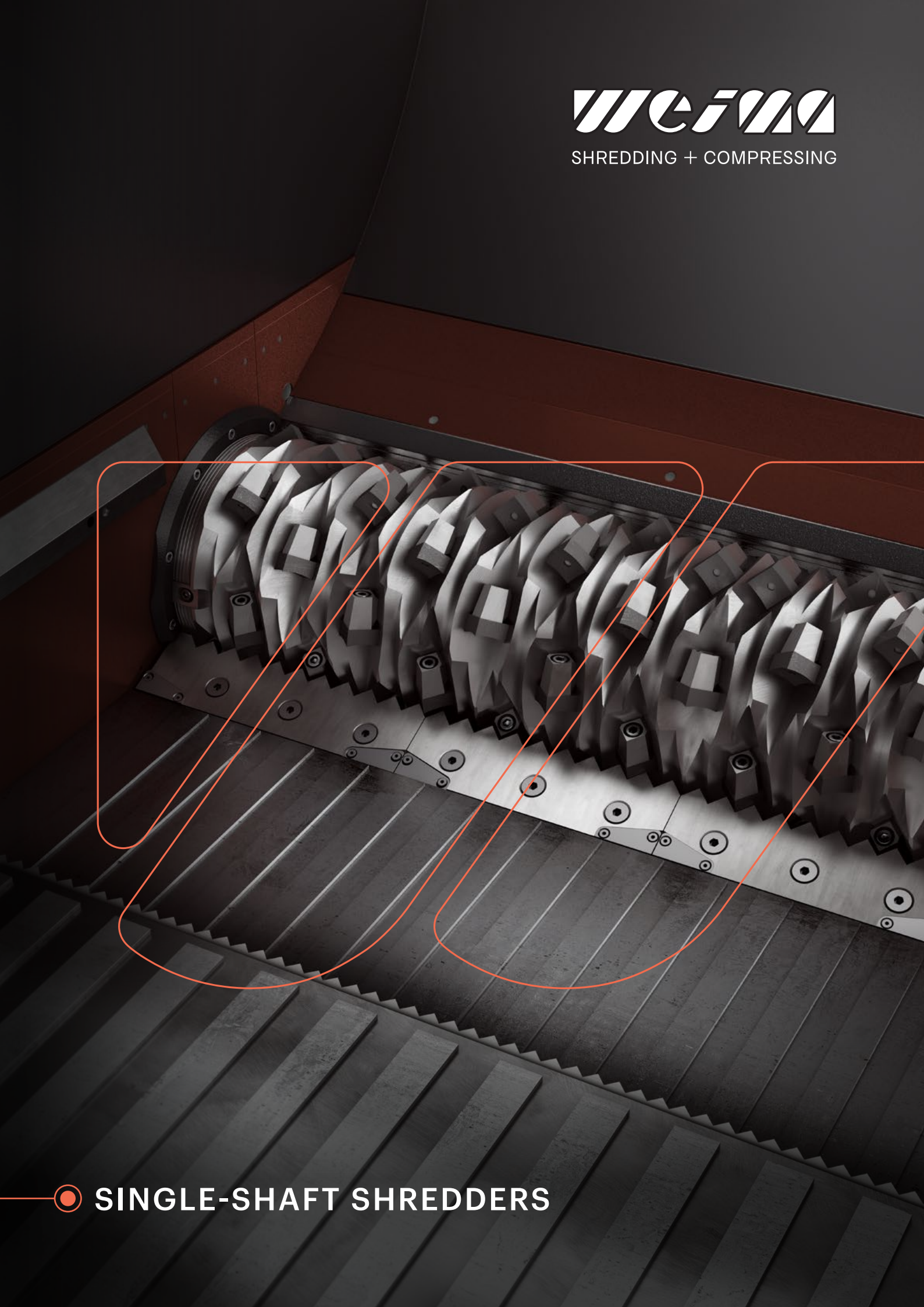
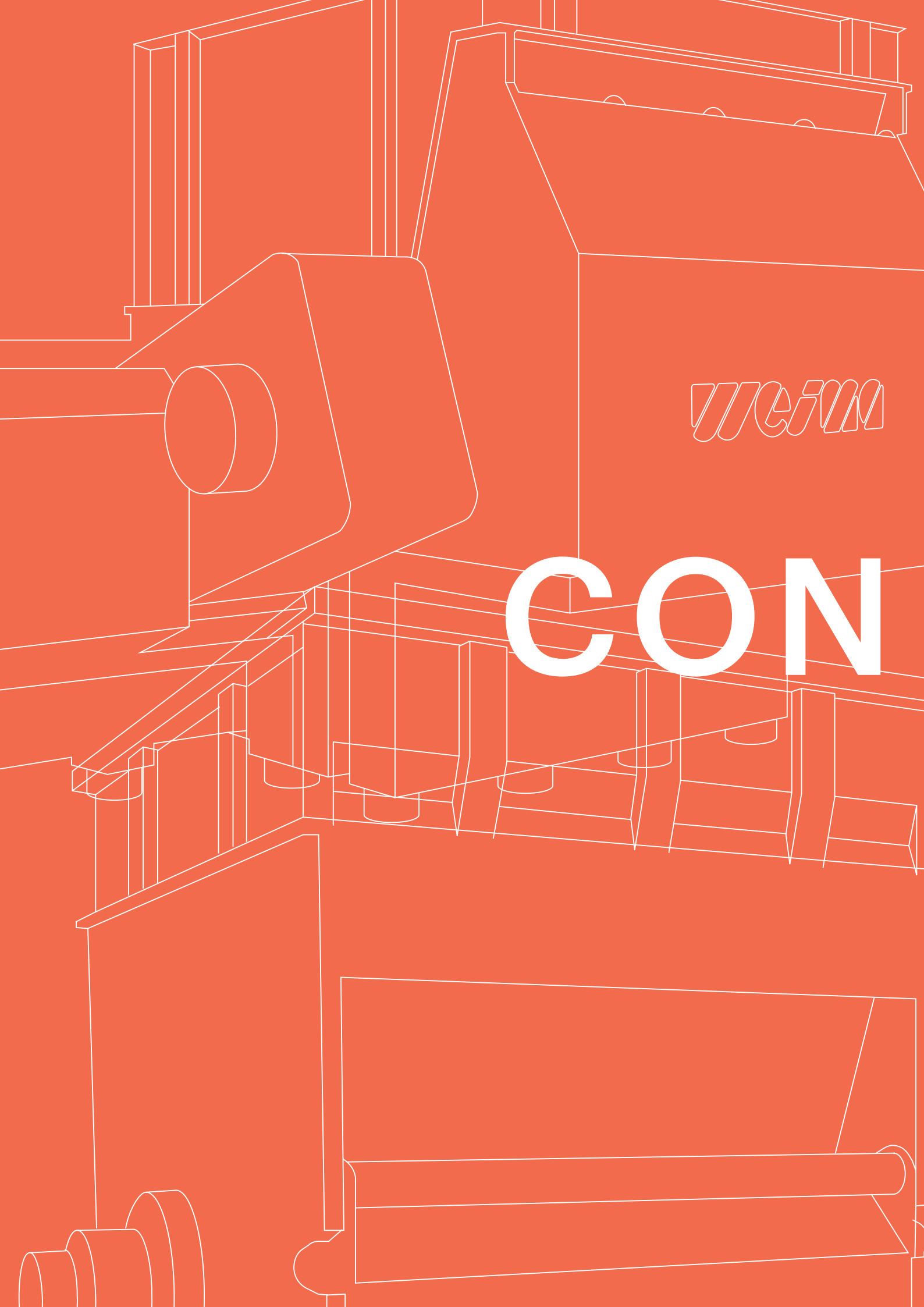
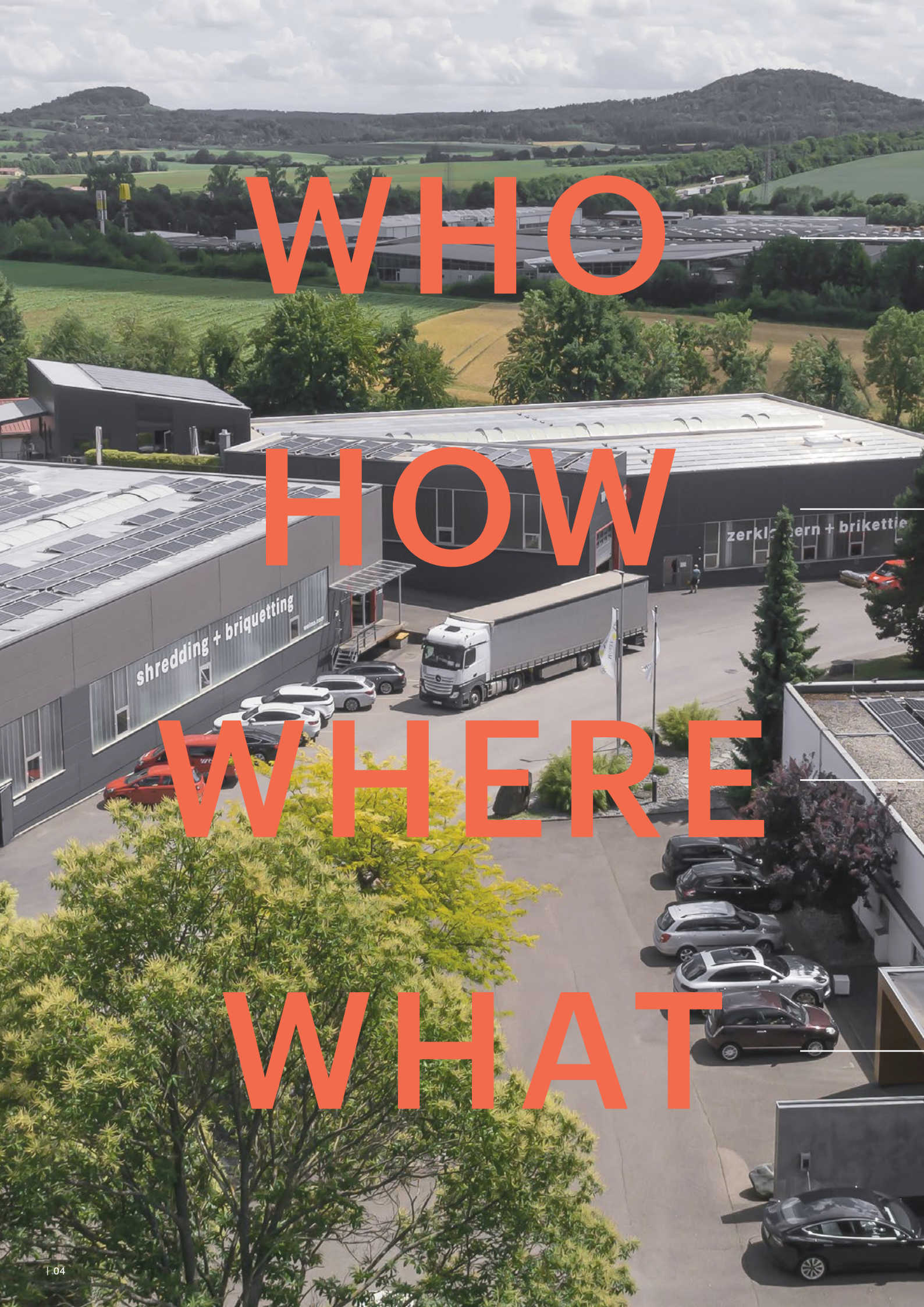


SHREDDING + COMPRESSING

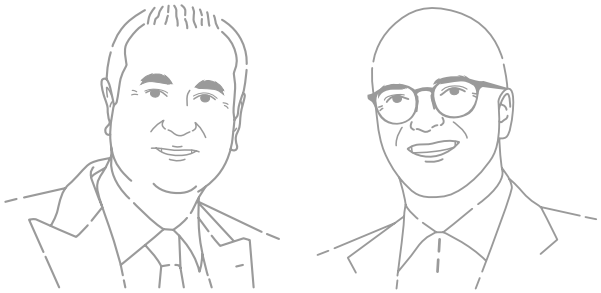
# SINGLE-SHAFT SHREDDERS


CON

# TENT

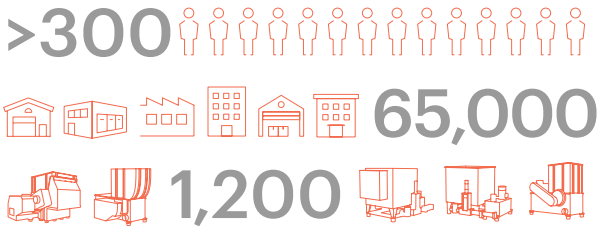



# WHO
# HOW
# WHERE
# WHAT



**The family business.**

The young entrepreneur and visionary, Peter Rössler, recognized the potential of waste recycling early on and founded Weinsberg Maschinenfabrik – or WEIMA for short – in 1980. After the turn of the millennium, Martin Friz succeeded in bringing about the generation shift and has now been running the business since 2003.



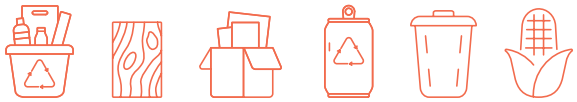

**Global leader.**

WEIMA produces more than 1,200 shredders, briquetters and drainage presses per year on a production area of approx. 65,000 sqm with more than 300 employees worldwide. Since its foundation, about 40,000 machines have been delivered worldwide.


**Built in Germany, made for the world.**

Thanks to the early international orientation, WEIMA is represented in all important markets. Sales and service locations are located in Europe, the USA, China and India.

