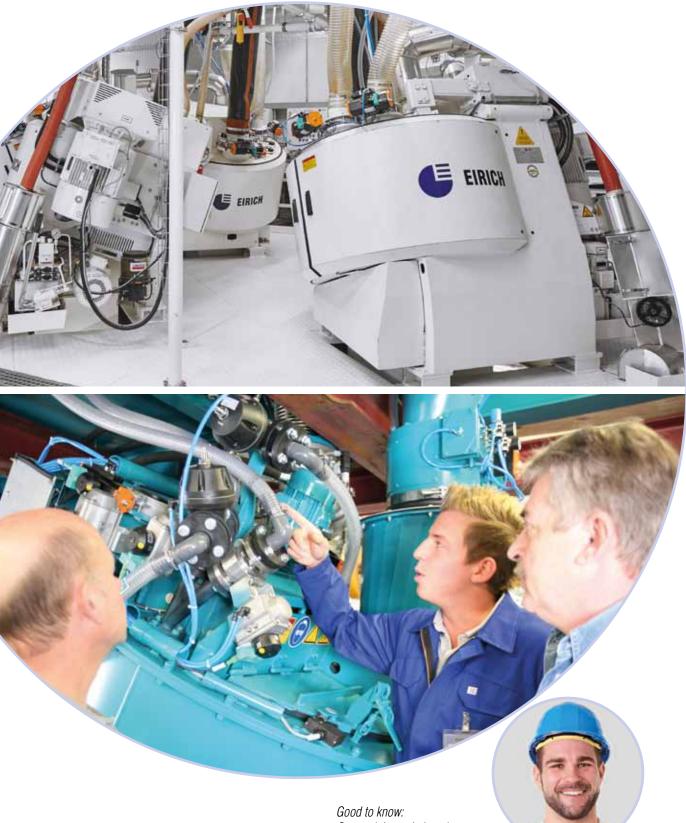
### **Basic services**

# Machine installation System installation Commissioning

The installation, commissioning and attending to production in the start-up phase of machinery and systems is the first step in LifeCycle Service from EIRICH. For us it starts with the site supervision before delivery, which is part and parcel of the package. Other planning-related details and our experience from the global networking of the service technicians are taken into account on an individual basis for each system. Our worldwide presence enables us to identify local obligations at an early stage and to meet them in full. The high safety standards are specified centrally by the chief installation engineer and are regularly monitored. Our work is carried out by our own professional and trained staff. All service technicians have their own tools which are subject to regular inspections.

A large range of special-purpose tools are available from a central depot. For commissioning purposes we organize our highly qualified and experienced process technicians whenever required, and they attend to the commissioning process and provide you with support with your formulas.





Good to know: Our work is carried out by our own professional and trained staff.



## The low-cost service without technicians on site, with remote service and remote fault diagnostics.

Are you keen to avoid long repair times? Then place your faith in our teleservice!

Our specialists analyze machine and process data and help pinpoint the problem from a remote location.

Corrective action can be initiated immediately, and customized software updates can be performed without a presence on site.

In every case the precondition for access to your system's control system is your express authorization. Contact is then established to our service technicians via a data link.

On your request they can then update software, organize access to the system in the event of operational disruption, analyze and evaluate system data and provide you with support during commissioning. If EIRICH original parts are required in this connection, these can be organized for you at your request.

#### What we provide:

- Remote access to machines and systems
- Remote machine operation from the user interface that is displayed on the EIRICH Service PC
- Analyze system data
- Fault diagnostics
- Support during commissioning and ongoing operation
- Download service and operating manuals

#### The advantages to you:

- Faster problem resolution, because a service call may not be necessary
- Lower maintenance costs
- Fast, user-friendly software check
- Increased system availability due to the prevention of production stoppages

#### **Teleservice security**

Data links on a VPN basis guarantee maximum data security.







## **Condition Monitoring**

The Condition Monitoring system revolves around the determination of the machine condition on the basis of the measurement and analysis of physical parameters on functional elements. Sensors supply data in real time. This data is analyzed on a continuous basis, which enables trends to be highlighted and possible damage to components to be identified before failure actually occurs. At regular intervals you receive a detailed report about the condition measurements which have been carried out, along with recommendations for action.

#### The advantages at-a-glance:

- Guaranteed machine and system availability
- Cuts in maintenance costs
- Components in critical condition are indicated by a simple traffic light scheme
- Long-term memories allow the origins of damage to be analyzed retrospectively
- Maintenance and repair work can be planned in advance

#### Applications

The possible applications for the Condition Monitoring system start with individual components on machines and go right up to the complete networking of systems.

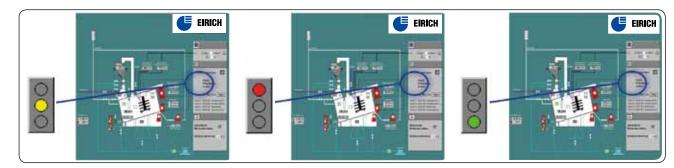
Being of modular design, the system can be adapted to meet the specific requirements of every maintenance strategy. The system can be expanded at any time. The Condition Monitoring system adapts to your requirements.

