

... SHREDDING UNLIMITED

Strong, solid, reliable -

effective state-of-the-art technology

ERDWICH shredders

Competence through strategy

Single-shaft shredders Two-shaft shredders Three-shaft shredders Cardboard rippers Bulk waste shredders

Shredding and recycling – ERDWICH offers maximum benefit

Beverage cans of all kind bulk and commercial waste Laboratory and analysis materials Magnetic tapes and data carriers Metal and plastic containers Metal shavings of all kind Municipal refuse king materials of all kind Paper and cardboard articles Plastic and foil refuse duction waste of all kind rators and chest freezers Rejects **Screenings** passenger cars and trucks) Waste of all kind

and much more

Whether in industry or in disposal companies - when it is a matter shredding and recycling, ERDWICH is the best address. For we hav clear strategy for maximizing your benefit:

As the core of our "hardware", our 1-, 2- or 3-Hardware core compe shaft shredders and our highperformance granulators assure

an efficient breaking-up of materials – as single machines or integrated into complete shredding and recycling plants.

And they are the "hard core" of our worldwide proven ERDWICH recycling and shredding technology. For shredding, separating and recycling reusable and non-reusable waste.

(= proven shredding machinery + plant components produced by + Software core com (= innovative engineering + professional projekt manage + service) + Specialist pool (= Integration of renowned = Your maximal u

Whether swarf, domestic appliances and electronic scrap accordin WEEE, biologically contaminated materials, tires, goods in bales, ind refuse of all kind, commercial waste, special waste and much mor ERDWICH shredders are the best choice.





Single-shaft shredders

Two-shaft shredders

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Proven ERDWICH shredding technology for your customer-specific solution.

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ERDWICH single-shaft shredders - an all-rounder for defined sizes of piece.

For shredding to exactly defined sizes of piece, the ERDWICH single-shaft technology represents the sophisticated and economic solution.

The effective, thousandfold proven rotor – stator cutting principle with sieve below for defining the size of piece reduces the materials exactly in a single-pass operation. The material is grabbed by the cutting rotor and is cut repeatedly at the stator until the desired size is reached and is discharged through the perforated sieve mounted under the machine.

Due to their space-saving construction and their variable drive concepts with rotation speeds specially adapted to the material, these solid, highly efficient shredders are the all-rounders for universal fields of application.

The advantages of the single-shaft technology in detail:

- individually inserted, removable knife disks on the cutting rotor
- knife disks with overcut for a better distribution of the materials over the whole cutting rotor - no coiling around the rotor (self-cleaning effect)
- possibility of individual insertion of the knife disks on the cutting rotor owing to an asymmetrical arrangement of the hooks
- **fully hardened knives which can be** reground several times
- reversible stator knives
- ideal cutting geometry owing to a special arrangement of the angles between rotor and stator knives
- quickly replaceable cutting rotors and sieves
- sieve segments with individual hole geometries, adapted to the specific materials
- **barrier wall system integrated in the** housing of the cutting gear, for protecting the shaft bearings



Single-shaft shredder mounted on a base plate



Quickly replaceable cutting rotor



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Exact rotor-stator cut

ERDWICH single-shaft technology – thousandfold proven precision for a well-aimed breaking-up of materials.





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Plant for shredding and separating solid and liquid matters





ERDUICH

Variable sieve hole geometry

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Versatile and powerful - the ERDWICH two-shaft shredders can smash anything.



Stripper segment



When continuously shredding large quantities and volumes or when pre-shredding is required for further procedures, there is no alternative to the ERDWICH two-shaft technology.

It is based on the proven and strong rotor-shearing cutting principle of long standing from ERDWICH, the most implemented of its kind.

The material is seized by the hooks of the knives, pulled in and cut between the knives of the two opposed shafts. The two strong cutting rotors master all materials, even if difficult to shred or large and voluminous. ERDWICH power which is convincing.

