



# WASTE SHREDDERS WITH SINGLE-SHAFT TECHNOLOGY

PRECUT | POWERLINE | FINECUT



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# **TOUGH ON WASTE.**

KIND TO YOUR BALANCE SHEET.

Waste is the Future. Efficient disposal methods are in demand more than ever before. Of great importance here is the processing of waste into substitute fuels, namely refuse derived fuel (RDF). WEIMA shredding solutions achieve the decisive prerequisites to get your RDF production running, with tailor-made shredding technology for plant concepts that are oriented to the future. And with leading competence based on decades of experience – more than 30,000 shredding solutions have been realized worldwide by WEIMA so far.

It does not matter which type of waste you process, whether it is municipal solid waste (MSW), commercial and industrial waste (C&I), construction and demolition waste (C&D), biomass, waste from papermaking, paper, wood, pulper waste, carpets or plastics: **you get the best out of it with WEIMA**. You will be well equipped to face up to the increasingly tough market conditions. WEIMA shredding technology delivers the highest RDF quality and provides you with first class sales opportunities at customers such as power stations and cement producers.



WEIMA PRECUT ► The ideal single-shaft pre-shredder.



#### WEIMA POWERLINE ► The universal single-shaft shredder.

## Highest degree of flexibility.

WEIMA is a full service provider for all processing stages with our PreCut, PowerLine and FineCut ranges of machines. Variable equipment levels and sizes enable exact fit with every special requirement.

## Quality "Made in Germany".

Optimized technology, solid construction: WEIMA shredding solutions stand for high productivity, low energy and wear costs, as well as outstanding ease of operation. We are manufacturing in Germany exclusively.

#### Powerful drive concepts.

WEIMA offers three types of drive concepts you can choose from: our heavy-duty hydraulic drive, the low maintenance direct drive, or the low budget power belt drive.

#### First class service.

From advice in plant planning through to the extensive technical support: we are there when you need us. Within the shortest possible reaction times. All shredders are specifically designed for your maintenance requirements – such as the quick change of knives and the blades and the removal of foreign objects. You can rely on our technical support team – worldwide.

# FROM BIG TO SMALL. PRECUT.



OUR POWERFUL SINGLE-SHAFT PRE-SHREDDER FOR UNSORTED, HIGHLY CONTAMINATED WASTE STREAMS.



## RAM

→ Load-dependent // Electronic distance measuring device // Less wear due to external guidance



# **CONTROL CABINET**

→ Siemens PLC control // Energy efficient size reduction // Easy to use



## **POWERFUL DRIVE**

→ Hydraulic drive // Full torque from zero // Full speed control // Excellent load control



# **COUNTER KNIVES**

 Externally adjustable // Rotatable
// Protected against impact thanks to cover plates



## PRECUT ROTOR

→ Vautid coated against wear // Massive 100/130 mm cutting knives // Easy maintenance



# SCREEN

→ For homogenous output material size // Wear protection // Easy adjustment



# BEARINGS

→ Dustproof // Sturdy design // Maintenance-friendly



## FRAME

→ Sturdy base // Compact design // Adaptable for conveying systems





# THE BIGGER THE BETTER.

ROUGH PRE-SHREDDER FOR ANY KIND OF WASTE.

This machine is the ideal first step for a multi-stage waste processing system. After unsuitable material has been sorted out, the pre-shredded material can be further processed in optimum form. Ideal for multi-stage processing with high throughput. Ensures optimum preconditioning of the material for further processing steps such as sorting, classification and separation.

## YOUR ADVANTAGES

- High productivity, low energy and wear costs
- Particle sizes of 150 400 mm achievable
- Vautid coated rotor and knife holders
- Hydraulic drive for extreme torque
- High protection against foreign objects
- Inspection flap for short service time
- Massive (up to 130 mm) cutting knives, rotatable



PRECUT ROTOR ► Heavy duty design with vautid coating and 130 mm cutting knives



**POWERFUL HYDRAULIC DRIVE** ► Low power consumption, high level of reliability

Octagonal knife 100 mm, 130 mm (actual size)



# REFERENCES.



2x PreCut 2000 with hydraulic drive, Indonesia



PreCut 3000 with hydraulic drive, Norway



# INTELLIGENT SHREDDING. POWERLINE.



THE UNIVERSAL SINGLE-SHAFT SHREDDER SERIES FOR A WIDE RANGE OF INPUT MATERIAL.