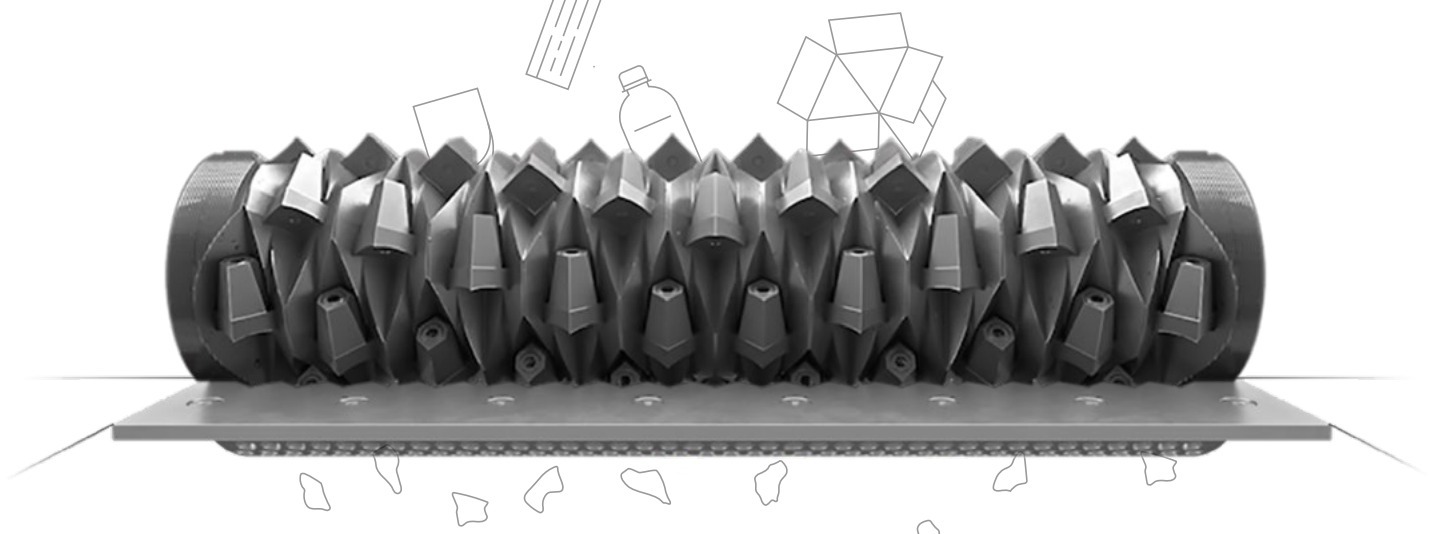
1. Ilsfeld | HQ (DE)
2. Annaburg | Production (DE)
3. Abstatt | Production (DE)
4. Fort Mill | Sales & Service (US)
5. Yantai | Sales & Service (CN)
6. Ahmedabad | Sales & Service (IN)



**From trash to treasure.**

With WEIMA machines there are (almost) no limits. For over 40 years, we have been shredding and compressing production waste from a variety of industries, including plastics, wood, paper, metal, packaging, waste and biomass.

# WE MAKE IT SMALL.



WEIMA SHREDDERS ENSURE THAT EVERYTHING THAT GOES IN COMES OUT IN SUCH A WAY THAT YOU ACHIEVE THE MAXIMUM ECONOMIC BENEFIT, WHETHER FOR SORTING, CLEANING, TRANSPORTING OR FURTHER PROCESSING.

## REDUCE. REUSE. RECYCLE.

WEIMA stands for active environmental protection and for robust shredding technology that's "Made in Germany". Our machines lay the foundation for a resource-saving future and are at the beginning of many recycling processes.

## AN APPRECIATION FOR WASTE MATERIALS

As a recycling specialist, we see it as our duty to contribute to a clean planet. WEIMA shredders, granulators, briquetting and drainage presses are thus becoming ever more sophisticated, productive, and above all – energy-efficient.

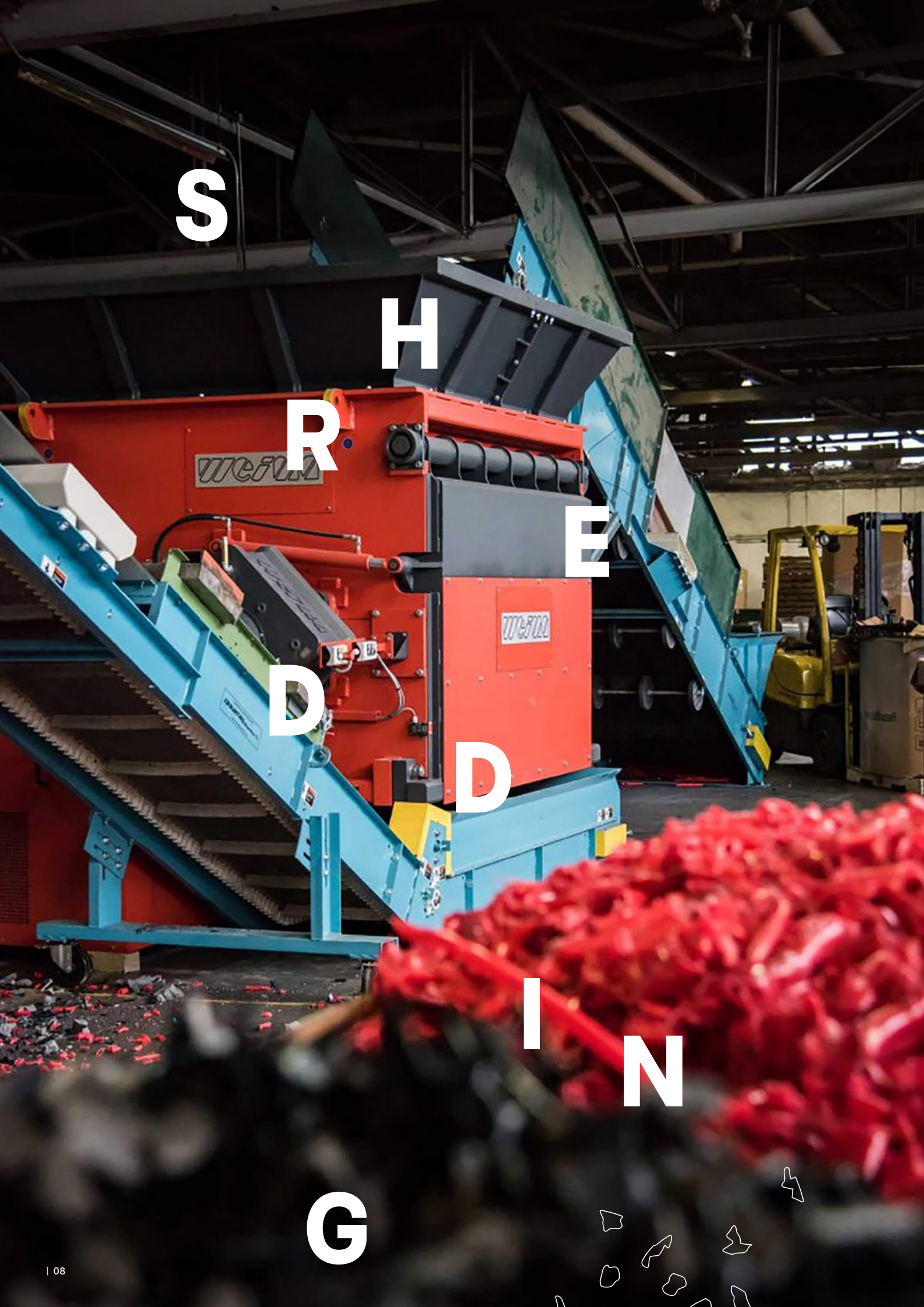
## SUSTAINABLE FOR INDUSTRY AND TRADE

The wide selection of machines and options gives WEIMA a decisive advantage: instead of one-size-fits-all solutions, we work with our customers to develop the right machine or system solution for each waste task.

## DID YOU KNOW?

The Destroy Responsibly™ program, active since 2009, makes trade shows and other events more environmentally friendly. A fully functional shredding line recycles waste where it is generated: directly on the event site.

**Learn more**


SHREDDING

# APPLICATIONS SHREDDING

## Plastics

With many thousands of plastic shredders delivered, there are hardly any applications that we have not already processed. These include classic items such as purge, crates, pallets, pipes, containers, molded parts, and post-consumer waste such as PET bottles or packaging. But also particularly tear-resistant materials such as rubber or films made of BOPP, as well as fabrics and fibers.

> "With the high volumes of plastic waste in the world, sustainable disposal concepts are particularly important, and shredding is the foundation for this."
>
> *Gunter Schippers,*
> *Business Development | Plastics at WEIMA*

# APPLICATIONS SHREDDING

## Wood

If you want to generate energy from your waste in an environmentally friendly way, utilize wood as a raw material. The wood waste, which is shredded into grindings, can be used for direct heat generation in wood burning oven or for the production of briquettes.

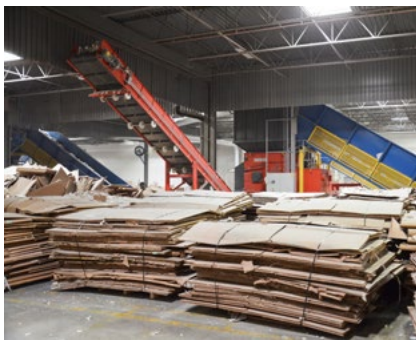
Typical applications include hard and soft scrap, old wood, OSB and MDF scrap, veneer, plywood, stairs, doors, and pallets. And don't worry, nails and screws are simply shredded as well. Later, they can be conveniently separated by means of a magnet.

"The first WEIMA shredders of the 1980s were used for wood applications. Since then, a lot has happened in technical terms. We have now become an expert for the associated conveying technology as well."

*Fred Haller,*
*Business Development | Wood at WEIMA*

## Paper and cardboard

Alongside metal and plastic, pulp is a key pioneer of recycling – and it's more important than ever. In times of booming online trade, the sustainable disposal of corrugated cardboard is becoming more and more important. The most common applications include waste paper, documents, paper rolls, cardboard, filter paper, labels, cores, books and packaging.



## Waste and substitute fuel

Whether as a stand-alone solution or firmly integrated into a production line – thanks to innovative drive concepts, WEIMA is a full-range supplier for the single-stage as well as multi-stage processing of all types of waste.

Robustly designed pre- and post-shredders effortlessly shred industrial and commercial waste, municipal waste as well as bulky and household waste. The output material is ideal for producing high-calorific refuse-derived fuel (RDF).

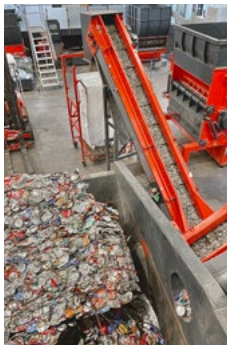
## Metal

Before bulky metal chips, milling waste, foil, cans and punching waste can be processed further, they usually have to be shredded to a homogeneous material size.

This works best with light metals such as aluminum or magnesium, but also with copper, brass and even smaller saw or milling scraps from steel.

**DID YOU KNOW?**

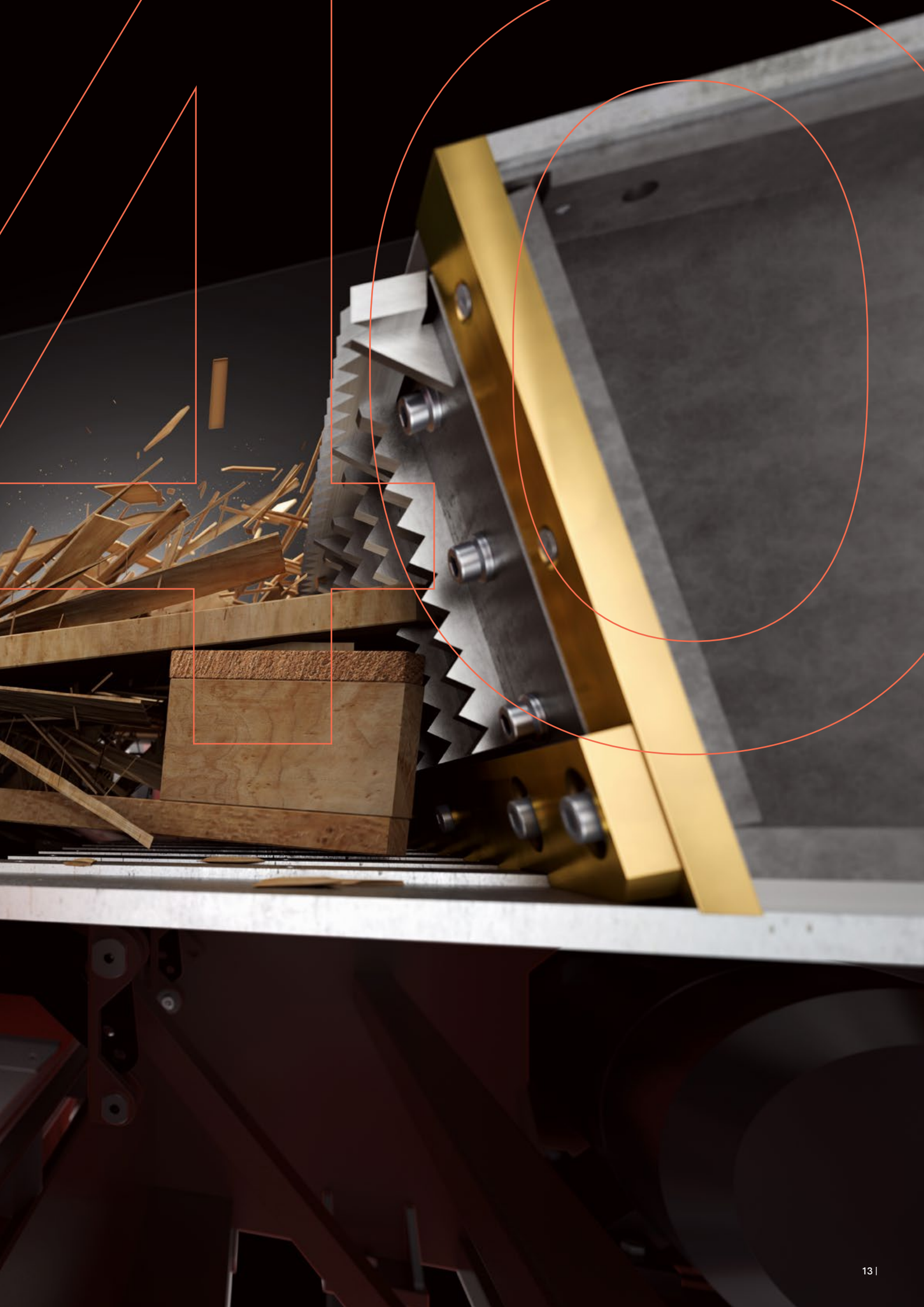
In Germany, the recycling rate for aluminum beverage cans is a whopping 99%.



