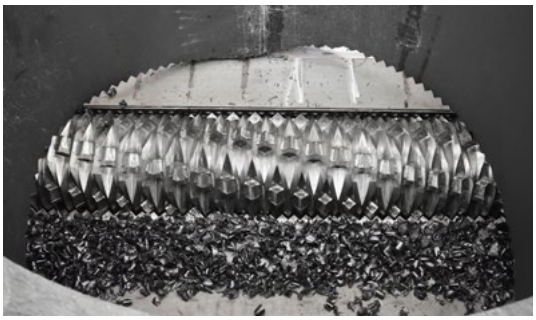
SHREDDING + COMPRESSING

W5 SERIES
SINGLE-SHAFT SHREDDERS

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 Siemens PLC control system. Material flows can thus be processed in an energy-efficient manner. WEIMA optionally offers a handy remote control for controlling the machine for added flexibility, especially during maintenance.

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

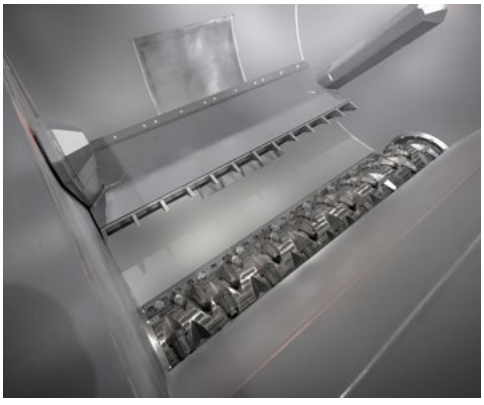
thanks to generously sized inspection flap

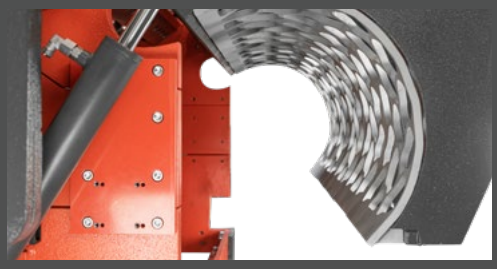
The most striking feature of the W5 machines is certainly the built-in inspection flap. As soon as the swing ram is secured in its upper starting position, the wide access from the rear can be opened hydraulically. You are now in the middle of the cutting chamber and have plenty of space to remove foreign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

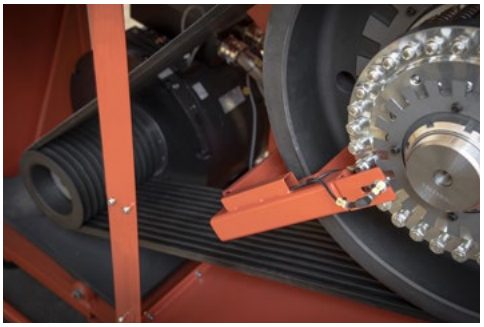
The choice of the appropriate screen is closely related to the desired shredding result. For maximum flexibility, the segments can therefore be exchanged individually. Different perforated screen diameters and screen variants such as the innovative kidney screen are possible. The entire screen basket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

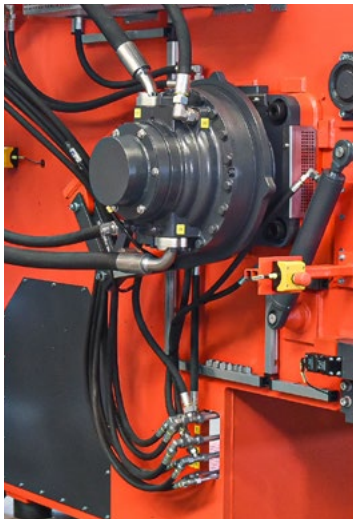
TECHNICAL HIGHLIGHTS

HIGH-TORQUE OR HYDRAULIC 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.

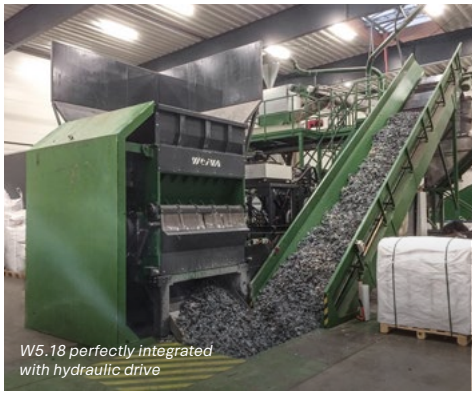
Ready for fast material transport

thanks to simple integration of conveyor technology

The feed opening of the W5 machines has been designed to be particularly generous. The low 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.

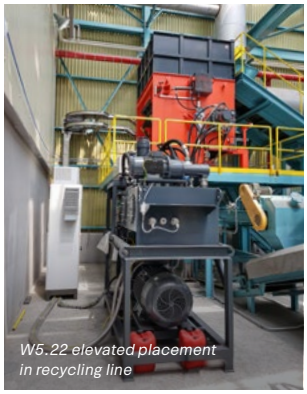
W5 SERIES IN ACTION

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

W5.14
with discharge conveyor belt

W5.18
Jeans recycling

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data W5 series

	W5.14	W5.18	W5.22
Rotor diameter [mm] [1)]	500	500	500
Rotor length [mm]	1,400	1,800	2,200
Rotor speed [rpm] [2)]	50 - 200	50 - 200	50 - 200
Drive power [kW] [3)]	90 - 280	90 - 280	90 - 280
Max. number of knives [pcs] [4)]	148	188	218
Available knife sizes [mm]	40 | 60 | 80	40 | 60 | 80	40 | 60 | 80
Particle size [mm]	20 - 100	20 - 100	20 - 100
Hopper opening [mm]	1,400 × 2,000	1,800 × 2,000	2,200 × 2,000
Length [mm]	2,470	2,470	2,470
Width [mm] [5)]	2,450	2,800	3,150
Height [mm]	3,000	3,000	3,000
Weight [approx. kg]	9,500	10,500	11,500
Wall thickness [mm]	40	40	40

1) dependent on cutting circle
2) dependent on specific drive configuration
3) dependent on drive technology
4) dependent on machine configuration
5) in standard configuration

Machine configuration single-shaft shredder

● Standard ○ Optional – Not available

	W5.14	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	●	●	●
Transmission oil cooling	○	○	○
Hydraulic oil cooling	○	○	○
Hydrodynamic start-up clutch	●	●	●
CUTTING GEOMETRY			
V rotor	●	●	●
F rotor	○	○	○
Special rotor	○	○	○
Adjustable counter knife	●	●	●
Vautid rotor wear protection	○	○	○
Rotor cooling	○	○	○
Detached bearings	●	●	●
MATERIAL DISCHARGE			
Lift-up screen	●	●	●
Conveyor belt cutout	●	●	●
MAINTENANCE			
Inspection flap	●	●	●
Vibration damping machine feet	●	●	●

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

WEIMA Maschinenbau GmbH | weima.com

Bustadt 6-10 | 74360 Ilsfeld (Germany) | Phone: +49 (0)70 62 95 70-0 | Fax: +49 (0)70 62 95 70-92 | info@weima.com

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