



## YOUR NEEDS ARE OUR MOTIVATION AND OUR PASSION.

As a highly specialised engineering and manufacturing company, ERDWICH can draw on over 40 years of experience to offer superior services in recycling and shredder technology.

Shredders, custom solutions, turnkey recycling facilities and a global service form our core competences, all supported on a day-to-day basis by our passionate and committed team.

More than 7,500 machines in over 90 countries throughout the world are the calling card for our unique and successful corporate philosophy. This places our customers and their needs at the centre of our decisions and actions — with no ifs or buts. Fairness, honesty and a target-oriented approach shape our work both inside and outside the company. For us, innovation is our daily benchmark. Our long-serving, experienced employees work with our customers to create perfect, customers specific solutions for every application.

Owner-managed with personal, dedicated support, short response times and a comprehensive service portfolio, we give you first-class quality: MADE IN BAVARIA.

## ■ INNOVATION IS OUR WAY OF LIFE

We develop customised machines and systems for every material and volume requirement. Our company does not simply sell a product, but always the technologically and economically best solution - because our goal is maximum customer satisfaction.

## QUALITY MADE IN BAVARIA

Our modular machines and systems impress with their firstclass quality, long service life and low maintenance requirements. Robust, stable, energy-efficient and durable, they epitomise our standards, which have grown from years of experience.

## **■ PERSONAL AND HONEST ADVICE**

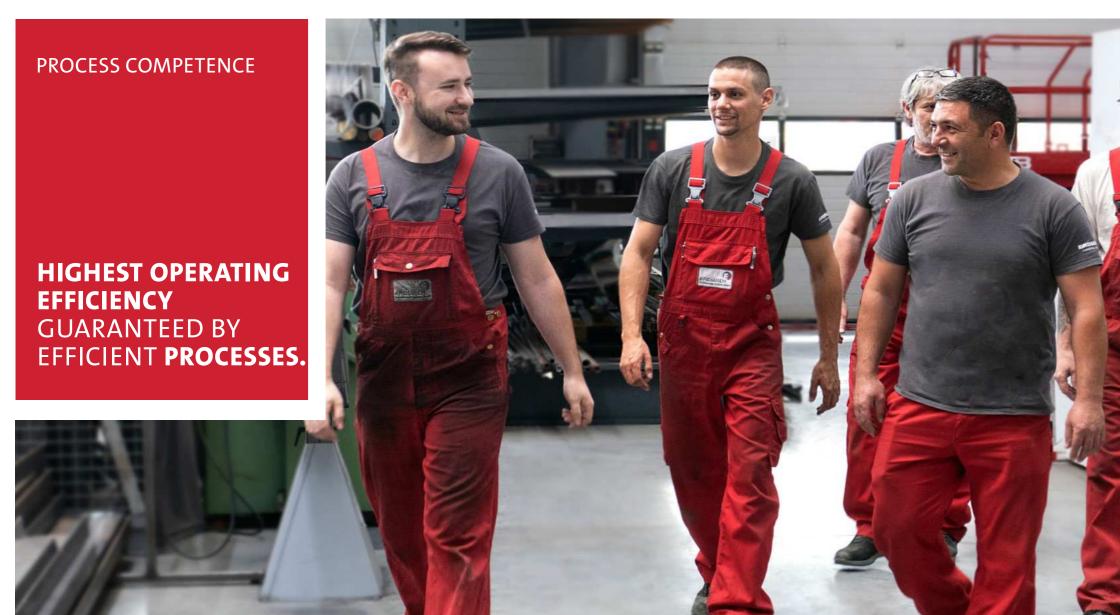
Experienced project managers support you from project planning to commissioning. Honesty, fairness and responsibility form the foundation of our values towards our partners.

## **■ DIRECT MANAGEMENT STYLE**

Flat hierarchies and the high degree of decision-making freedom of our employees promote quick decisions.

## **■ WE ARE PASSIONATE ABOUT SERVICE**

Our service covers everything from your first contact with us to technical support and professional maintenance. We always strive to maximise your satisfaction.



CUSTOMISED ADVICE FOR THE BEST SOLUTION

Our specialists provide you with personalised advice designed to identify a solution perfectly matched to your needs.