# SHREDDING TECHNOLOGY MADE IN GERMANY

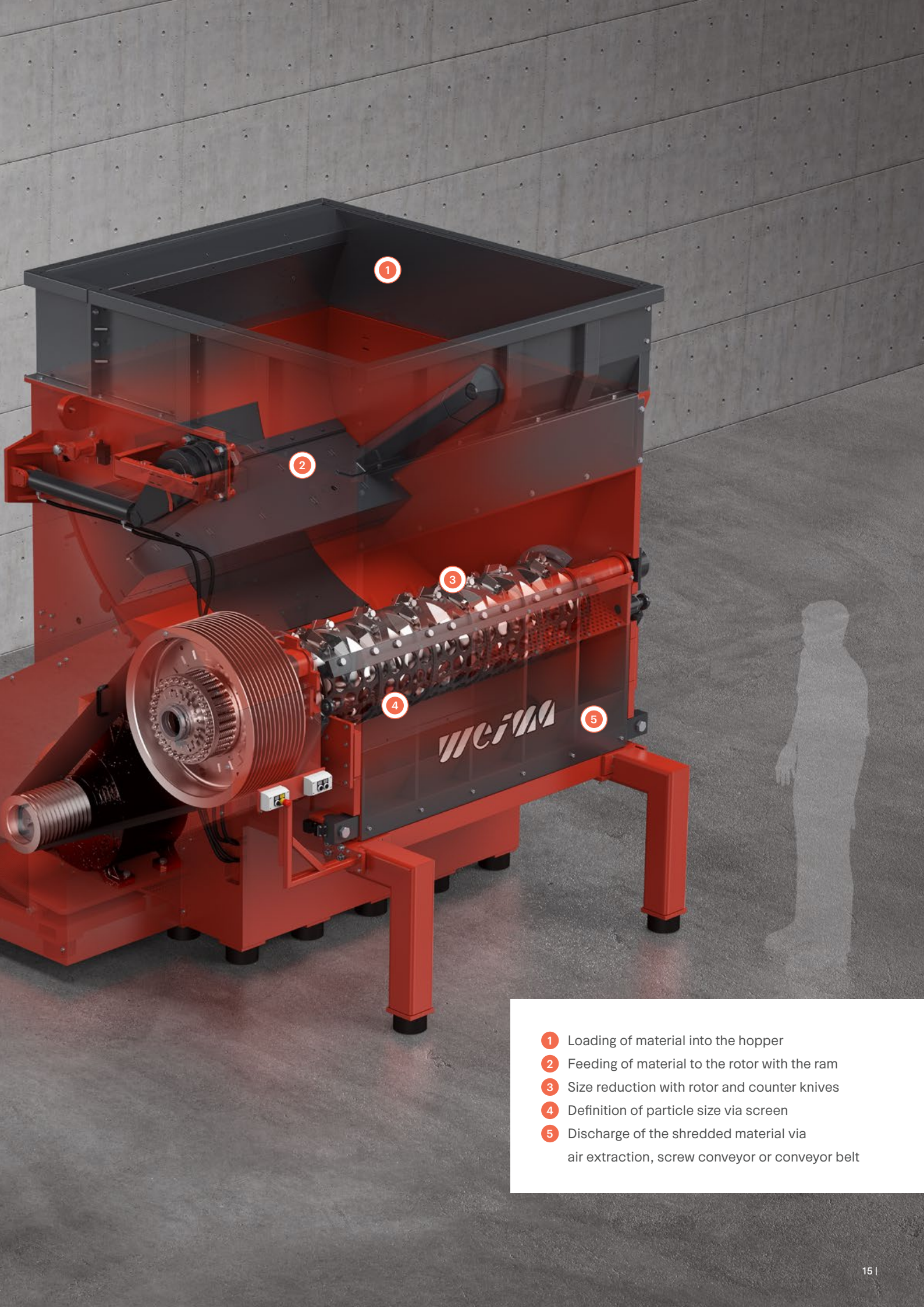
At WEIMA you get everything from a single source: planning, design, machine, control cabinet, control, software, conveyor technology, support, maintenance, wear parts and spare parts. We make all this and much more possible with

**40 YEARS OF RECYCLING KNOW-HOW.**



# TECHNOLOGY SINGLE-SHAFT SHREDDERS

Maximum robustness and the highest precision – WEIMA shredders prove day in and day out to operators all over the world that this balancing act is possible. Whether compact machines that have been sold thousands of times over, such as the WL 4, or huge high-end shredders like the W5.18 – our shredders work according to the same principle.



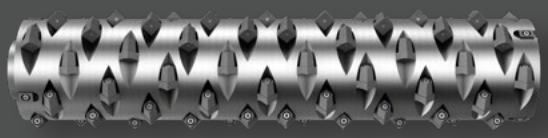

1. Loading of material into the hopper
2. Feeding of material to the rotor with the ram
3. Size reduction with rotor and counter knives
4. Definition of particle size via screen
5. Discharge of the shredded material via air extraction, screw conveyor or conveyor belt

# ROTOR AND CUTTING TECHNOLOGY

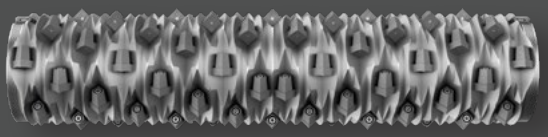
To achieve the desired result from a shredder, it's important to select the right combination of rotor, knives and counter knives. Selecting the right specifications for each material type requires a high degree of experience.

## ROTOR

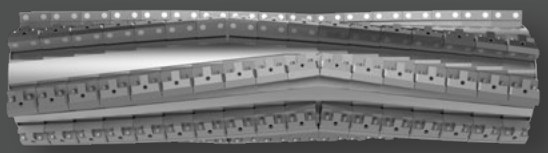
No two applications are alike. But one thing remains: the rotor is the heart of the shredder. It is fitted with cutting blades and, depending on the material and the machine, rotates between 30 and 400 revolutions per minute.



**F rotor**
*Controlled feed behavior, ideal for flexible materials such as filaments, films or fiber*



**V rotor**
*Universally applicable and resistant to foreign materials*

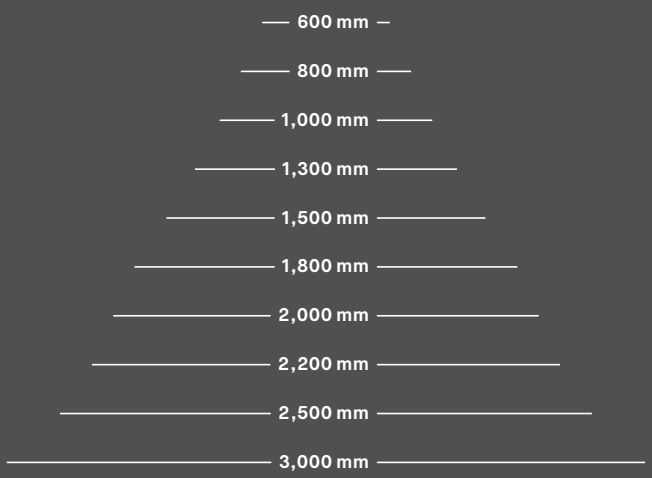


**FineCut rotor**
*Specifically for secondary shredding, high speed, ideal for RDF*

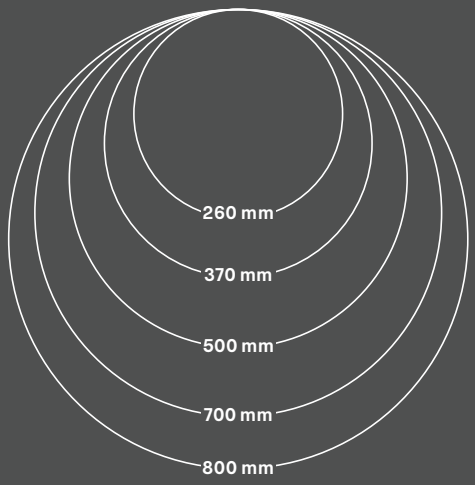
**EXPERT TIP**

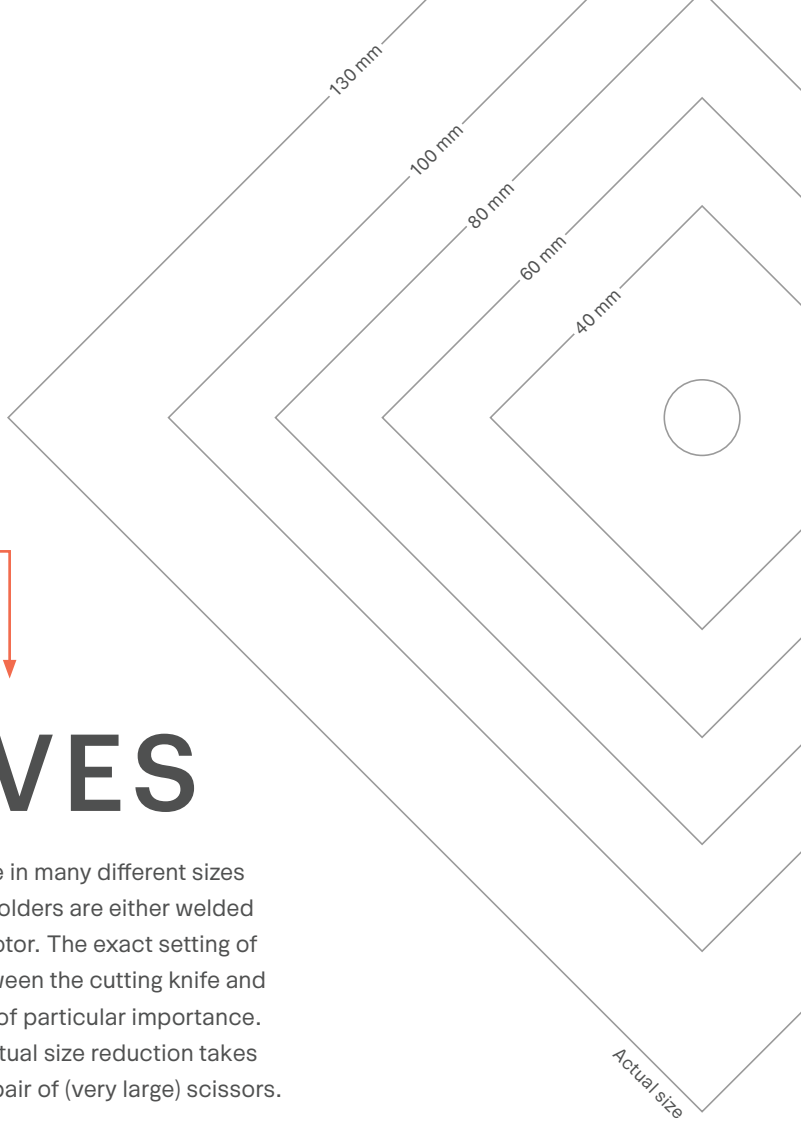
For particularly abrasive materials, we recommend wear protection made of Vautid.

### Overview rotor lengths



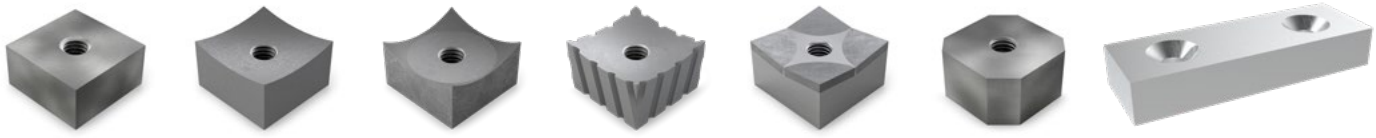

### Overview rotor diameter (cutting circle)






# KNIVES

Cutting knives come in many different sizes and shapes. Knife holders are either welded or bolted onto the rotor. The exact setting of the cutting gap between the cutting knife and the counter knife is of particular importance. This is where the actual size reduction takes place – similar to a pair of (very large) scissors.



**Flat**
*For material with adhesives*

**Concave**
*For standard applications*

**Extra concave**
*For blow-molded materials*

**CrossCut**
*For a finer cut*

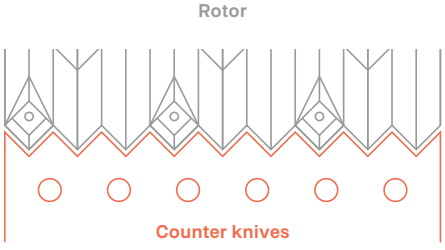
**Carbide**
*For significantly longer tool life*

**Trapezoid**
*For extreme applications*

**FineCut**
*For secondary shredding*

## Counter knives

While the rotor cutting knives rotate, the counter knives in a shredder are firmly bolted into the cutting chamber floor. Many variations are reversible. Optionally, the cutting gap can be variably adjusted. This is ideal if readjustment is necessary due to wear. In this way, the throughput remains constantly high while minimizing wear. Choosing the right counter knife design depends on the material and the desired throughput.




# SCREENS

The screen mounted below the rotor defines the material size (particle size) that will result from shredding. As a rule, the larger the holes, the coarser the shredded material.

## Round hole

The classic standard screen is universally applicable for almost all types of material.

**10 – 150 mm diameter**

The extended hole area (more holes per $m^2$) increases the throughput. The honeycomb screen structure is particularly stable.

**20 – 150 mm wide openings**

## Honeycomb

### DID YOU KNOW?

Modelled after nature – the bionic design of the honeycomb screen was inspired by dimensionally stable honeycombs.

## Zigzag

Designed for special applications in the plastics sector, the zigzag screen is ideal for shredding film, big bags, and tear-resistant fibers.

**25–80 mm web width**

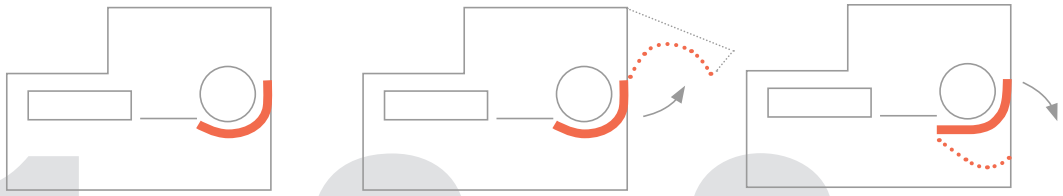
## Kidney

The characteristic kidney shape minimizes clogging in flat, 2D materials and is therefore widely used for shredding industrial waste.

**50–250 mm diameter**

### Screen mounting options

Whether a screen access should be bolted to the frame, swing upwards, or swing downwards, is closely linked to the maintenance of the machine. There are individual advantages when changing screens and cutting knives, or for cleaning. As always, the respective application defines the configuration.



1 **Bolted screen**
*Screen is firmly bolted to frame*

2 **Lift-up screen**
*Screen basket can be lifted upward hydraulically*

3 **Drop-down screen**
*Screen basket can be hydraulically lowered*

# DRIVES

For a rotor to rotate, it must be driven by a power source. There are various ways of doing this. While a 170 kg rotor must be set in motion in the WL 4 shredder, a PreCut 3000 cutting shaft weighs a massive 7 tons – a real challenge for mechanics and electronics.

## WAP GEARBOX

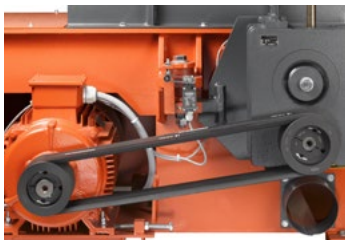
Shredder gearboxes must withstand constantly fluctuating loads and impacts. This is why WEIMA has developed and designed the WAP gearbox specifically for use in shredders. This design ensures maximum resistance to disturbances and optimum torque transmission. For even more robustness, we use a vibration damper to protect the gearbox from impacts. Wear is reduced to a minimum. It is manufactured exclusively by WEIMA in Ilsfeld, Germany. In addition, WAP gearboxes are extremely easy to maintain, wear-resistant and insensitive to interference.

## The proven standard drive

In most cases, single-shaft shredders are equipped with an electromechanical drive. The power is transmitted by means of a standard motor, a specially developed WEIMA WAP gearbox and a power belt. The speed is adjustable.