Strong technology for strong performances:

- individually inserted removable barrier walls for protecting the knife disks made of special knife steel
- fully hardened knives for long service lives and repeated regrinding
- variable knife shapes and cutting edge widths for all requirements
- smallest cutting gap for powersaving cut without jamming effect
- Iarge-scale, precision milled hexagon knife shafts made of high-quality special steel

- shaft bearings from liquid or aggressive agents
- compact, torsion resistant cutting gear housings
- **rounded side panels which are** adapted to the knife radius for reducing the strain on the shaft
- stripper segments located at the housing sides - best selfcleaning effect
- mechanical or hydraulic drive concepts for special requirements



No material we cannot master profit from our experience of more than 30 years of shredder technology.







Plants for shredding special waste

7

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Hydraulically driven machine

Competence through strategy Single-shaft shredders Two-shaft shredders

Three-shaft shredders

Granulators Cardboard rippers Bulk waste shredders

Shredding coarse materials evenly – with the 3-shaft technology from ERDWICH.

For the defined shredding of voluminous and massive materials required for further operating or processing procedures, ERDWICH has developed the 3-shaft technology. It is based on the proven rotor-

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shearing cutting principle of the 2-shaft technology.

Due to the different speeds of the three cutting rotors and to variable knife equipments, the materials are continuously pulled in and shredded – no jamming, no blocking.

Materials which are too voluminous are cycled by the overhead transfer shaft to the knife shafts below for further shredding. This circuit is repeated until the defined size of piece is reached.

The size of piece is determined by perforated sieves mounted under the machine through which the materials drop and are discharged after shredding.

Three shafts - an optimal result: Exactly defined sizes of piece.



Centralized swarf shredding plant

State-of-the-art technology for defined size reduction:

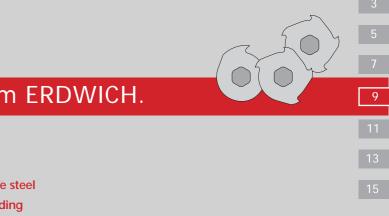
- individually inserted removable knife disks made of special knife steel
- fully hardened knives for long service lives and repeated regrinding
- smallest cutting gap between the knives for power-saving cut without jamming effect
- Iarge-scale, precision milled hexagon knife shafts made of high-quality special steel
- compact, torsion resistant cutting gear housings
- rounded side panels which are adapted to the knife radius for reducing the strain on the shaft
- overhead transfer shaft for optimal selfcleaning effect
- separated drives for cutting rotors and transfer shaft
- sieve segments with individual hole geometries, adapted to the specific materials, mounted in a central, tilting sieve basket





Tilting perforated sieve basket

Indispensable for exact procedures – the powerful ERDWICH 3-shaft shredders.



Shredding system for flooring materials



Competence through strategy Single-shaft shredders Two-shaft shredders Three-shaft shredders

Granulators

Cardboard rippers Bulk waste shredders

Effective reprocessing of reusable waste – of course with ERDWICH granulators.

Granulators - the ideal technology for the concept of several machines in a line or for use as a single machine especially for plants for effective recovery of reusable waste. The efficient gate shears principle guarantees the defined size reduction of various materials in a single pass.

Tires, cables or electronic scrap (WEEE), aluminium, shredder light fraction (SLF), oil filters, etc.

Rotor and stator are equipped with high quality solid knives. The material is cleanly sheared off between rotor and stator – a defined granulate is formed by the perforated sieves mounted below the rotor. The highly efficient gate shears principle works with very small cutting gaps - a precondition for optimal performances and best separation of materials.

Different variants of the equipment for the gate shears principle allow the preparation of a variety of different granulates, depending on the material.

Owing to their solid construction, the granulators from ERDWICH have extremely long service lives. Quality which makes the point.

Proven granulator technology which pays off:

- knives made of high-quality shears steel
- highest precision due to smallest cutting gaps up to <0,1 mm **ideal disposition of rotor and stator for optimal separation results**
- knives fourfold reversible on rotor and stator, easy to replace
- **supplement for wear within the cutting system**
- patented protection system relating to the cutting gear being blocked by foreign materials
- quickly replaceable perforated sieve/grid system
- very heavy duty, torsion resistant housing construction
- throughput rates of up to 10 to/h

with varying materials

electric or hydraulic drives with rotation speed control



Versatile perforated ieve system







Quick knife replacement



No one shreds finer - the strong granulators from ERDWICH.