#### **LIVE TESTS CREATE CONFIDENCE**

If required, our Test Centre enables us to trial your materials under real-world conditions. This ensures the optimum strategy for your investment decision.

#### SOLUTIONS DESIGNED FOR YOUR SUCCESS

Taking this strategy, we use the latest technology to design and develop an optimum solution from both a technical and economic perspective. And one that is naturally fine-tuned to match your individual needs, protect the environment and conserve resources.

#### YOUR PERSONAL PM IS ALWAYS AVAILABLE FOR YOU

Your personal project manager ensures punctuality and reliability throughout the entire process.

#### **■ FULL OF PRIDE AT COMMISSIONING**

This package of services consists of factory approval, installation, commissioning and start-up support. It also includes test runs, training for your operating and servicing personnel, clearly intelligible operating instructions and spare parts catalogues.

#### WE ARE PASSIONATE ABOUT SERVICE

You can call our Service Hotline to ask one of our highly motivated employees at any time. Our service technicians work day and night to guarantee maximum availability for your plant.

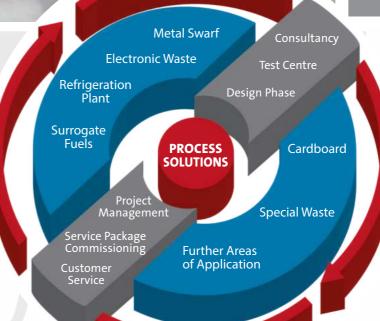
As a manufacturer of shredding machines and recycling facilities, ERDWICH inspires with product solutions that are well known for their sophisticated technology, outstanding quality and unique innovative character.

Yet the secret of our success is not only to be found in our products. It is based on our employees who develop, produce and sell these products. Their satisfaction and expertise are required to produce first-class services for you. The special team spirit and great freedom people experience in our company moves them forward.

Globalisation of the markets increases the complexity of requirements day by day. They demand highly efficient processes, speed and flexibility from all those involved in the market.

We recognised this at an early stage and have interlinked our process steps in such a way that our customers benefit from maximum efficiency. Like a cog in a wheel, each step in the process fits neatly into the next, ensuring the high ERDWICH quality.

Our resulting process solution proficiency guarantees you allround support with uncompromising dependability, first-class functional reliability and punctuality.





DEVELOPMENT AND DESIGN

OUR **EXPERIENCED DESIGN TEAM** DEVELOPS
CUSTOMISED **SOLUTIONS**.



Experience counts. This is particularly true for the development and design of our custom-made machinery and plant solutions.

It also requires employees who develop new ideas into strong innovations as part of a team in a constructive and unconventional manner. Such employees characterise the ERDWICH team, which professionally realises these solutions using the latest 3D-software.

Customised solutions in the best hands.

## **■ CUSTOMER FOCUS RIGHT FROM THE START**

Machinery or plant planning begins with the quotation and joint cooperation with the customer. Every customer enquiry is a new challenge.

## **■ INTENSIVE INTERNAL COMMUNICATION**

Our great success is due to what we have in common. Constant dialogue between Sales, Design and Development allows ideas to mature into innovations.

## ■ INTERNAL AND EXTERNAL PARTNERSHIPS

Our long-service suppliers and partners for plant components are an inherent part of the ERDWICH team. They are just as dedicated to their work as our own employees are.

## **■ HIGH PERSONAL RESPONSIBILITY**

Only a team that can work responsibly and independently can face up to the challenges of the market. The expertise of our long-serving staff allows a more direct management and great sense of responsibility.