- **Robust**
- **Low wear**
- **Torque converter provides energy savings by limiting peak amp draw at start-up**
- **Proven and compact design**
- **Low investment and maintenance costs**
- **User-friendly maintenance**
- **WEIMA WAP gearboxes specially developed for size reduction**

**Electromechanical drive with WEIMA WAP gearbox**



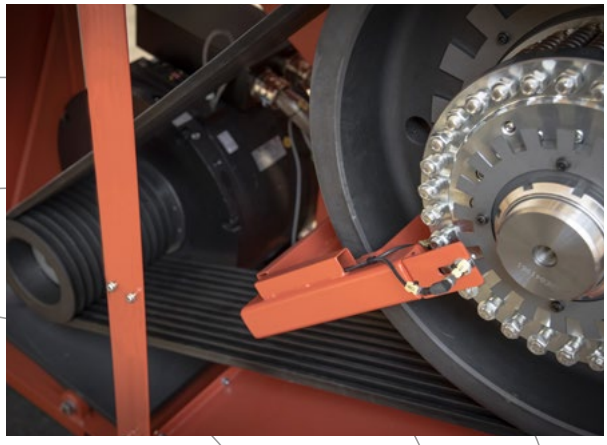
## Electromechanical drive with belt

### High speeds. Even higher throughputs.

The FineCut machines use a 6-pole asynchronous motor without gearbox. The speed is infinitely variable between 160 and 340 rpm via a frequency converter. Thanks to the high speed, extreme throughputs can be achieved. A slip clutch protects the drive train from damage by contaminants, thus ensuring long service life. The drive is extremely robust and low-maintenance and guarantees an electrical load-free start-up without current peaks.

- **Asynchronous motor with belt**
- **Gearless drive**
- **Insensitive to foreign materials**
- **Low maintenance and wear**
- **Energy efficient**
- **Protection of the drive train by coupling**
- **Speed infinitely variable via frequency converter**

# DRIVES



## High-torque drive

BAUMÜLLER

### Electromechanical drive with belt and multi-pole synchronous torque motor

The high-torque, multi-pole synchronous motor from Baumüller is produced in Germany and is characterized by its insensitivity to foreign materials. Without gears, the drive withstands shocks and vibrations and thus has a particularly long service life – even when shredding challenging material streams.

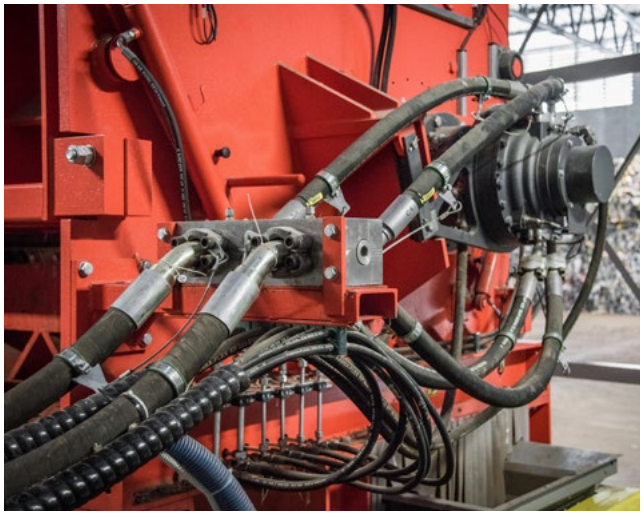
- **Belt drive without gearbox**
- **Torque and speed via frequency converter**
- **Frequency converter precisely adjustable**
- **Low noise emissions**
- **Low energy consumption**
- **High efficiency**
- **Insensitive to foreign materials**
- **Water-cooled synchronous motor**
- **Compact and robust design**
- **High torque and breakaway torque**

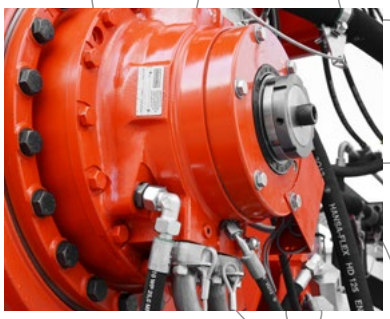
## Power transmission without interruption

Hydraulic drives from Hägglunds / Bosch Rexroth have no gearbox and are therefore insensitive to many foreign materials. Speed and torque can be adjusted without causing current peaks. The robust drive provides high torque at low kW. The speed can be adjusted by means of a variable speed pump.

- **Powerful direct drive without gearbox – for full power transmission**
- **Especially insensitive to foreign materials and fast response**
- **Infinitely variable speed and torque adjustable by means of regulating pump**
- **Low connected load**
- **Low maintenance costs as no belt required**
- **Extremely high torque and breakaway torque**

# Direct drive with hydraulic motor





# RAM

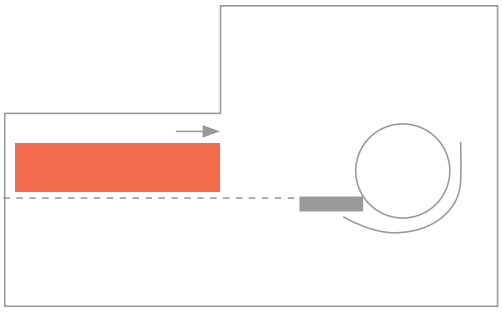
What good is a razor-sharp rotor and many kW of drive power if the material to be shredded doesn't get to it in the first place? That's what the ram is for. Whether horizontal or curved – a perfectly adjusted ram significantly increases throughput.

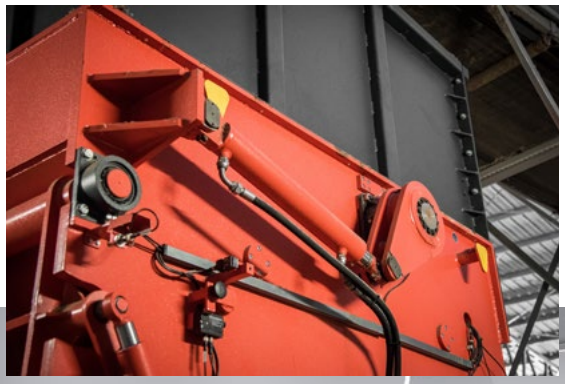
**DID YOU KNOW?**

In some applications, adding a jagged face to the ram makes material feeding more efficient. They hold the material firmly so that the rotor can cut freely.

The ram uses hydraulic pressure to move horizontally forwards and backwards. The movements can be controlled automatically, cyclically, or manually. If required, this is load-dependent. It is precisely guided by brass guide rails or rollers so that it does not jam. A shock valve at the rear end of the slide also absorbs impacts, making the system even more robust.

## Horizontal ram

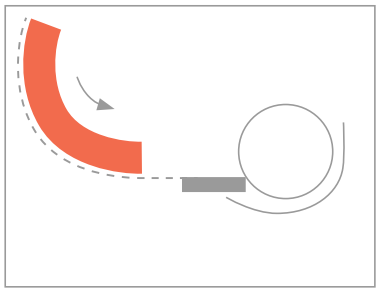




*Hydraulic swing ram with robust lever and swingarm bearing*

The hydraulic swing ram design makes the shredder particularly compact, simplifies maintenance and allows for a more aggressive material feed. Optionally, the swing arm can be equipped with an attachment, which further improves feeding.

## Swing ram



# MACHINE PORTFOLIO SHREDDERS

When it comes to diversity, no one can beat us. With approx. 1,200 machine solutions delivered per year, we rely on a comprehensive shredding portfolio consisting of single-shaft shredders, multi-shaft shredders and granulators. We always have one goal in mind: to build the right machine for our customer.

## ONE SIZE FITS ALL? NOT AT WEIMA.

# SINGLE-SHAFT SHREDDERS

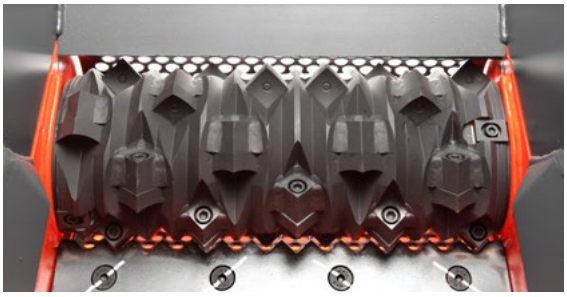
## Economical compact machines with 260 mm rotor diameter

*WL 4*

260 mm
rotor diameter

*WLK 800*

# TECHNICAL HIGHLIGHTS



## Precise cut with high throughput

with profiled V rotor

The V rotor, specially developed by WEIMA, can be used universally and is made of solid material. Its aggressive material feed with up to two rows of knives guarantees high throughput with low power requirements. It can be equipped with hardened steel cutting knives in edge lengths of 30 mm and 40 mm. These can be rotated several times in case of wear, which drastically reduces maintenance costs.

## Intuitive operation

thanks to Allen Bradley PLC control with touch display

To ensure that the electronics are optimally matched to the machine, we design, build and wire our control cabinets ourselves. We only use high-quality components – for example from Allen Bradley or Rittal. Intuitive touch interfaces guarantee quick adjustments. Functional ram setting adjustments ensure a high throughput. The built-in overload protection also prevents defects in the machine.

## No material bridges

due to free-cutting hopper design

The hopper fulfills several tasks at once. First, the material to be shredded is fed through it – manually, mechanically, or by conveyor belt. The generous opening makes it easy to fill even very large parts. A decisive factor for shredding, however, is its special design, which is rounded at the front and thus effectively prevents material bridging. Even with bulky parts, the shredder cuts itself free. If required, hopper extensions and lids with gas pressure springs are available.

## Controlled feeding behavior

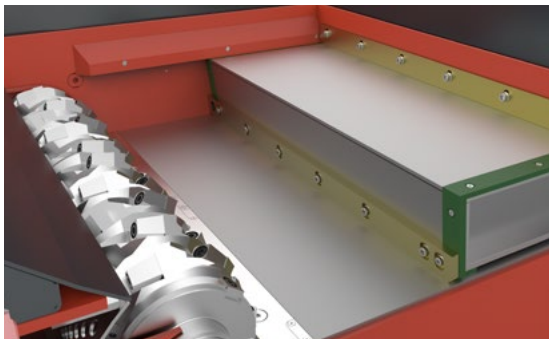
when shredding with F rotor

The F rotor shows its decisive advantages especially with flexible materials such as filaments, films and fibers. Its controlled feed behavior, in combination with precise cutting geometry, permits a powerful cut. This ensures high material throughputs. The knife holders are firmly welded to the rotor made of solid material.

## DURABLE ROTOR BEARINGS

thanks to offset design

A rotor bearing must be robustly designed due to the extreme stresses it is subjected to while it's in operation. To prevent dust or foreign matter from getting inside it, we have set it apart from the machine frame. This also makes it very maintenance-friendly and easy to access.



## Safe material feed

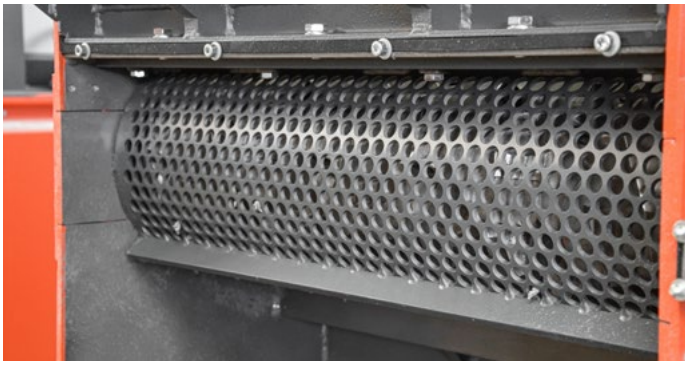
with load-controlled ram

The ram, which moves horizontally back and forth via hydraulics, feeds the material to the rotor. With WEIMA, it can be controlled or cycled automatically depending on the load. If required, it can also be controlled manually. For even more aggressive feeding, we recommend additional serrated plates and hold-down device, which also hold bulky and long parts securely in place. A shock valve located on the hydraulic cylinder absorbs any impacts to the ram, thus ensuring a longer service life.

## Homogeneous shredding results

thanks to flexible, interchangeable screen

Adapt the screen to your needs. The smaller the hole diameter, the finer the shredded material that is discharged. Screens can be exchanged flexibly and are bolted as standard. On the WLK 800, a screen basket that opens downward ensures even faster screen changes and simplified maintenance.



# TECHNICAL HIGHLIGHTS

## Optimally protected hydraulics
installed in the machine frame

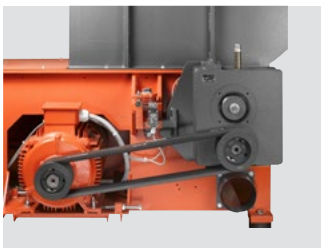
Integrating the sensitive components of a hydraulic system into the machine frame has many advantages. Not only is it protected from dust, dirt and other external influences such as the weather, but it also makes the machine even more compact in its installation. A separate service opening provides easy access for maintenance.

## Efficiently absorb vibrations
with stable rubber feet

Vibration-damping machine feet ensure a secure footing and help to significantly reduce disruptive vibrations in the surrounding area. Since the machine does not have to be anchored to the ground first, installation is particularly flexible and convenient.

**CLEAN DISCHARGE OF MATERIAL**
by suction, screw or conveyor belt

Depending on your needs and frame design (elevated machine with conveyor belt cutout or side spout), you have the option of discharging shredded material either by air extraction, discharge screw or classic conveyor belt. With experience from many thousands of machines on the market, we are also experts in conveyor technology and can supply you with a turnkey solution from a single source.



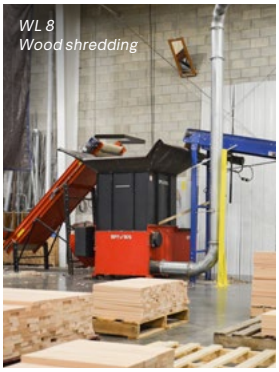
## Powerful drive
with WEIMA WAP gearboxes

Instead of purchasing standard components, we have been manufacturing our proven WAP gearboxes ourselves in our German production facilities for many years. The in-house development ensures maximum robustness with the highest machine requirements. The electromechanical drive via V-belt and powerful electric motor is also optimally protected against shocks and interference thanks to the built-in vibration damper. This counteracts increased wear and extends the service life of a machine. In the WLK 800 shredder, a hydrodynamic start-up clutch also ensures an even smoother shredding process.

