

SHREDDING + COMPRESSING



WL 600 | WL 4-8 | WLK 4 | WLK 800 SINGLE-SHAFT SHREDDERS

# 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 turned over several times in case of wear, which drastically reduces maintenance costs.

#### Intuitive operation thanks to Siemens 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 Siemens or Rittal. Intuitive touch interfaces guarantee quick adjustments. Functions such as setting the ram cycle or stop 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 or veneer. 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. Cutting knives with 30 or 40 mm edge length are also reversible.





#### **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, of course, 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 shocks to the drawer, 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.

### 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 suction, 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.

### 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.



### SINGLE-SHAFT SHREDDERS IN ACTION













### TECHNICAL DATA AND **MACHINE CONFIGURATION**

#### Technical data single-shaft shredder

	WL 600	WL 4	WLK 4	9 TM	WLK 800	WL 8
Rotor diameter [mm] <sup>1)</sup>	260	260	260	260	260	260
Rotor length [mm]	600	600	600	800	800	1,000
Rotor speed [rpm] <sup>2)</sup>	80 - 125	80 - 125	80 - 125	80 - 125	80 - 125	80 - 125
Drive power [kW] <sup>3)</sup>	15 - 18.5	11 - 18.5	18.5 - 22	15 - 22	22 - 37	22
Max. number of knives [pcs] $^{4)}$	14	28	28	42	42	54
Available knife sizes [mm]	40	40	40	40	40	40
Fraction size [mm]	10 - 40	10 - 40	15 - 40	10 - 40	15 - 80	10 - 40
Exhaust connection [mm]	160	160	-	200	-	200
Hopper opening [mm]	600 × 800	600 × 1,050	600 × 800	800 × 1,250	800 × 1,450	1,000 × 1,250
Length [mm]	1,805	2,045	2,045	2,045	2,590	2,045
Width [mm] $^{5)}$	1,118	1,190	1,313	1,540	1,745	1,740
Height [mm]	1,645	1,640	1,685	1,840	2,180	1,840
Weight [approx. kg]	1,100	1,300	1,700	1,700	2,800	2,200

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

	0		4		800	
	WL 600	WL 4	WLK 4	8 ML 6	WLK 800	WL 8
Control cabinet with PLC control	٠	٠	٠	٠	•	٠
MATERIAL FEED						
Horizontal ram	٠	٠	٠	0	٠	٠
Segmented floor	-	0	0	0	•	0
Serrated ram	-	0	0	0	<b>O</b> <sup>1)</sup>	0
Hold-down device	•	•	-	٠	-	٠
Fast hydraulics	-	0	0	0	٠	0
Free-cutting hopper	-	0	0	0	٠	0
DRIVE						
Electromechanical drive	٠	٠	٠	٠	•	٠
WEIMA WAP gearbox	-	٠	٠	٠	٠	٠
Transmission oil cooling	-	-	0	0	0	0
Hydraulic oil cooling	-	-	0	-	0	-
Hydrodynamic start-up clutch	-	-	-	-	•	-
CUTTING GEOMETRY						
V rotor	•	۲	٠	٠	٠	٠
F rotor	-	-	0	-	0	-
Additional rotor knife row	-	0	0	0	0	0
Adjustable counter knife	-	-	٠	-	٠	-
Vautid rotor wear protection	-	-	0	-	0	-
Detached bearings	-	0	•	0	•	0
MATERIAL DISCHARGE						
Screw screen	٠	٠	٠	٠	-	٠
Swivel down screen	-	-	-	-	•	-
Conveyor belt cutout	-	0	0	0	0	0
Exhaust connection	•	٠	0	٠	0	٠
MAINTENANCE						
Vibration damping machine feet	٠	٠	٠	٠	٠	٠

#### Machine configuration single-shaft shredder

• Standard • Optional • Not available

1) Serrated plate

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



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