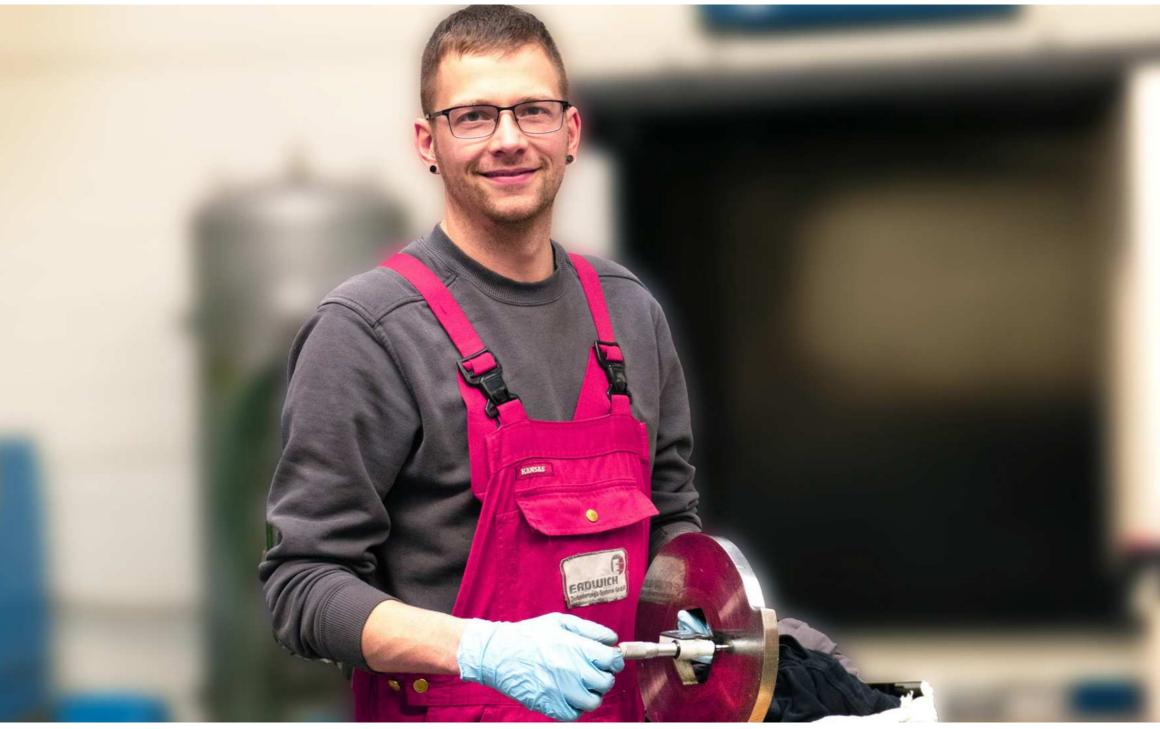
## ■ INNOVATIONS FOR A SUCCESSFUL FUTURE

We develop technologies for the future. We closely monitor the market and consistently align our developments with it. For both individual machines and entire system solutions.

**PRODUCTION** 

OUR PRODUCTION DEPTH ASSURES YOU HIGH FLEXIBILITY AND SHORT REACTION TIMES.





Our company is able to carry out all major manufacturing processes on the premises, thus ensuring that quality and innovation can undergo continual development in a positive process under our responsibility. Production covers machining and the mechanical engineering this involves as well as the manufacturing of plant-specific machine components.

This depth of production also allows us a great degree of flexibility to react quickly to short-term customer wishes. Every machine or system is tested at ERDWICH under conditions and only released for delivery after technical, internal technical acceptance.

ERDWICH is certified to ISO 9001 and 14001.





## AREAS OF APPLICATION

WE DEVELOP THE PERFECT **SOLUTION** FOR YOU. FOR EVERY REQUIREMENT AND EVERY MATERIAL.

















#### **METAL SWARF**

In metal-working shops with swarfproducing manufacturing techniques, the swarf generated is an important cost factor. Machine downtimes caused by swarf blockage is a killer factor for the productivity of any company.

Yet efficient swarf discharge presents a real logistic challenge. Here, company size, the number of machines and swarf volume in particular are the decisive criteria for economic and process-reliable solutions.

## **E-WASTE/REFRIGERATION PLANT/ BATTERY RECYCLING**

The ozone-depleting chlorofluorocarbons (CFCs) and flammable hydrocarbons (HCs) used in PU foam production place particular demands on the recycling processes. Currently, the recovery of hydrocarbons (e.g. pentane) is almost 100%.

An ecologically very attractive approach for the recycling of lithium-ion batteries is the largely mechanical processing of the batteries via shredding, classifying and sorting processes as well as the evaporation of the volatile electrolyte components.

Electrical/electronic appliances, small and large household appliances and circuit boards DDING UNLIMITED also contain valuable raw materials.