## SINGLE-SHAFT SHREDDERS IN ACTION


*WL 8*
*Discharge by air extraction*

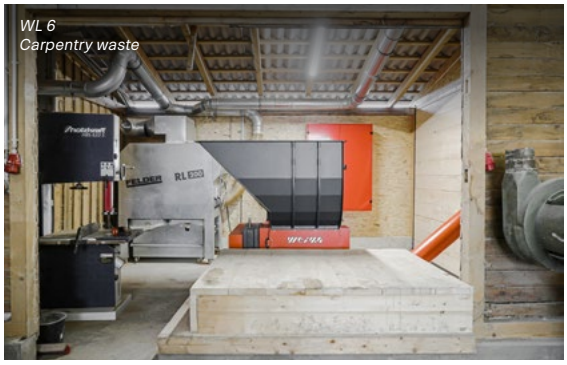
*WL 6 S*
*Integration in production line*



*WL 8*
*Wood shredding*

*WL 4*
*Underfloor installation*

*WLK 800*
*With discharge conveyor belt*



*WL 6*
*Carpentry waste*

# TECHNICAL DATA AND MACHINE CONFIGURATION

## Technical data single-shaft shredder

| | Woodchuck | WL 4 | WMS 60 | WL 6 | WLK 800 | WL 8 |
|---|---|---|---|---|---|---|
| **Rotor diameter [mm]** | 260 | 260 | 260 | 260 | 260 | 260 |
| **Rotor length [mm]** | 600 | 600 | 600 | 800 | 800 | 1,000 |
| **Rotor speed [rpm]** | 90 - 110 | 90 - 110 | 60 - 80 | 90 - 110 | 80 - 125 | 80 - 125 |
| **Drive power [kW]** | 18.5 | 22 - 26.5 | 22 | 22 - 26.5 | 37 | 26.5 |
| **Max. number of knives [pcs]** | 28 | 28 | 28 | 42 | 42 | 54 |
| **Available knife sizes [mm]** | 40 | 40 | 40 | 40 | 40 | 40 |
| **Screen size [mm]** | 12 - 50 | 12 - 50 | 15 - 50 | 12 - 50 | 15 - 80 | 12 - 50 |
| **Extraction connection [mm]** | 160 | 160 | - | 200 | - | 200 |
| **Hopper opening [mm]** | 600 × 1,050 | 600 × 1,050 | 600 × 1,440 | 800 × 1,250 | 800 × 1,800 | 1,000 × 1,250 |
| **Length [mm]** | 2,045 | 2,045 | 1,685 | 2,388 | 2,390 | 2,388 |
| **Width [mm]** | 1,163 | 1,163 | 1,238 | 1,438 | 1,745 | 1,638 |
| **Height [mm]** | 1,640 | 1,640 | 1,855 | 1,840 | 2,180 | 1,840 |
| **Weight [approx. kg]** | 1,400 | 1,400 | 1,700 | 1,900 | 2,800 | 2,200 |

*Specifications based on standard configurations.*

## Machine configuration single-shaft shredder

● *Standard* ○ *Optional* – *Not available*

| | Woodchuck | WL 4 | WMS 60 | WL 6 | WLK 800 | WL 8 |
|---|---|---|---|---|---|---|
| Control cabinet with PLC control | ● | ● | ● | ● | ● | ● |
| **MATERIAL FEED** | | | | | | |
| Horizontal ram | ● | ● | – | ● | ● | ● |
| Sloped floor | – | – | ● | – | – | – |
| Serrated ram | ● | ● | ○ | ● | ● | ● |
| Fast hydraulics | ○ | ● | ● | ● | ● | ● |
| **DRIVE** | | | | | | |
| Electromechanical drive | ● | ● | ● | ● | ● | ● |
| WEIMA WAP gearbox | ● | ● | ● | ● | ● | ● |
| Gearbox oil cooling | – | – | – | – | ○ | – |
| Hydraulic oil cooling | ○ | ○ | ○ | ○ | ○ | ○ |
| Hydrodynamic start-up clutch | – | – | – | – | ● | – |
| **CUTTING GEOMETRY** | | | | | | |
| V rotor | ● | ● | ● | ● | ○ | ● |
| F+ rotor | – | – | – | – | ● | – |
| Adjustable counter knife | – | ● | ● | ● | ● | ● |
| Vautid rotor wear protection | ○ | ○ | ○ | ○ | ○ | ○ |
| Offset bearings | – | ● | ● | ● | ● | ● |
| **MATERIAL DISCHARGE** | | | | | | |
| Bolt-on screen | ● | ● | ● | ● | – | ● |
| Drop-down screen | – | – | – | – | ● | – |
| Conveyor belt cutout | – | ○ | ● | ○ | ● | ○ |
| Extraction connection | ● | ● | ○ | ● | ○ | ● |
| **MAINTENANCE** | | | | | | |
| Vibration damping machine feet | ● | ● | ● | ● | ● | ● |

*Other variations, special equipment, and technical modifications available on request.*

# SINGLE-SHAFT SHREDDERS

## Flexible machines with 370 mm rotor diameter

*WLK 1000*

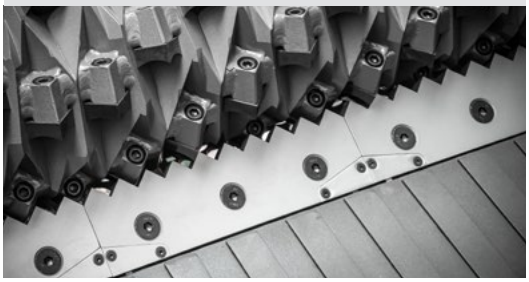
370 mm
rotor diameter

*WLK 15*

# TECHNICAL HIGHLIGHTS

## Perfect cutting gap
thanks to adjustable counter knives

The interaction between the cutting knife and the counter knife has a significant influence on the material throughput and the shredding result. To maintain a perfect cutting gap even with natural wear, counter-knives of this series are manually adjustable. Optimum cutting geometry keeps shredding energy-efficient, minimizes wear costs, and significantly extends the service life of the knife.



## Flexible control
for changing material flows

WEIMA only requires one control panel to precisely control one or more machines including the conveyor system. The built-in Allen Bradley PLC control is optimally adapted to the shredding process. Various slide controls and rotor settings can be conveniently adjusted to the desired application. All control cabinets are designed in-house and built in our German production facilities.

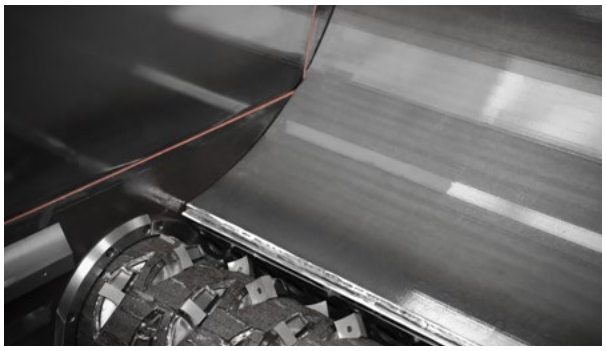
## Precise cut with F rotor
for flexible materials

The F rotor impresses with its controlled infeed behavior and its precise cutting geometry – especially with flexible materials such as films, filaments or fiber. It can be equipped with either bolted-on or welded knife holders. In addition, a robust wear protection made of Vautid is possible for more abrasive materials.

## Universally applicable V rotor

for demanding applications

Many of our customers describe the profiled V rotor as a best in class for shredding. The material intake is optimally designed with two rows of knives. The V rotor stands for high throughput rates, low energy consumption, reduced thermal stress and low wear costs.



## Better material absorption

for particularly large pieces

Instead of classic angled hoppers, WEIMA has relied on a design that is rounded along the front side for many years. This has two decisive advantages: the feed volume is increased. In addition, disruptive material bridges are effectively avoided – these occur especially with large material pieces. In this case, the shredder cuts itself free.

## CONTROLLED MATERIAL FEEDING

by ram with serrated plate and segmented floor

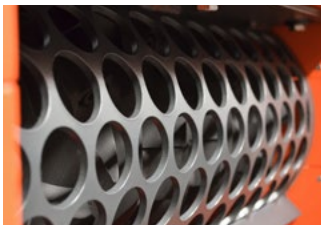
The ram feed can be controlled manually, cyclically, or load-dependently. Depending on the application, it makes sense to supplement the classic material ram with more technical options. To prevent possible jamming and improve its guidance, the ram can be guided on rollers. In addition, WEIMA recommends the use of a segmented floor – especially for very thin materials.

## Offset rotor bearings

Protect against dust and foreign matter

The shredding of particularly resistant materials requires correspondingly robust bearings that are easy to maintain. WEIMA uses long-life, spherical roller bearings, whose stable design and offset mounting from the machine frame protects against impacts and uncontrolled power transmission. Their additional shaft seal ring effectively helps against the intrusion of contaminants or dust.

# TECHNICAL HIGHLIGHTS



## Three screen configurations
for optimum accessibility

Single-shaft shredders come standard with a bolt-on screw screen. In addition, there are hydraulic drop-down screens as well as lift-up screen baskets. The ideal design depends on the application. In general, screen doors provide better access to the rotor and thus facilitate maintenance.

**MORE SPACE FOR MATERIAL DISCHARGE**
by raising the machine frame

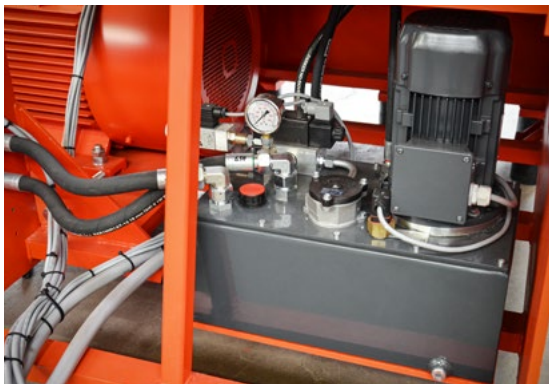
If you need more space for discharge, we recommend an optional support stand. This makes your production even more flexible.

## Easy integration of conveyor technology
cutout for conveyor discharge

Machines with a conveyor belt cutout make material discharge clean and efficient – ideal for production lines. For example, conveyor belts up to 600 mm wide can be seamlessly integrated. Alternatively, material can be discharged via air extraction or screw conveyors.

## Robust electromechanical drive
with in-house built WAP gearbox

For most applications, electromechanical drives are the classic choice because they are easy to maintain and robust. WEIMA's special feature: we manufacture our own gearboxes that are specially designed for shredding operations. Torque monitoring and shock-absorbing vibration dampers round off the package. A hydrodynamic start-up clutch is available as an option for further protection of the machine. For even higher requirements, we recommend the use of a hydraulic drive.



## Even higher throughputs

with turbo hydraulics

The ram of a shredder is moved back and forth hydraulically. With turbo hydraulics, this happens even faster. For continuous operation, additional oil cooling and a length measuring systems are available upon request.

## Vibration damping machine feet

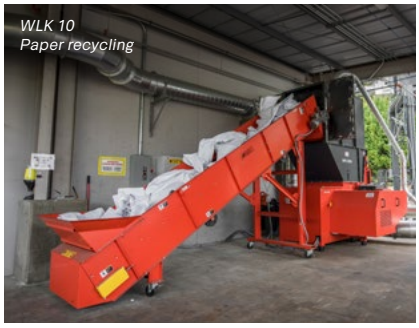
for less vibration in the building

Thanks to compact feet made of hard rubber, there is no need to anchor the machine to the plant floor. The installation remains flexible. More importantly, disruptive vibrations that negatively affect the surrounding area are effectively avoided.

## SINGLE-SHAFT SHREDDERS IN ACTION

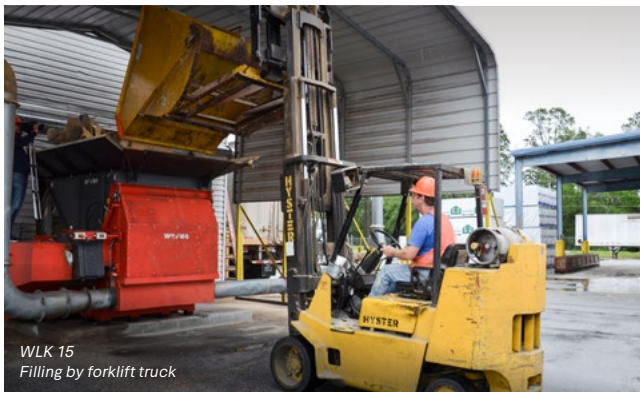
*WLK 15*
*Automotive Interior Recycling*

*WLK 6 S*
*Plastic waste*



*WLK 10*
*Paper recycling*

*WLK 1500*
*Two-stage shredding with granulator*



*WLK 15*
*Filling by forklift truck*

# TECHNICAL DATA AND MACHINE CONFIGURATION

## Technical data single-shaft shredder

| | WMS 600 | WMS 800 | WLK 6S | WLK 10 | WLK 1000 | WMS 1000 | WLK 13 | WLK 15 | WLK 18 | WLK 20 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Rotor diameter [mm]** | 370 | 370 | 370 | 370 | 370 | 370 | 370 | 370 | 370 | 370 |
| **Rotor length [mm]** | 600 | 800 | 800 | 1,000 | 1,000 | 1,000 | 1,300 | 1,500 | 1,800 | 2,000 |
| **Rotor speed [rpm]** | 60 - 80 | 60 - 80 | 90 - 110 | 90 - 110 | 90 - 110 | 60 - 80 | 90 - 110 | 90 - 110 | 90 - 110 | 90 - 110 |
| **Drive power [kW]** | 26.5 | 36 | 36 - 45 | 45 - 55 | 45 - 55 | 55 \| HYD | 55 - 90 | 66 - 110 | 90 - 133 | 90 - 133 |
| **Max. number of knives [pcs]** | 28 | 42 | 42 | 52 | 52 | 26 | 70 | 82 | 98 | 110 |
| **Available knife sizes [mm]** | 40 | 40 | 40 \| 60 | 40 \| 60 | 40 \| 60 | 60 | 40 \| 60 | 40 \| 60 | 40 \| 60 | 40 \| 60 |
| **Screen size [mm]** | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 |
| **Hopper opening [mm]** | 600 × 1,455 | 800 × 1,734 | 800 × 1,800 | 1,000 × 1,800 | 1,000 × 1,640 | 1,000 × 1,690 | 1,300 × 2,000 | 1,500 × 2,295 | 1,800 × 2,295 | 2,000 × 2,295 |
| **Length [mm]** | 2,629 | 2,655 | 2,534 | 2,534 | 2,903 | 2,656 | 2,728 | 3,290 | 3,290 | 3,290 |
| **Width [mm]** | 1,273 | 1,831 | 1,898 | 2,098 | 2,058 | 2,320 | 2,532 | 2,742 | 3,042 | 3,242 |
| **Height [mm]** | 2,000 | 2,000 | 2,100 | 2,100 | 2,130 | 2,130 | 2,100 | 2,100 | 2,100 | 2,100 |
| **Weight [approx. kg]** | 2,500 | 3,200 | 3,600 | 4,200 | 4,200 | 4,200 | 5,100 | 6,900 | 8,300 | 9,200 |