Tire processing plant

11

13

15



Heavy disk flvwheel



Competence through strategy Single-shaft shredders Two-shaft shredders Three-shaft shredders Cardboard rippers

Bulk waste shredders

Not a house of cards - the versatile cardboard rippers from ERDWICH.



Printing houses Cardboard and corrugated board factories Wholesales markets Mail-order firms Goods distribution centres Sorting offices

When roughly shredding voluminous cardboard articles and waste consisting of corrugated board, the cardboard rippers from ERDWICH are in their element, either as a preliminary stage for subsequent continuous recycling processes or for the optimal pressing efficiency of pressing systems.

The material is fed manually or via a conveying system into the machine. The slow-speed draw-in rotor seizes the material. The faster running ripping rotor equipped with flail type ripping elements shreds it between the two rotors.

The different sizes and equipment variants of our rippers are suitable for a huge spectrum of applications and are readily adaptable to individual customer requirements.

ERDWICH "Hedgehog" -

fine ripper for defined size determination of pieces suited to trouble-free vacuum extraction directly from the material output station. Ideal for cardboard waste coming from production machines or automatic punches.



Fine ripper



Draw-in knife

Individual and versatile:

- various implementation possibilities for different types of material feed
- screwed and bolted draw-in and ripping elements made of wearresistant Hardox steel
- space-saving owing to a compact construction
- chain transmission for adapting speed to the material being processed

Assembly variant for material feed from above

Rough ripping or extractable fine ripping the machines from ERDWICH optimise your recycling processes.



13





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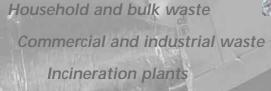
ERDWICH bulk waste shredders – patented technology for high throughput rates.

Endless piles of rubbish - ugly, but hard to avoid. No problem for the bulk waste shredders from ERDWICH. Wherever large quantities of industrial waste as well as bulk and household refuse have to be disposed of rapidly, they unremittingly do their job - with powerful forward and reverse cutting tools. The best precondition for quick further processing or disposal of the bulk waste.

Thus, the ERDWICH bulk waste shredders more than satisfy the requirements of municipalities for highly efficient treatment systems for municipal refuse. In daily use as bulk waste shears before processing in incineration plants, for disintegrating bales and for processing at waste collection sites.

The core of our bulk waste shredders is a patented cutting system consisting of axially coupled knives. Counter-blades located at the side panels and on the support in the middle of the cutting gear allow the shredding procedure to occur alternately at both sides of the knives, however never at the same time. In this way, the power required is considerably reduced – an optimal size reduction with high throughput up to 80 t/h is reached.

Therefore, ERDWICH bulk waste shredders are unquestionably the first choice for efficiently reprocessing large quantities of waste.







Shaft bearings located outside

Battle against the mounds of rubbish - ERDWICH shredding unlimited.



15

Shredding system for bulk waste

- Robust, patented technology which meets every challenge:
- uniform wear of the tools owing to the patented cutting system
- individually removable knife disks no welded shafts
- **cutting procedure running forward as well as reverse**
- separate hydraulic drives for each shaft for individual speed control
- **shaft bearings located outside for protection from foreign materials**





We care – the "Care"-package!

ERDWICH is a medium size company "par Excellence": run by the owner, uncompromisingly customer-oriented, innovative, flexible, quick, reliable and friendly.

Your satisfaction requires more than a mere leading edge technology. From the first contact through to the problem-free daily use of your equipment – we care for you. Trust our "Care" package for an all embracing care and service:

The ERDWICH "Care" package:

- **problem solution on a partnership basis**
- **test runs in testing institutions**
- professional project management
- trial runs

16

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- operation and maintenance training
- initial use support
- comprehensive technical documentation
- **customer service and help line**
- inspection and maintenance contracts
- machine leasing centre

More than 5000 shredding systems and plants in over 70 countries worldwide prove our efficiency. We pursue many paths to the one goal: to provide the best solution for each individual customer requirement. Put us to the test.



Ask for our detailed information or demonstration videos. In the download area of our homepage, you will find our thematic brochures:

- Image brochure the ERDWICH profile
- **ERDWICH** swarf logistics
- ERDWICH recycling plants for electrical and electronic scrap
- ERDWICH TWIN-STER sterilisation plants



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ERDWICH – innovative solutions in shredder and recycling technology.