## **CARDBOARD**

Every year, Germany produces around 10 million tonnes of cardboard and paperboard for the packaging industry.

To optimise in-house production processes, large-volume, bulky boxes are reduced in volume directly at source once emptied and can thus be passed on to a controlled recycling cycle by downstream presses.

Depending on requirements, different machine sizes are required so that they can be put to optimum use in the production processes of the corrugated cardboard industry.

#### **SURROGATE FUELS**

Analytical shredding systems for QA work are a fundamental preliminary component in the production of surrogate fuels.

Businesses that buy in their surrogate fuel from external suppliers are faced with two key analytical requirements before putting it to use: pollutant analysis and calorific analysis.

To ensure the proper handling of these analyses, a sophisticated sampling system is required.

## **SPECIAL WASTE**

Large quantities of special waste are produced by the pharmaceutical and chemical industries as well as in other industrial operations. Due to the health and environmental hazard presented by such waste materials, they have to be destroyed in special plants or stored in special landfills.

The main objective is to shred this waste to such an extent that it is no longer useful on the one hand and can be prepared perfectly for destruction in high-temperature incineration plants on the other.

## **FURTHER AREAS OF APPLICATION FROM**

The significance of primary materials results in the creation of new areas of application every day. Our technology even covers areas as diverse as dashboards, bank notes, disposable plates, catering waste, bottle closures, plastic containers, milk packaging, oil filters, nappies, cans, packaging of all kinds, cigarettes and much more besides.

There is almost no application we can't find a suitable solution for.

Our specialists are just a phone call away.



## **SHREDDING MACHINES**

INNOVATIVE
SOLUTIONS SET
GLOBAL STANDARDS
IN TECHNOLOGY
AND PERFORMANCE.

#### **SINGLE-SHAFT SHREDDER**

Precise material breakdown in just a single operation.

The material is taken up by the cutting rotor and shredded repeatedly against the stator blade, using the tried-and-tested rotor/stator cutting principle. This continues until the desired size has been achieved.

## **TWO-SHAFT SHREDDER**

Continuous-process shredding of large quantities and volumes.

The secret is our ERDWICH rotor-blade cutting principle, honed to perfection over decades. The material is taken up by the barbed blade, pulled unceremoniously into the machine and then shredded between the blades on the two opposing shafts.

#### **THREE- AND FOUR-SHAFT SHREDDER**

This machine technology is especially suitable for shredding larger quantities or large-volume materials to a defined size.

The cutter shafts and their individual sets of blades rotate at different speeds, so as to continuously pull in and precisely shred the feedstock material.

#### **COARSE SHREDDER**

The slow-running, low-noise twoshaft rotor/shredder system for resource-saving and low-wear material shredding allows resources and pollutants to be salvaged almost undamaged during the subsequent sorting process.

#### **HAMMER MILLS**

ERDWICH hammer mills are the answer to the challenge of selectively shredding hard and brittle materials as well as pelletising rubbery materials as preparation for downstream separation systems.

They are especially suitable for metal, electrical and electronic scrap or swarf from steel, aluminium or other materials.

## **CARDBOARD SHREDDER**

With the EKZ cardboard shredder in different sizes we provide the optimum solution for shredding large-volume cardboard in a reliable process directly at the point where the waste is created.

The FKZ paperboard shredder processes residue from punching machines or corrugated cardboard waste directly at the production line, allowing it to be disposed of directly through existing extraction-based systems.

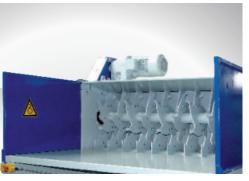














## SHREDDING SYSTEMS

THE EXAMPLES OF OUR **SYSTEM SOLUTIONS**ARE AS **INDIVIDUAL** AS YOUR **REQUIREMENTS.** 













#### **REFRIGERATOR SYSTEMS**

As one of the leading manufacturers with dozens of systems installed around the globe and more than 35 million refrigeration units processed, ERDWICH repeatedly sets standards in this sector.

ERDWICH supplies systems which can handle 15 to 150 refrigerators per hour. They include the automatic pre-dismantling line and the closed-system plant with shredding and separation of the individual fractions without adding liquid nitrogen. The ERDWICH range also includes thermal separation plants for foaming agents.