*Specifications based on standard configurations.*

## Machine configuration single-shaft shredder

● Standard ○ Optional – Not available

| | WMS 600 | WMS 800 | WLK 6S | WLK 10 | WLK 1000 | WMS 1000 | WLK 13 | WLK 15 | WLK 18 | WLK 20 |
|---|---|---|---|---|---|---|---|---|---|---|
| Control cabinet with PLC control | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MATERIAL FEED** | | | | | | | | | | |
| Horizontal ram | – | – | ● | ● | ● | – | ● | ● | ● | ● |
| Sloped floor | ● | ● | – | – | – | ● | – | – | – | – |
| Serrated ram | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | ● |
| Extended ram bed | – | – | – | ○ | ○ | – | ○ | ○ | ○ | ○ |
| Fast hydraulics | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **DRIVE** | | | | | | | | | | |
| Electromechanical drive | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Hydraulic drive | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| High-torque drive | – | – | – | – | – | – | – | ○ | ○ | ○ |
| WEIMA WAP gearbox | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Gearbox oil cooling | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Hydraulic oil cooling | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Hydrodynamic start-up clutch | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **CUTTING GEOMETRY** | | | | | | | | | | |
| V rotor | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| F rotor | – | – | ○ | ○ | ○ | ○ | – | ○ | ○ | ○ |
| Adjustable counter knife | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Vautid rotor wear protection | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Rotor cooling | – | – | ○ | ○ | ○ | – | – | ○ | ○ | ○ |
| Offset bearings | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MATERIAL DISCHARGE** | | | | | | | | | | |
| Bolt-on screen | ● | ● | ○ | ○ | ○ | ● | ○ | ○ | ○ | ○ |
| Lift-up screen | – | – | ● | ● | – | – | ● | ● | ● | ● |
| Drop-down screen | ○ | ○ | – | – | ● | ○ | – | – | – | – |
| Conveyor belt cutout | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Extraction connection | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| **MAINTENANCE** | | | | | | | | | | |
| Vibration damping machine feet | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

*Other variations, special equipment and technical modifications available on request.*

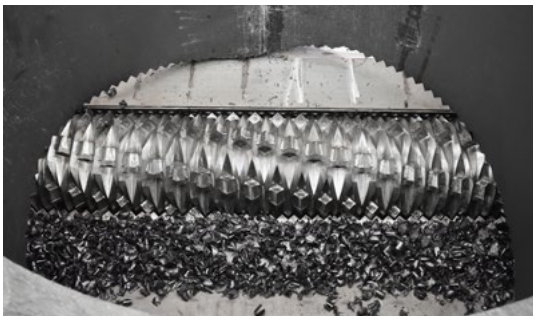
# W5 SERIES

## Maintenance-friendly shredders with 500 mm rotor diameter


Electromechanical drive
High-torque drive
Direct drive with hydraulic motor

*W5.18*

# TECHNICAL HIGHLIGHTS



## Master the most difficult materials effortlessly

with the universal V rotor

Measuring 500 mm in diameter and up to 2,200 mm in length, the V rotor of the W5 series was designed for ambitious throughput targets with high flexibility. Thanks to its innovative design, even large start-up lumps, hollow bins and very voluminous parts pose no problem.

## Easy machine operation

thanks to PLC control with large touch panel

WEIMA's latest shredder generation also uses only the latest technology in a compact space for the control cabinet. The shredder, as well as the peripherals – including conveyor belts, separation technology and secondary shredders – can be controlled centrally with the Allen Bradley PLC control system. Material flows can thus be processed in an energy-efficient manner.

## Controlled feed and precise cut

with proven F rotor

WEIMA is known for its precise cutting geometries. The F rotor is a prime example. Its milling and special knife arrangement are ideal for shredding flexible materials such as fibers and films. For extreme applications and contaminated material streams, we recommend an additional Vautid wear guard to protect the rotor.

## Optimum cutting geometry

thanks to adjustable counter blades

To ensure that the cutting gap is always perfect, even with wear, the counter knives of the W5 series can be quickly adjusted and turned from the outside. This leads to a constantly high throughput rate and increases the knife service life.

## Convenient maintenance and optimum rotor access

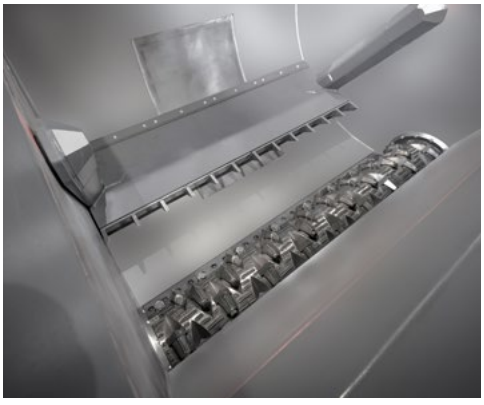
thanks to generously sized inspection flap

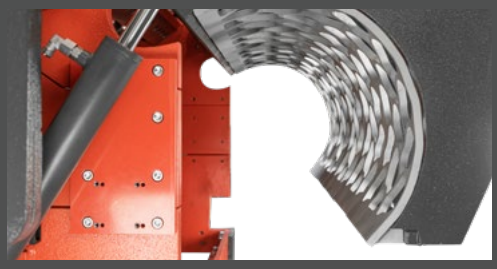
The most striking feature of the W5 machines is certainly the built-in inspection flap. As soon as the swing ram is secured in its upper starting position, the wide access from the rear can be opened hydraulically. You are now in the middle of the cutting chamber and have plenty of space to remove foreign matter from the rotor or to carry out maintenance work at a comfortable working height.

## Optimized material feed

through innovative swing ram

The W series from WEIMA is characterized by its distinctive swing ram and correspondingly high ram speed, which is integrated in the cutting chamber to save space and requires extremely low maintenance. Material already slides to the rotor by gravity and is then continuously or cyclically pressed against it by the hydraulically movable swing ram. For even more aggressive feeding, the ram can optionally be equipped with an additional pressing feature.





### LIFT-UP SCREEN BASKET

for maintenance-friendly access

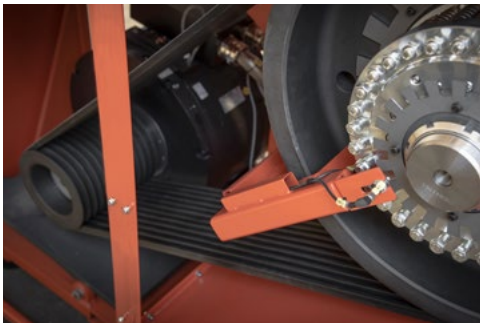
The choice of the appropriate screen is closely related to the desired shredding result. For maximum flexibility, the segments can therefore be exchanged individually. Different perforated screen diameters and screen variants such as the innovative kidney screen are possible. The entire screen basket can be opened hydraulically at the push of a button.

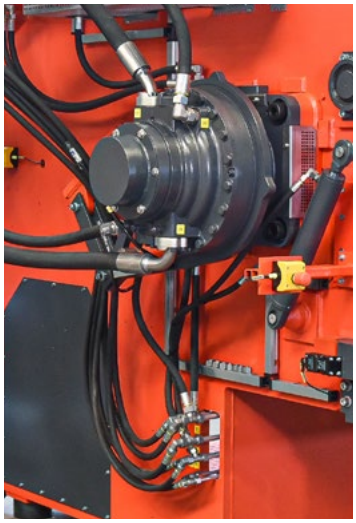
# TECHNICAL HIGHLIGHTS

## HYDRAULIC OR HIGH-TORQUE DRIVE?

You have the choice

Depending on the application, we offer two heavy duty drive concepts: The high-torque drive with a high-torque, multi-pole synchronous motor is produced by Baumüller in Germany and is distinguished by its insensitivity to foreign materials. Without a gearbox, the drive withstands shocks and vibrations and thus has a particularly long service life. The Hägglunds / Bosch Rexroth hydraulic actuator is very responsive – at a low connected load. Stopping, starting, and reversing is possible even under full load. Speed and torque are infinitely variable without a frequency converter.





## Robust technology and machine frames

Made in Germany

To minimize vibration and wear, WEIMA relies on a machine wall thickness of 40 mm as part of an optimized frame design. It also depends on the large rotor diameter of 500 mm. Matching cutting blades are available in edge lengths of 40, 60 and 80 mm. Vibration-absorbing machine feet also come standard.

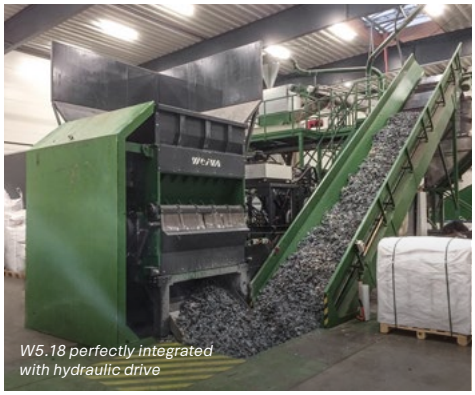
## Ready for fast material transport

thanks to simple integration of conveyor technology

The feed opening of the W5 machines has been designed to be particularly generous. The loading edge is ideal for direct filling via forklift or wheel loader. Discharging material is also easy. The wide conveyor belt cutout allows for large quantities of shredded material to be transported quickly and cleanly.

## W5 SERIES IN ACTION

*W5.18*
*Film recycling with metal detection and extrusion*



*W5.18 perfectly integrated with hydraulic drive*

*W5.18*
*with conveyor belt discharge*

*W5.22 elevated placement in recycling line*

*W5.18*
*Jeans recycling*

# TECHNICAL DATA AND MACHINE CONFIGURATION

## Technical data W5 series

| | W5.18 | W5.22 |
|---|---|---|
| **Rotor diameter [mm]** | 500 | 500 |
| **Rotor length [mm]** | 1,800 | 2,200 |
| **Rotor speed [rpm]** | 50 - 200 | 50 - 200 |
| **Drive power [kW]** | 108 - 192 \| HYD | 132 - 192 \| HYD |
| **Max. number of knives [pcs]** | 141 \| 75 \| 42 | 171 \| 93 \| 50 |
| **Available knife sizes [mm]** | 40 \| 60 \| 80 | 40 \| 60 \| 80 |
| **Screen size [mm]** | 15 - 100 | 15 - 100 |
| **Hopper opening [mm]** | 1,800 × 2,000 | 2,200 × 2,000 |
| **Length [mm]** | 2,470 | 2,470 |
| **Width [mm]** | 2,800 | 3,150 |
| **Height [mm]** | 3,000 | 3,000 |
| **Weight [approx. kg]** | 10,500 | 11,500 |

*Specifications based on standard configurations.*

## Machine configuration single-shaft shredder

● *Standard* ○ *Optional* – *Not available*

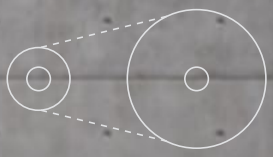
| | W5.18 | W5.22 |
|---|---|---|
| Control cabinet with PLC control | ● | ● |
| **MATERIAL FEED** | | |
| Swing ram | ● | ● |
| Segmented edge swing ram | ○ | ○ |
| Turbo hydraulics | ● | ● |
| **DRIVE** | | |
| Electromechanical drive | ● | ● |
| Hydraulic drive | ○ | ○ |
| High-torque drive | ○ | ○ |
| WEIMA WAP gearbox | ● | ● |
| Gearbox oil cooling | ○ | ○ |
| Hydraulic oil cooling | ● | ● |
| Hydrodynamic start-up clutch | ● | ● |
| **CUTTING GEOMETRY** | | |
| V rotor | ● | ● |
| F rotor | ○ | ○ |
| Adjustable counter knife | ● | ● |
| Vautid rotor wear protection | ○ | ○ |
| Rotor cooling | ○ | ○ |
| Offset bearings | ● | ● |
| **MATERIAL DISCHARGE** | | |
| Lift-up screen | ● | ● |
| Maintenance door | ● | ● |
| Conveyor belt cutout | ● | ● |
| Extraction connection | ○ | ○ |
| **MAINTENANCE** | | |
| Vibration damping machine feet | ● | ● |

*Other variations, special equipment, and technical modifications are available on request.*

# S5 AND S7 SERIES

## For demanding throughput rates with 500 or 700 mm rotor diameter

*S5.20 lift-up*



Electromechanical drive

High-torque drive

Direct drive with hydraulic motor

*S7.25 lift-up*

# TECHNICAL HIGHLIGHTS

## Trouble-free shredding

thanks to PLC control with automatic reversing system

With just one central, high-quality Allen Bradley PLC control cabinet, you control not only the shredder but also the entire conveyor system. If required, you can also control downstream secondary shredders within the production line. Large touch displays facilitate operation. An automatic reversing system ensures a trouble-free shredding process.

## Achieve demanding throughput targets

with Heavy Duty V rotor

While the profiled V rotors of the S5 series have a diameter of 500 mm, those of the S7 series even reach 700 mm with up to three rows of knives. All sizes are universally applicable and guarantee maximum throughput rates at low wear costs. The cutting knives can be reversed several times and are available in sizes of 40, 60, 80 mm.

## Safe shredding of large-volume parts

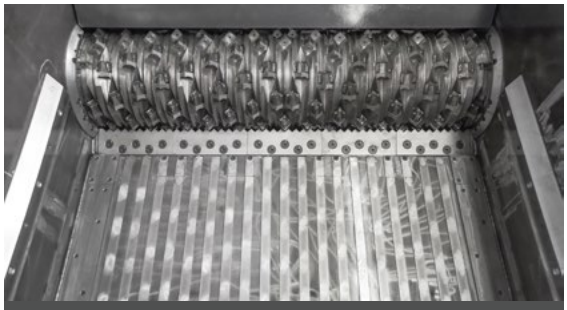
with extended hopper attachment

Individual hopper extensions and enclosures with plastic curtains are available to prevent materials from being thrown from the hopper. In the heavy duty version, the feed hopper can be double-walled and thus effectively contributes to sound insulation.

## Sharp cuts guaranteed

thanks to adjustable counter knives

A perfect cutting gap with sharp knives keeps the material throughput at a constantly high level. For this reason, WEIMA rotor and counter knives can not only be turned – the counter knives are also manually adjustable.



**PRECISE MATERIAL FEEDING**
due to segmented floor

Particularly when shredding very thin materials such as films or fibers, it is recommended to use a segmented floor, which guides the ram even more precisely and prevents jamming. The shock valve at the end of the hydraulic ram also absorbs shocks to the ram, thus reducing wear.

## Highest precision with flexible materials

with F rotor including Vautid wear protection

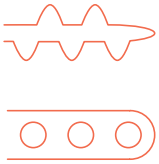
The F rotors of the S5 and S7 series were designed for extreme demands. An optional protective layer of Vautid counteracts increased wear. Optional rotor cooling is available for particularly temperature-sensitive materials.

## Protected rotor bearings

thanks to offset mounting from the frame

WEIMA shredders are known for their durability. This is also due to the spherical roller bearings used for our rotors. The bearings are mounted at a distance from the machine and protect against contaminants and uncontrolled forces acting on the rotor. It also facilitates regular maintenance.

# TECHNICAL HIGHLIGHTS



## Fast material discharge

with screw conveyor or conveyor belt

With such high throughput rates, the removal of shredded material must also be ensured. For this reason, the machines of both series have a 600 mm wide conveyor belt cutout.