#### Vibration measurement

Vibration sensing systems can be used to detect and analyze unbalanced rotors, defective friction bearings, gear wear, localized intermeshing problems, etc.

#### Wear detection

Wear is based on a change in material thicknesses, distances, etc. Wear is measured on the basis of absolute and relative measured values. Defined wear limits can be displayed on visualization systems.



After months of stable operation, the signal light changed from green to yellow. The condition of the machine was analyzed via EIRICH Condition Monitoring. It was found that the bearing of one of the mixing tools was worn.

### Production was maintained, the condition of the machine assessed daily.

33 days after the first warning, the signal light changed from yellow to red. At this point, spare parts were already on their way to the customer. *The machine was kept operational for a further 9 days. 42 days after the first warning, the* 

bearing was replaced with a new one. The Condition Monitoring system enabled an unscheduled machine downtime to be avoided.

#### Example: Bearing damage on the mixing tool



### EIRICH LifeCycle Service Condition Monitoring

Company	Mayer	Serial Number Type	075 RV16
Contact Person	A. Müller	Project Number	050507
Customer Number	A4000000	Ticket	1234/5678
Phone	000/234560	Date	
E-Mail	mueller@mayer.com		
Author	M. Huber		



Good to know: On request you can be provided with a detailed condition report with recommendations for action for your machine.



In general terms maintenance, also referred to as preventive maintenance, covers all measures involved in the care of production systems, such as cleaning, lubrication, adjustment, refilling of media and similar measures geared towards the reduction or prevention of wear.

For machines and systems which are highly stressed, the functionability of production-relevant components should be safeguarded. Close cooperation with you and familiarity with your respective value-added process enable the optimum level of maintenance work to be specified. We collate this information in a systemspecific or machine-specific checklist. Our service technicians are available to you promptly for regular maintenance work and offer you professional support when it comes to repair work. Maintenance activities are the basis for obtaining information about the condition of a machine or a system. Hence it is possible to introduce specific further optimizations for continuous production.

Monitoring the machinery when it is operating or idle provides vital information which our support team uses to develop a tailored maintenance strategy together with you. Working in close consultation with you, we define the optimal maintenance intervals for the components and provide professional documentation of the maintenance activities performed.

Should an occasional unscheduled machine or system shut-down arise nonetheless, it goes without saying that you can count on our quick and professional help.

#### The advantages are therefore obvious:

- Increased machine availability
- Guaranteed high production level
- Maintenance of operational reliability
- Stabilization of the value-added chain
- Complete cost-control for your maintenance measures
- Transfer of know-how due to regular contact with our experienced and competent service technicians



Good to know:

Good to know: Our service technicians are promptly at your service for regular maintenance work.



## **Conversion and modernization**

#### 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.

Over the course of their lifecycle, products are subject to adaptations to keep them marketable. To meet your specific requirements in relation to changed production conditions such as increased productivity or changes to the product, we provide the "Conversion and Modernization" service.

In consultation with you, we establish the current condition and specify and document the measures for optimization. We then provide you with an optimization concept and quotation. An EIRICH expert will be at your side throughout the entire project phase to liaise with you, making sure that all the stages of the project and the requisite service work fit in with your production schedule.

We will also be glad to provide your operating staff with their training after completion of the modernization or conversion work.

#### The advantages to you:

- Quick and straightforward conversion to new technology
- Increased efficiency thanks to technical improvement
- Tailored solutions
- Personal support from a qualified contact throughout the entire project and beyond.

#### The services for your project 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

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## **Customer training**

With our customer training service, we offer you a program of training which is specifically tailored to your preparation system. Depending on the specific task, the training sessions can be provided either at your production plant or at our training facilities.

#### **Objective of training**

By offering the transfer of know-how, we provide you with the certainty that you can assess the performance of your EIRICH technology. Your staff, qualified on the basis of our training, make the most of the potential of the machine or system and therefore create a direct competitive advantage.

#### The EIRICH training program

With the modular training concept and well-coordinated content, EIRICH will help your employees to attain a consistently high level of knowledge.

#### Block 1

Introduction to the basic principles of process engineering interrelationships

#### Block 2

Configuration and function of the system

#### Block 3

Configuration and function of system components/ maintenance and spare parts management

#### Block 4

Introduction to instrumentation and control

#### **Content:**

- Instruction on how to operate the system
- Production monitoring
- Training in process engineering interrelationships
- Presentation of servicing and maintenance work
- Practical maintenance exercises
- Spare parts management, service life assessment

#### **Benefits of EIRICH training:**

- Upgrading of the skills of your personnel, e.g. in the handling of unscheduled machine down-times
- Effective deployment of your machines and systems
- Reduced induction times
- Higher level of work safety

#### Personal benefits for your employees:

- Shared level of team knowledge about the system
- Continuous personal development
- The ability to handle the system effectively leads to increased personal satisfaction
- Sufficient opportunity to ask specific questions



Good to know: We turn training into an experience for your staff and contribute to a lasting improvement in your production quality on the basis of the training.



No matter which components you need for your EIRICH machine or system, be it wear parts such as mixing tools or wall and bottom plates, or seal elements or parts of the drive, hydraulic power unit or electrical equipment - with original parts from EIRICH you are always on the safe side.