## **MATERIAL FEEDING**

→ Swing ram on rolls // Positioned inside of the cutting chamber // Optionally with extended pusher plate



# **PLC CONTROL**

→ Energy efficient size reduction and good usability with Siemens PLC control panel



# DRIVE

 Shredders can be equipped with hydraulic drive, direct drive, or power belt drive
// Depending on application



# LOW FEEDING POINT

→ For direct feeding via forklift or wheel loader



## **POWERLINE ROTOR**

→ All-purpose // High throughput // Low energy consumption // Low wear costs



# **COUNTER KNIVES**

→ Externally adjustable // Diagonal mounting for more aggressive cut



# SCREEN

→ Multi-piece segments // Interchangeable // Easy to handle



# DESIGN

11 cr 11.0

→ Adjustable base frame // Compact and flexible // Maintenance-friendly





# FULL POWER. THE FLEXIBLE UNIVERSAL SHREDDER.

FOR SINGLE OR MULTI-STAGE SHREDDING.

Our PowerLine series can be used flexibly, depending on the requirements of the material to be produced: as a high throughput secondary shredder in multi-stage processing or as a single stage solution for pre-sorted material.

## YOUR ADVANTAGES

- Highly efficient for a wide range of input materials
- Flexible, as it can be used in single or multi-stage processing
- Particle sizes of 30 150 mm achievable
- Multi-stage processing: operation as a secondary shredder with continuous or direct feeding
- Designed for the toughest requirements



## YOUR DRIVE OPTIONS



#### HYDRAULIC DRIVE

Extremely high torque at all times and low kW consumption. Stop, start and reverse at any point and at full load. Simple structure and fast reaction times. Very resistant to foreign materials. Torque and rotational speed can be adjusted flexibly, quickly, and gradually by a regulating pump.



DIRECT DRIVE

Water-cooled, synchronous motors. High torque at low and medium rotational speed. Planetary gearbox installed inside of the rotor. Compact and solid design. Low maintenance efforts and easy installation.



#### **POWER BELT DRIVE**

Reliable and compact design. Safety clutch protects shredder from foreign materials. With frequency converter for optimal rotor speed adjustment. Low investment costs and user-friendly maintenance.

Octagonal knife 80 mm, 100 mm (actual size)



# REFERENCES.



2x PowerLine 3000 with hydraulic drive, Poland



 $\label{eq:powerLine 2000 and PowerLine 3000 with hydraulic drive, England$ 



# WORKS OUT FINE. FINECUT.



# THE HIGH OUTPUT SECONDARY SINGLE-SHAFT SHREDDER FOR SMALLEST PARTICLE SIZES.



# **MATERIAL FEEDING**

→ Swing ram on rolls // Positioned inside of the cutting chamber // Optionally with extended pusher plate



## PLC CONTROL

→ Energy efficient size reduction and good usability with Siemens PLC control panel



# DRIVE

 Shredders can be equipped with hydraulic drive, direct drive, or power belt drive // Depending on application



# LOW FEEDING POINT

→ For direct feeding via forklift or wheel loader



# **FINECUT ROTOR**

→ Aggressive infeed // For very fine material // Different knife configurations possible



# **COUNTER KNIVES**

→ Externally adjustable // Diagonal mounting for more aggressive cut



# SCREEN

→ Multi-piece segments // Interchangeable // Easy to handle



# DESIGN

11/0/11/1

→ Adjustable base frame // Compact and flexible // Maintenance-friendly





# **BEST SALES OPPORTUNITIES.**

# FINECUT SHREDDERS ARE THE IDEAL SECONDARY SHREDDING SOLUTION FOR A MULTI-STAGE PLANT.



Impressive outputs can be achieved due to its high rotor speed. The fine particle size of the shredded material corresponds perfectly with the increasing demand for higher RDF qualities. The right machine to produce the best RDF quality for power plants and the cement industry.

