

SHREDDING + COMPRESSING



WL(K) 6 S | WL 10-20 | WLK 10-20 | WLK 1000-2000 SINGLE-SHAFT SHREDDERS

# TECHNICAL HIGHLIGHTS

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.

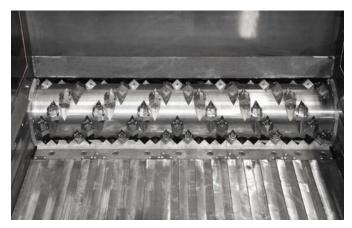
#### Perfect cutting gap thanks to adjustable counter knives

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.





The F rotor impresses with its controlled infeed behavior and its precise cutting geometry – especially with flexible materials such as films, filaments or fibers. 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

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 applica-tion. 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.

# Robust electromechanical drive with in-house built WAP gearbox

# Easy integration of conveyor technology thanks to cutout conveyor for 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.



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 shockabsorbing 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.





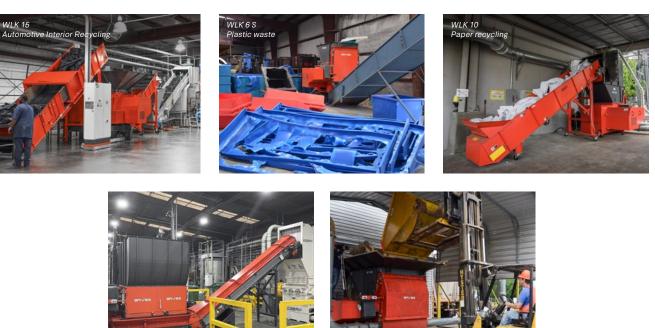
Even higher throughputs with turbo hydraulics

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 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	S9 X1W	WLK 10	WLK 1000	WMS 1000	WLK 13	WLK 15	WLK 18	WLK 20
Control cabinet with PLC control	•	٠	٠	٠	٠	٠	٠	٠	٠	٠
MATERIAL FEED										
Horizontal ram	-	-	٠	٠	•	-	•	•	•	•
Sloped floor	•	•	-	-	-	•	-	-	-	-
Serrated ram	0	0	•	•	٠	0	٠	٠	•	٠
Extended ram bed	-	-	-	0	0	-	0	0	0	0
Fast hydraulics	•	•	•	•	•	•	•	•	•	•
DRIVE										
Electromechanical drive	•	•	٠	٠	•	•	•	•	•	•
Hydraulic drive	0	0	0	0	0	0	0	0	0	0
High-torque drive	-	-	-	-	-	-	-	0	0	0
WEIMA WAP gearbox	•	•	•	•	•	•	•	•	•	•
Gearbox oil cooling	0	0	0	0	0	0	0	0	0	0
Hydraulic oil cooling	0	0	0	0	0	0	0	0	0	0
Hydrodynamic start-up clutch	•	•	•	•	•	•	•	•	•	•
CUTTING GEOMETRY										
V rotor	•	•	•	•	•	•	•	•	•	•
F rotor	-	-	0	0	0	0	-	0	0	0
Adjustable counter knife	•	•	•	•	•	•	•	•	•	•
Vautid rotor wear protection	0	0	0	0	0	0	0	0	0	0
Rotor cooling	-	-	0	0	0	-	-	0	0	0
Offset bearings	•	•	•	•	•	•	•	•	•	•
MATERIAL DISCHARGE										
Bolt-on screen	•	•	0	0	0	٠	0	0	0	0
Lift-up screen	-	-	•	•	-	-	•	•	•	•
Drop-down screen	0	0	-	-	٠	0	-	-	-	-
Conveyor belt cutout	•	•	•	•	•	•	•	٠	٠	•
Extraction connection	0	0	0	0	0	0	0	0	•	0
MAINTENANCE										
Vibration damping machine feet	•	•	•	•	•	٠	•	٠	٠	•

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



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