#### **EIRICH original parts**

- fit "like a glove" on your machine or system every time and therefore keep downtimes and repair times to a minimum
- are designed for long service lifes and therefore lead the field in terms of comparative costs over the total lifecycle
- help your machine or system to maintain its value
- meet the highest standards in terms of quality

With original parts from EIRICH you will always be sure that you have latest state-of-the-art in technology, because ongoing engineering developments on serial products are also incorporated in the original parts as well.

Optimum consulting and fast, reliable service offer you further advantages:

- Quick turnaround times on spare parts orders placed at short notice
- Express delivery service
- Software solutions for part identification and maintenance strategies





Good to know: When it comes to spare and wearing parts for EIRICH machinery and systems, then it is best to contact us straight away ...



## Wear protection

Machines and systems from EIRICH are used for the toughest of jobs, day in, day out, preparing materials in a great variety of industries such as building materials, ceramics, metallurgy, foundry sand and many more besides. In most cases they involve highly abrasive materials which cause wear.

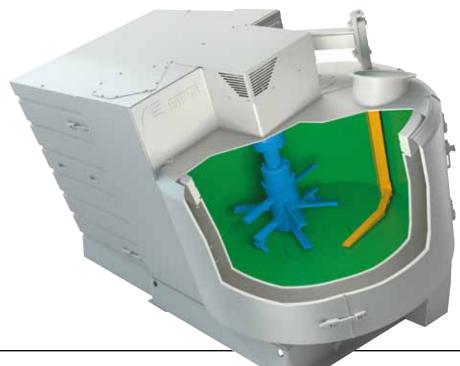
The parts in the mixer which come into contact with the product, in other words

- the mixing tool
- the bottom/wall scraper or the
- lining of the wall and bottom

therefore need to be equipped with wear protection designed for the specific application. If not, there is a risk that the proper operation of the machine will be impaired. Or, in the worst case scenario, the use of the wrong components could have a negative impact on product quality. Wear protection can vary considerably: different types and designs of wear protection are needed to achieve the best possible results, depending on the product material and the degree of stress from impacts and abrasion. EIRICH has decades of experience in the development and use of wear protection solutions.

As a customer, you get the benefit of this know-how in several ways:

- You can always be sure of obtaining the right wear protection solution for your specific application
- Exceedingly long service lifes are assured
- Significantly reduced downtimes and maintenance times
- EIRICH wear parts give you the assurance of unbeatable cost-efficiency when measured over the total lifecycle



## The key components in the EIRICH mixer with wear protection

Mixing tool
Bottom/wall scraper
Wall and bottom





Not every defective machine or system component has to be automatically replaced with a new one. With our "Inhouse repair" service you can call on the services of a qualified team which returns used parts in your machine or system to as-new condition again.

The quality of EIRICH original parts often makes repair the cheapest alternative. The parts are given a general overhaul at the factory, then tested and made available again in as-new quality. We will also gladly handle the complete disassembly and assembly logistics for you as well.

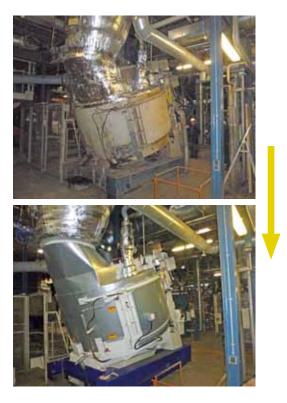
#### Our services at-a-glance:

- Repair of EIRICH original parts with a quality guarantee
- Complete overhauling of functional assemblies and return to as-new condition
- Provision of an acceptance report and test certificate
- Handling of the logistics

#### The advantages to you:

- Reduced costs thanks to re-use of your EIRICH original parts
- Guaranteed quality and production reliability







Good to know: EIRICH original parts repair. Saves money for the same quality!



Our rental unit park featuring a comprehensive selection of machinery and aggregates is a special service that we offer to you.

It includes mixers with effective volumes of 1 I to 750 I, along with molding sand aerators and disk pelletizers or special tools. We will gladly hire them out to you for a period of your choosing. The provision of expert advice on integration in your production flows is for us part and parcel of this service. In this way we provide you with support for a wide range of tasks and requirements.

These can include, e.g.:

- Additional machines are required,
  - to cope with production peaks
  - for the testing of new product developments parallel to production
- On-site trials in order to test product improvements with EIRICH mixing technology in downstream steps of production
- Bridging of the delivery time for a new machine
- Downtime for repair of an existing machine
- Performance of long-time tests for checking the viability of new capital investments





With an EIRICH rental machine you are on the best road to your own EIRICH mixer!



### **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 paste – Battery paste 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 Internet: www.eirich.com



Eirich France SAS Saint-Priest, France



000 Eirich Maschinentechnik Moscow, Russia



000 Eirich Maschinentechnik Dnepropetrovsk, Ukraine



Eirich Machines, Inc. Gurnee, IL, USA



Eirich Industrial Ltda. Jandira S.P., Brazil

Nippon Eirich Co. Ltd. Nagoya, 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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