## MAINTENANCE-FRIENDLY ROTOR ACCESS

thanks to upward-swiveling screen basket

The screen baskets of the S5 and S7 series can be swung upwards. This allows free access to the rotor for convenient maintenance without components getting in the way. Screens can be changed just as easily. The screen basket can be equipped with round hole screens in various diameters, zigzag, honeycomb, and kidney screens – depending on the desired shredding result.

## Powerful drive options

Hydraulic drive or electromechanical drive

Hydraulic drives from Hägglunds / Bosch Rexroth are insensitive to foreign material and are therefore extremely robust. Speed and torque can be adjusted without causing current peaks. In this way, high torques are achieved at low kW output. The speed can be adjusted by means of a variable displacement pump. Alternatively, a conventional electromechanical drive with WEIMA WAP gearbox can be installed.

## Less vibration with flexible set up

with hard rubber feet

Despite their many tons of weight, shredders in these series feature practical machine feet made of hard rubber. They have a vibration-damping effect and reduce vibrations in the immediate vicinity.

## Stronger. Wider. Tougher.

with Heavy Duty options

The higher the requirements, the more robustly a shredder must be built. For this reason, we use high-quality steel sidewalls with 40 mm wall thickness for the S5, W5 and S7 series. Together with the extra large rotors as well as suitable drives, WEIMA machines are ready for anything.

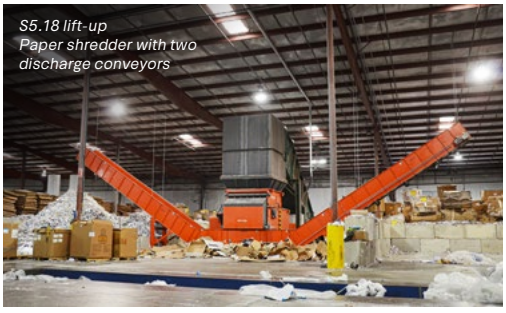
## Faster ram movements

for higher throughputs

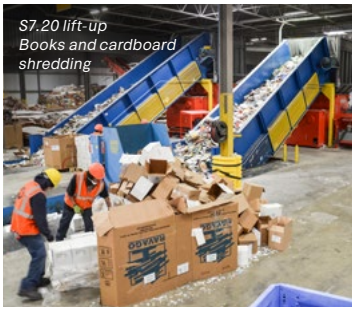
With the help of turbo hydraulics, the ram feeds the material to be shredded to the rotor much faster. This increases the throughput of your machine.

## S5 SERIES AND S7 SERIES IN ACTION

*S7.30 lift-up*
*Pipeline sections*



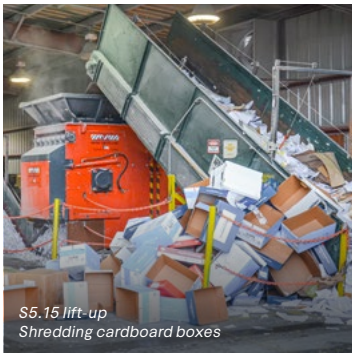
*S5.18 lift-up*
*Paper shredder with two discharge conveyors*



*S7.20 lift-up*
*Books and cardboard shredding*

*S7.25 lift-up*
*Production of regranulate*

*S7.25 lift-up*
*Shredder and extruder*



*S5.15 lift-up*
*Shredding cardboard boxes*

# TECHNICAL DATA AND MACHINE CONFIGURATION

## Technical data S5 series and S7 series

| | S5.15 lift-up | S5.18 lift-up | S5.20 lift-up | S7.20 lift-up | S7.25 lift-up | S7.30 lift-up |
|---|---|---|---|---|---|---|
| **Rotor diameter [mm]** | 500 | 500 | 500 | 700 | 700 | 700 |
| **Rotor length [mm]** | 1,500 | 1,800 | 2,000 | 2,000 | 2,500 | 3,000 |
| **Rotor speed [rpm]** | 80 - 100 | 80 - 100 | 80 - 100 | 80 - 100 | 80 - 100 | 80 - 100 |
| **Drive power [kW]** | 108 - 132 | 108 - 132 | 108 - 132 | 132 - 192 HYD | 160 - 192 HYD | 160 - 192 HYD |
| **Max. number of knives [pcs]** | 123 \| 66 | 147 \| 75 | 165 \| 87 | 165 \| 87 \| 60 | 207 \| 111 \| 75 | 249 \| 135 \| 93 |
| **Available knife sizes [mm]** | 40 \| 60 | 40 \| 60 | 40 \| 60 | 40 \| 60 \| 80 | 40 \| 60 \| 80 | 40 \| 60 \| 80 |
| **Screen size [mm]** | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 | 15 - 100 |
| **Hopper opening [mm]** | 2,340 × 1,960 | 2,340 × 2,320 | 2,340 × 2,460 | 2,395 × 2,460 | 2,395 × 2,960 | 2,395 × 3,460 |
| **Length [mm]** | 3,639 | 3,785 | 3,570 | 3,755 | 3,861 | 4,100 |
| **Width [mm]** | 2,461 | 2,756 | 3,394 | 3,460 | 4,050 | 4,550 |
| **Height [mm]** | 2,815 | 2,815 | 2,815 | 2,915 | 2,915 | 2,915 |
| **Weight [approx. kg]** | 15,000 | 17,000 | 18,500 | 21,000 | 30,000 | 34,000 |

*Specifications based on standard configurations.*

## Machine configuration S5 series and S7 series

● *Standard* ○ *Optional* – *Not available*

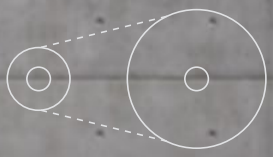
| | S5.15 lift-up | S5.20 lift-up | S5.25 lift-up | S7.15 lift-up | S7.20 lift-up | S7.25 lift-up |
|---|---|---|---|---|---|---|
| Control cabinet with PLC control | ● | ● | ● | ● | ● | ● |
| **MATERIAL FEED** | | | | | | |
| Horizontal ram | ● | ● | ● | ● | ● | ● |
| Serrated ram | ○ | ○ | ○ | ○ | ○ | ○ |
| Ram extension | ○ | ○ | ○ | ○ | ○ | ○ |
| Fast hydraulics | ○ | ○ | ○ | ○ | ○ | ○ |
| **DRIVE** | | | | | | |
| Electromechanical drive | ● | ● | ● | ● | ● | ● |
| Hydraulic drive | ○ | ○ | ○ | ○ | ○ | ○ |
| High-torque drive | ○ | ○ | ○ | ○ | ○ | ○ |
| WEIMA WAP gearbox | ● | ● | ● | ● | ● | ● |
| Gearbox oil cooling | ○ | ○ | ○ | ○ | ○ | ○ |
| Hydraulic oil cooling | ● | ● | ● | ● | ● | ● |
| Hydrodynamic start-up clutch | ● | ● | ● | ● | ● | ● |
| **CUTTING GEOMETRY** | | | | | | |
| V rotor | ● | ● | ● | ● | ● | ● |
| F rotor | ○ | ○ | ○ | ○ | ○ | ○ |
| Additional rotor knife row | ○ | ○ | ○ | ○ | ○ | ○ |
| Adjustable counter knife | ● | ● | ● | ● | ● | ● |
| Vautid rotor wear protection | ○ | ○ | ○ | ○ | ○ | ○ |
| Rotor cooling | ○ | ○ | ○ | ○ | ○ | ○ |
| Offset bearings | ● | ● | ● | ● | ● | ● |
| **MATERIAL DISCHARGE** | | | | | | |
| Lift-up screen | ● | ● | ● | ● | ● | ● |
| Conveyor belt cutout | ● | ● | ● | ● | ● | ● |
| Extraction connection | ○ | ○ | ○ | ○ | ○ | ○ |
| **MAINTENANCE** | | | | | | |
| Vibration damping machine feet | ● | ● | ● | ● | ● | ● |

*Other variations, special equipment and technical modifications available on request.*

# SINGLE-SHAFT SHREDDERS

## High-end production machines with 800 mm rotor diameter

*PreCut 3000*



Electromechanical drive

Direct drive with hydraulic motor

High-torque drive

*FineCut 3000*

*PowerLine 3000*

# TECHNICAL HIGHLIGHTS

## Flexible adjustment of cutting parameters

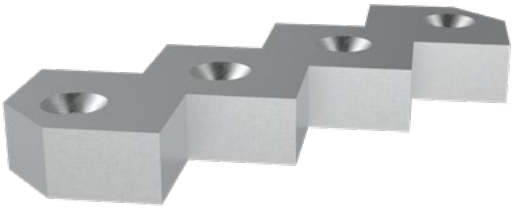
with Allen Bradley PLC control

We manufacture our control cabinets ourselves in our German factories, using only brand-name components. With the large touch display, you have all important data and settings at your fingertips. The flexible adjustment of parameters such as the rotor speed or the ram movement is thus easily possible. For challenging conditions, we recommend optional control cabinet cooling.

## FineCut rotor

developed for secondary shredding

With the characteristically designed FineCut rotor made of solid material, you can achieve fine particle sizes using high speeds of 160 to 380 rpm. The cutting blades can be turned several times. The rotor has up to seven rows of knives, allowing very high throughputs to be achieved. Here, too, a Vautid guard comes standard. A splined shaft journal is installed on the drive side for an optimum fit. The compact installation also provides plenty of lateral expansion space for the material.



**Consistently high-quality cuts**

with SuperCut cutting gap adjustment

The counter knives are user-friendly, adjustable from the outside via a screw system, and can be easily reversed when worn. In addition, they are protected by cover plates and positioned at an angle for an even more aggressive cut.

## PowerLine rotor

for universal use with waste of all kinds

Due to its high solid weight, the PowerLine rotor requires less torque for shredding. Vautid protection against increased wear is available as a full shell or in the form of welded seams. Side-mounted rotor face plates made of Creusabro® also protect against abrasive material flows. The shaft journals are bolted on both sides. Cutting blades in sizes 60, 80 and 100 mm can be flexibly selected.

## LOAD-DEPENDENT FEEDING FOR MAXIMUM THROUGHPUT

with swing ram

Material is fed to the rotor with a swing ram. The swing attachment, which is located on the outside of the pre-shredder, ensures maximum cutting chamber size. The swing ram can optionally be equipped with an additional pressing feature to hold the material more firmly against the rotor. In addition, turbo hydraulics are used for faster swing arm movements and result in higher throughputs.

## Plenty of space for maintenance work

thanks to hydraulic inspection flap

The shredders can be opened outward on both sides via a flap or door – at the front for work on the screen and at the rear for direct rotor access. This facilitates routine maintenance, such as knife rotation, or optimization of the cutting gap. Foreign materials can also be easily removed manually. Down times are reduced to a minimum.

## PreCut rotor

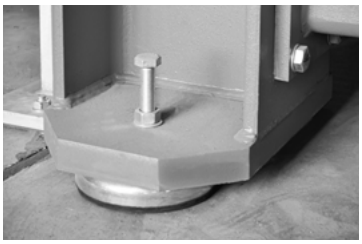
developed for pre-shredding

The massive PreCut rotor is ready for anything. It has Vautid wear protection as standard, which makes it particularly resistant to foreign matter. The bolted-on octagonal cutting blades have an edge length of 100 or 130 mm – the largest in the entire WEIMA portfolio. Due to the excellent accessibility, the rotor can still be maintained comfortably. Speeds are adjustable from 5 – 120 rpm.

# TECHNICAL HIGHLIGHTS

## Secure footing on any terrain
with level, heavy duty feet

Even if your production surfaces are not one hundred percent level: Thanks to our standard, adjustable heavy duty feet, the machine is guaranteed to have a firm hold.



**Always lubricated bearings**
thanks to automatic central lubrication

The central lubrication system mounted on the side of the machine frame ensures that rotor bearings, swingarm bearings, screen bearings and inspection flap bearings are always optimally lubricated. This eliminates the need for manual lubrication by hand pump.

## Easy integration into production lines
or as a stand-alone solution

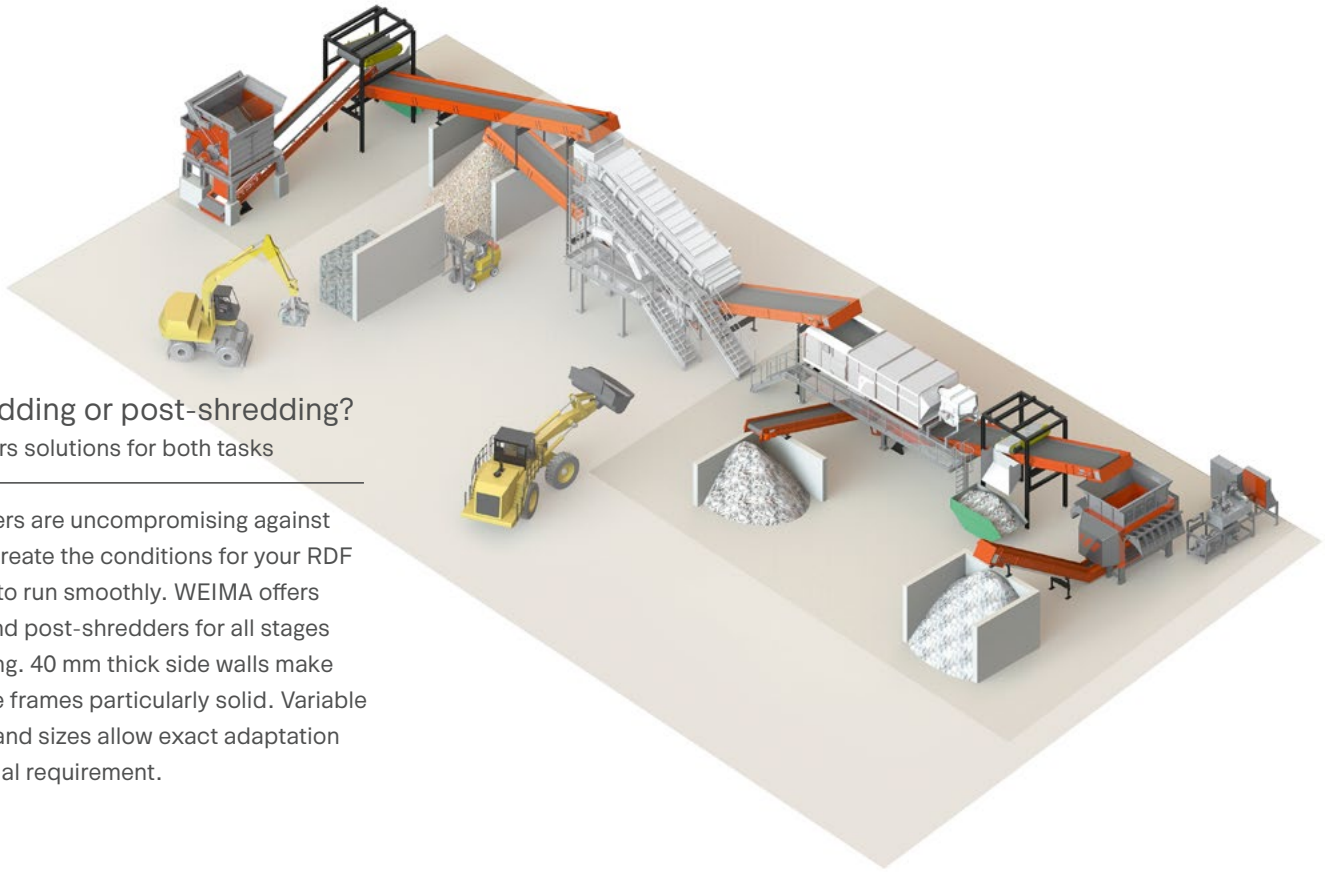
Optimally connected: WEIMA shredders have all common interfaces to ensure fast integration into existing production lines. Thousands of system solutions in cooperation with plant engineering partners worldwide speak for themselves. The elevated base frame offers plenty of space for all common conveyor belts – perfect for transporting shredded material away.