## YOUR ADVANTAGES

- High performance secondary shredder for multi-stage processing
- Shreds pre-sorted or pre-shredded material
- Continuous material input via conveyor belt feeding
- Particle sizes of 20 80 mm achievable
- The right machine to produce the best RDF quality for power plants and the cement industry

## YOUR DRIVE OPTIONS



HYDRAULIC DRIVE

Extremely high torque at all times and low kW consumption. Stop, start and reverse at any point and at full load. Simple structure and fast reaction times. Very resistant to foreign materials. Torque and rotational speed can be adjusted flexibly, quickly, and gradually by a regulating pump.



DIRECT DRIVE

Water-cooled, synchronous motors. High torque at low and medium rotational speed. Planetary gearbox installed inside of the rotor. Compact and solid design. Low maintenance efforts and easy installation.



#### **POWER BELT DRIVE**

Reliable and compact design. Safety clutch protects shredder from foreign materials. With frequency converter for optimal rotor speed adjustment. Low investment costs and user-friendly maintenance.

FineCut knives 172 x 57 x 28 mm (actual size)



# REFERENCES.



2x FineCut 2500 with power belt drive, Indonesia

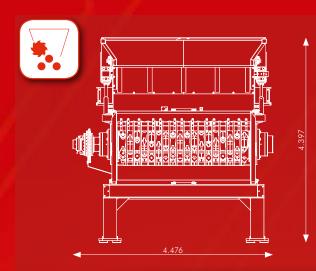


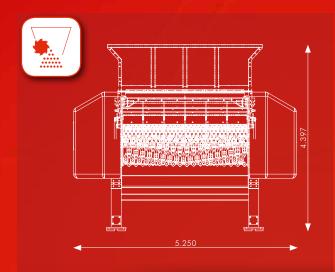
FineCut 2500 with hydraulic drive, France

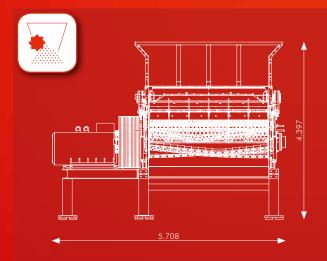




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## PRECUT

## Applications

Pre-shredding of municipal solid waste (MSW), commercial and industrial waste (C&I), construction and demolition waste (C&D) with high amount of foreign objects

#### **Technical specifications**

Rotor length: 1,500 to 3,000 mm Rotor diameter: 800 mm Rotor knives: 130 x 130 / 100 x 100 mm Throughput: up to 50 to/h Drive capacity: 160 kW to 350 kW Drive options: hydraulic drive Weight: 24 to 34 tons Particle size : 150 to 400 mm

## POWERLINE

#### Applications

Shredding of municipal solid waste (MSW), commercial and industrial waste (C&I), construction and demolition waste (C&D) with foreign objects

## **Technical specifications**

Rotor length: 1,500 to 3,000 mm Rotor diameter: 800 mm Rotor knives: 100 x 100 / 80 x 80 mm Throughput: up to 30 to/h Drive capacity: 160 kW to 350 kW Drive options: Hydraulic drive, direct drive, power belt drive Weight: 16 to 26 tons Screen size: 30 to 150 mm

## FINECUT

## Applications

Shredding of pre-shredded municipal solid waste (MSW), commercial and industrial waste (C&I), with Iow amount of foreign objects

## **Technical specifications**

Rotor length: 1,500 to 3,000 mm Rotor diameter: 800 mm Rotor knives: 172x58 mm Throughput: up to 25 to/h Drive capacity: 160 kW to 350 kW Drive options: Hydraulic drive, direct drive, power belt drive Weight: 22 to 32 tons Screen size: 20 to 80 mm

# Technical changes reserved | 05.2016 | WEM\_2016\_004 | www.hela.com

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