#### SYSTEMS FOR ELECTRICAL AND ELECTRONIC SCRAP

With its complete plant solutions, ERDWICH has also specialised in recovering valuable primary materials from electronic waste.

The recycling steps cover all the necessary processes.

These include the pre-sorting and selection of valuable primary materials, pollutant decontamination and gentle coarse shredding with material breakdown. Automated separation of the various fractions through to the ultra-fine separation of all the required processes is also a constituent part of ERDWICH solutions.

#### **METAL SWARF SYSTEMS**

ERDWICH can supply both centralised and decentralised solutions for efficient swarf management based on decades of experience.

These solutions immediately lead to greater process reliability for the machine tool and lower transportation costs thanks to the higher bulk weight of the swarf waste.

At the same time, occupational safety is improved and personnel costs for swarf handling are significantly reduced.



It covers all steps from sampling through shredding to a defined particle size through to the automated return of sample waste to the stove feeder system.

#### SYSTEMS FOR SPECIAL WASTE RECYCLING

ERDWICH system solutions range from simple shredding machinery for waste volume reduction through to complete turnkey facilities for shredding and sorting for further processing steps.

They can handle hospital waste, blister packaging, paint and varnish containers, filter dusts, laboratory chemicals and special waste in liquid and paste form. ERDWICH systems can also deal with potentially explosive waste in the form of aerosols and cans, as well as medicines and much more besides.

#### **FURTHER SYSTEMS FROM A-Z**

Tried-and-tested and mature technology is the basis for ongoing further developments of new plant solutions and applications.

Our number one priority is to design systems with maximum operating efficiency and use of energy which are tailor-made to the requirements and wishes of every single customer. This applies to both stationary and mobile solutions.

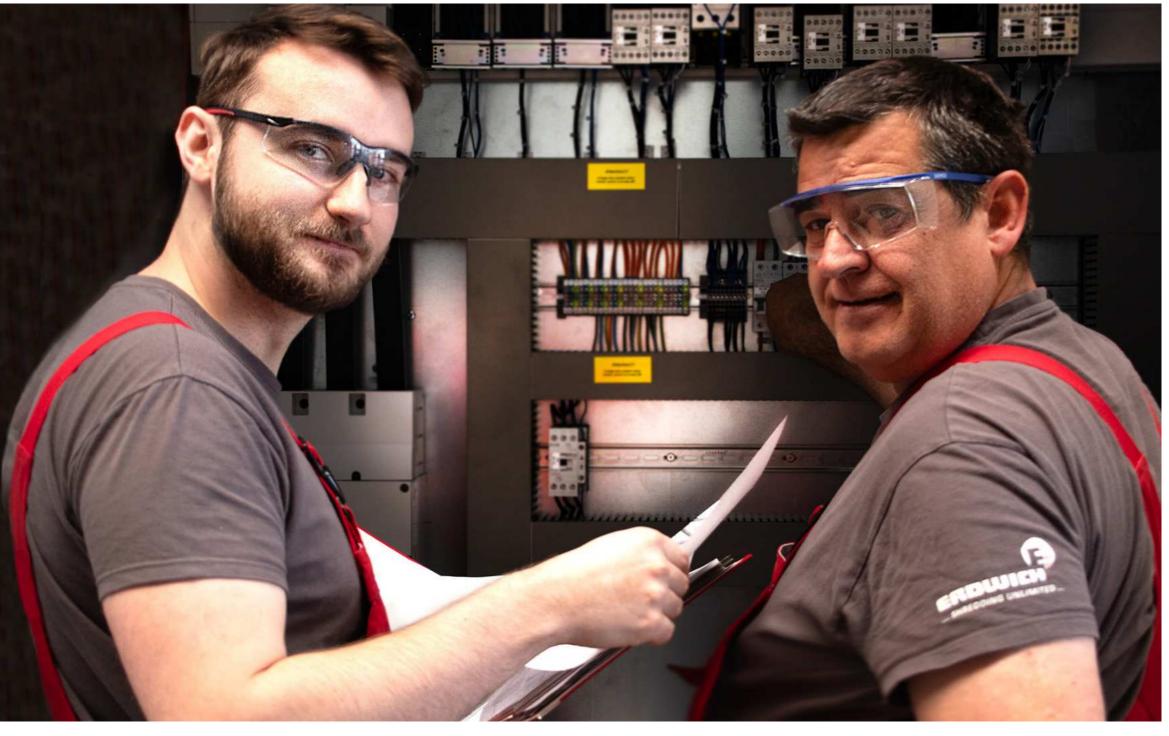
Benefit from our years of experience.