**THE RIGHT DRIVE MAKES THE DIFFERENCE**
Hydraulic, electromechanical, or high-torque?

You have the choice: While our primary shredders are exclusively equipped with large Hägglunds hydraulic drives, high-torque drives from Baumüller and conventional electromechanical drives are also available for all other machines for universal and secondary shredding. Your individual application always decides which one is the right one.

## Flexible screen change for changing material flows
thanks to hydraulically swiveling screen basket

Pre-shredders have a firmly bolted screen basket with replaceable rungs (see picture). This results in extreme stability and sturdiness. All other machines have a screen basket that can be swung upwards, on which the screen segments are bolted. They can be changed quickly and are protected against wear. With secondary shredders, a particle size of 25 - 150 mm can be achieved – with primary shredders up to 400 mm.



## Pre-shredding or post-shredding?

WEIMA offers solutions for both tasks

Our shredders are uncompromising against waste and create the conditions for your RDF production to run smoothly. WEIMA offers both pre- and post-shredders for all stages of processing. 40 mm thick side walls make our machine frames particularly solid. Variable equipment and sizes allow exact adaptation to any special requirement.

## SINGLE-SHAFT SHREDDERS IN ACTION

*2x FineCut 3000*
*Waste processing for cement production*

*PowerLine 2500*
*Waste containers and plastic pipes by wheel loader*

*FineCut 2500 and PowerLine 3000*
*Industrial waste processing*

*PowerLine 1500*
*Commercial waste*

*PowerLine 3000*
*with fire protection system*

*FineCut 2500*
*Secondary shredding for high-quality substitute fuel*

*PowerLine 2500 and PowerLine 3000*
*for maximum throughput*

*PowerLine 3000*
*Direct filling by crane*

*PreCut 3000*
*Outdoor pre-shredding*

# TECHNICAL DATA AND MACHINE CONFIGURATION

## Technical data single-shaft shredder

| | PreCut 2000 | PreCut 2500 | PreCut 3000 | PowerLine 2000 | PowerLine 2500 | PowerLine 3000 | FineCut 2000 | FineCut 2500 | FineCut 3000 |
|---|---|---|---|---|---|---|---|---|---|
| **Rotor diameter [mm]** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| **Rotor length [mm]** | 2,000 | 2,500 | 3,000 | 2,000 | 2,500 | 3,000 | 2,000 | 2,500 | 3,000 |
| **Rotor speed [rpm]** | 5 - 120 | 5 - 120 | 5 - 120 | 80 - 200 | 80 - 200 | 80 - 200 | 160 - 380 | 160 - 380 | 160 - 380 |
| **Drive power [kW]** | 240 | 300 | 378 | 240 | 300 | 378 | 240 | 300 | 378 |
| **Max. number of knives [pcs]** | 76 | 92 | 116 | 92 | 116 | 144 | 77 | 98 | 119 |
| **Available knife sizes [mm]** | 100 \| 130 | 100 \| 130 | 100 \| 130 | 80 \| 100 | 80 \| 100 | 80 \| 100 | 172 × 57 × 28 | 172 × 57 × 28 | 172 × 57 × 28 |
| **Screen size [mm]** | 150 - 400 | 150 - 400 | 150 - 400 | 50 - 150 | 50 - 150 | 50 - 150 | 25 - 80 | 25 - 80 | 25 - 80 |
| **Hopper opening [mm]** | 2,000 × 2,200 | 2,500 × 2,000 | 3,000 × 2,200 | 1,800 × 2,000 | 1,800 × 2,500 | 1,800 × 3,000 | 1,260 × 2,000 | 1,260 × 2,500 | 1,600 × 3,000 |
| **Length [mm]** | 3,500 | 3,500 | 3,500 | 3,190 | 3,190 | 3,190 | 3,000 | 3,000 | 3,000 |
| **Width [mm]** | 3,480 | 3,980 | 4,370 | 4,760 | 5,260 | 5,760 | 4,770 | 3,700 | 4,720 |
| **Height [mm]** | 4,560 | 4,397 | 4,560 | 4,770 | 4,770 | 4,770 | 4,770 | 3,700 | 4,720 |
| **Weight [approx. kg]** | 32,000 | 35,000 | 38,000 | 28,500 | 31,500 | 34,500 | 28,500 | 32,500 | 36,500 |
| **Wall thickness [mm]** | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |

*Specifications based on standard configurations.*

## Machine configuration single-shaft shredders

● *Standard* ○ *Optional* – *Not available*

| | PreCut 2000 | PreCut 2500 | PreCut 3000 | PowerLine 2000 | PowerLine 2500 | PowerLine 3000 | FineCut 2000 | FineCut 2500 | FineCut 3000 |
|---|---|---|---|---|---|---|---|---|---|
| Control cabinet with PLC control | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MATERIAL FEED** | | | | | | | | | |
| Horizontal ram | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Turbo hydraulics | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **DRIVE** | | | | | | | | | |
| Electromechanical drive | – | – | – | – | – | – | ● | ● | ● |
| Hydraulic drive | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| High-torque drive | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Hydraulic oil cooling | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **CUTTING GEOMETRY** | | | | | | | | | |
| V rotor | – | – | – | ○ | ○ | ○ | – | – | – |
| F rotor | ● | ● | ● | ● | ● | ● | – | – | – |
| FineCut rotor | – | – | – | – | – | – | ● | ● | ● |
| Additional rotor knife row | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Adjustable counter knife | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Vautid rotor wear protection | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Offset bearings | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MATERIAL DISCHARGE** | | | | | | | | | |
| Heavy duty screen inserts | ● | ● | ● | – | – | – | – | – | – |
| Lift-up screen | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Maintenance door | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MAINTENANCE** | | | | | | | | | |
| Vibration damping machine feet | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Central lubrication | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

*Other variations, special equipment, and technical modifications available on request.*

# CONNECTIVITY

The demands on modern shredding plants are continuously increasing. Industrial shredders play a central role in the disposal and recycling process. They are the link between sorting and further material processing. These shredders are inconspicuous on the outside and, above all, robustly built. On the inside there are high-tech electronic controls that are managed by the advanced control panel.

**Material feed >**

*Forklift | wheel loader*

*Conveyor belt*

*Manual*

## Customized conveying technology

To make the material flow as efficient and convenient as possible, we have been working with our partners to develop the optimum conveying solution for every application. In doing so, we can draw on a wide range of technologies and plenty of practical experience. WEIMA shredders are capable of load-dependent control of drive power, rotor speed, or ram speed. When incoming material flows pause, the shredder also automatically switches to standby mode.

All information of a plant is collected centrally and can be monitored digitally. The integrated control system regulates not only the performance of the shredder, but also the peripherals. This includes extraction, metal detectors and secondary shredders for subsequent production steps. All process data is available for evaluation during the next maintenance.

## DID YOU KNOW?

Control cabinets are built and wired from scratch at the company headquarters in Ilsfeld. Programming also takes place there. This ensures the optimum coordination of all components.

**Material discharge**



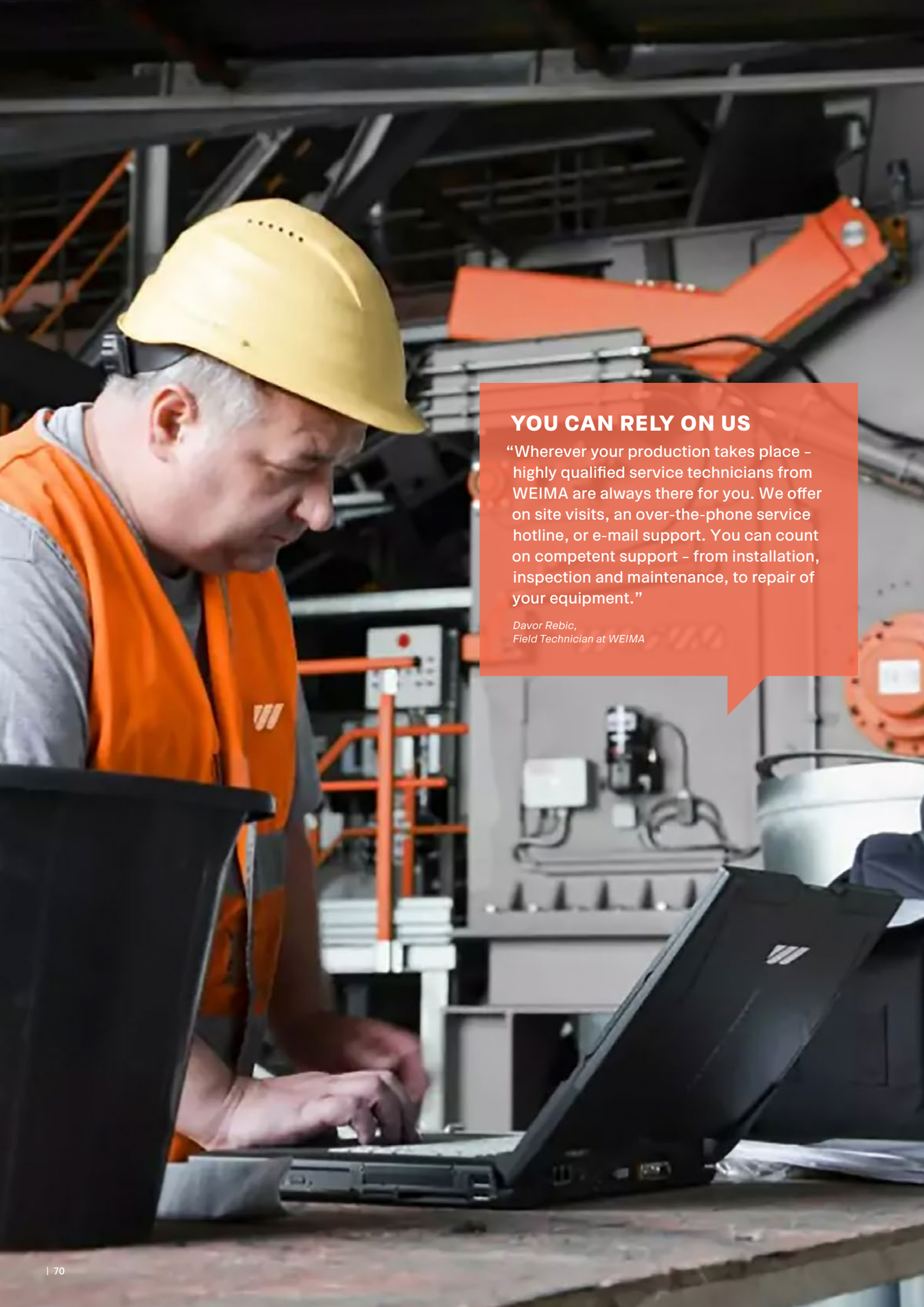
*Suction*



*Conveyor belt*



*Screw conveyor*



## YOU CAN RELY ON US

“Wherever your production takes place – highly qualified service technicians from WEIMA are always there for you. We offer on site visits, an over-the-phone service hotline, or e-mail support. You can count on competent support – from installation, inspection and maintenance, to repair of your equipment.”

*Davor Rebic,*
*Field Technician at WEIMA*

# WEIMA CUSTOMER SUPPORT AND SERVICES

**Customer proximity is the decisive factor for successful cooperation. For this reason, WEIMA invests in regional service centers. Just recently, two new locations were opened in India and China.**

**DID YOU KNOW?**

More than **70 employees** worldwide take care of service matters. Of these, over 25 technicians are constantly on the road to commission or service the next machine.


## Trainings

When you're well trained, you can maximize the full potential of your machine. We would like to pass on this knowledge to you and your employees. We set up the machine and commission the system together.

Our wide range of training courses is aimed at both beginners and experts. WEIMA is able to impart product know-how in a sustainable and professional manner thanks to experienced instructors, optimally equipped conference rooms, and hands-on training directly at the shredding or compacting plant.

WEIMA's training centers at the main location in Ilsfeld, and at our subsidiary WEIMA America in the USA, allow you to get to know your machine under optimal conditions and to further supplement your expertise.

### FIRST-CLASS QUALITY FROM SECOND-HAND MACHINERY

With used shredders, briquette presses, and drainage presses from WEIMA, you play it safe. Second-hand machinery is refurbished and comes with original WEIMA parts. The special thing about it: As with the purchase of a new machine, the extensive range of training courses, function upgrades and services is available to you. You can also rely on our team of experts to answer all your questions when selling your used WEIMA.

# SERVICE WE'VE GOT YOUR BACK

## MAINTENANCE AND REPAIR

There's no such thing as can't. WEIMA service technicians are guaranteed to get everything running again professionally. They know WEIMA machines like no one else. Due to low turnover and their tenure with the company, they have an irreplaceable wealth of experience and expertise. Regular maintenance ensures safe and reliable production, saving time and money. Documenting maintenance according to manufacturer specifications also increases the resale value and service life of your plant. You can also plan your expenses and save operating costs thanks to optimally adjusted components.

## Service packages

With the WEIMA service packages you are well provided for. Choose the scope of services yourself: From inspection and maintenance, to detailed reports and electrical safety checks. You can also secure exclusive discounts on spare and wear parts. This way, you can avoid unexpected downtimes, prevent excessive wear, and guarantee production reliability.

# ORIGINAL PARTS

## PAY OFF TWICE!

Your investment in a machine from us should also pay off in the long term. Original parts from WEIMA help you to achieve this. With parts tailored to your product, you can shred or compress safely, reliably, and efficiently. You can rely on our worldwide logistics network – and above all on the guaranteed quality of the mechanical spare parts from German production.

We make no compromises when it comes to hydraulic and electrical components. For this reason, we only use well-known manufacturers such as Allen Bradley, Bosch Rexroth, Siemens, or Eaton Möller. Since we also produce our robust control cabinets ourselves, you benefit from particularly fast availability of electronic components.


weima

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