## THE TEST CENTRE

YOUR TEST RUN UNDER **REAL-WORLD CONDITIONS** CREATES A **SOUND INVESTMENT.** 







Testing materials under real-world conditions, performing fine-tuning, exploring alternatives – that is the world of the ERDWICH Test Centre. For you as our customer, this results in a firm foundation for your investment decision.

The ERDWICH Test Centre gives you the full range of our product expertise: single-, two- and three-shaft shredders, coarse shredder, cardboard shredders and hammer mills. The test material can be tipped directly into the chosen machine. To optimise subsequent production quality test results, you can also choose from a broad spectrum of highly varied machine equipment. Pneumatic systems can be used to simulate material separation in individual components during testing, too.

Separate versions of machine controls mean that various running speeds are possible, and key parameters such as power consumption, pressure, reversing behaviour and many more besides can be documented to ensure process quality.

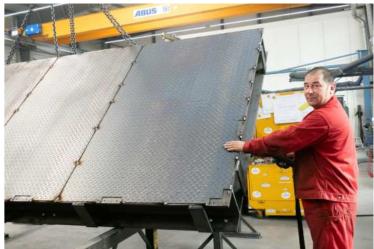
This lets us work with you to achieve optimum reporting on test results, which yields the decisive criteria for the ideal design of your machine or plant.

Video and photo documentation, films and test logs all play their part in generating ample evidence for reporting on individual test runs.



**WORLDWIDE SERVICE** 

**ERDWICH** AND ITS **PARTNERS** ARE AT HOME **IN MORE THAN 90 COUNTRIES**.



As a long-standing, successful manufacturer of machinery and plant, our own experience reminds us of the importance of sincere, high-quality and lasting service.

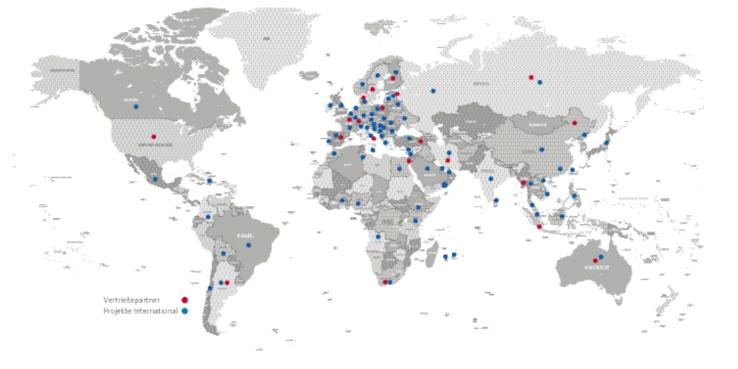
Whether factory approval, installation, commissioning or start-up support – we handle the details. Our service also includes all test runs, training for your operating and servicing personnel, clearly intelligible operating instructions and spare parts catalogues.

Thanks to our rapid logistics network, our spare parts service is just as first-rate as our service technician support — available on site at short notice.

Our global partners have received intensive training and provide perfect on-site maintenance and service completely in tune with our corporate philosophy.

ERDWICH machinery and plant do their best day in, day out, 94 countries around the world.

ERDWICH Service.
When you need us, we are there for you – worldwide.





# ALL OF YOUR REQUIREMENTS ARE IN EXPERT HANDS WITH US.

Owner-managed with personal, dedicated consultation, short response times and a comprehensive service portfolio, we provide you with first-class quality Made in Bavaria.

We are ready for your challanges. Let's meet and find out.

## **WELCOME TO ERDWICH**

## **ERDWICH ZERKLEINERUNGS-SYSTEME GMBH**

Gewerbestrasse 6 86859 Igling Germany

Tel.: +49 (0)8191 - 96 52 - 0 E-Mail: infoline@erdwich.de





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