

S5 AND S7 SERIES SINGLE-SHAFT SHREDDERS

# **TECHNICAL HIGHLIGHTS**



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 and 100 mm.

### Trouble-free shredding thanks to PLC control with

automatic reversing system

With just one central, high-quality Siemens 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.



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 is 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.

### 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 temperaturesensitive materials.





### 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.

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**



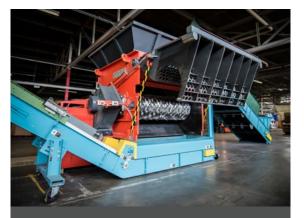


Fast material discharge with screw conveyor or conveyor belt

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.

> 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.



### 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.





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**













## TECHNICAL DATA AND **MACHINE CONFIGURATION**

#### Technical data S5 series and S7 series

	S5.15 lift-up	S5.20 lift-up	S5.25 lift-up	S7.15 lift-up	S7.20 lift-up	S7.25 lift-up	S7.30 lift-up
Rotor diameter [mm] <sup>1)</sup>	500	500	500	700	700	700	700
Rotor length [mm]	1,500	2,000	2,500	1,500	2,000	2,500	3,000
Rotor speed [rpm] $^{2)}$	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120
Drive power [kW] $^{3)}$	75 - 200	90 - 200	110 - 200	75 - 250	90 - 250	110 - 250	110 - 250
Max. number of knives [pcs] $^{4)}$	164	223	280	164	220	246	330
Available knife sizes [mm]	40   60	40   60	40   60	40   60   80   100	40   60   80   100	40   60   80   100	40   60   80   100
Particle size [mm]	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100
Hopper opening [mm]	1,500 × 1,880	2,000 × 1,880	2,500 × 1,880	1,500 × 1,930	2,000 × 1,930	2,500 × 1,930	3,000 × 1,930
Length [mm]	3,800	3,800	4,130	3,750	4,230	3,865	3,981
Width [mm] <sup>5)</sup>	3,050	3,500	3,745	3,000	3,750	3,750	4,285
Height [mm]	2,815	2,815	2,815	2,915	2,950	2,950	3,015
Weight [approx. kg]	15,000	18,500	24,500	17,500	21,000	30,000	34,000
Wall thickness [mm]	40	40	40	40	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 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	S7.30 lift-up
Control cabinet with PLC control	•	•	•	٠	•	•	•
MATERIAL FEED							
Horizontal ram	٠	•	•	٠	٠	٠	٠
Segmented floor	0	0	0	0	0	0	0
Serrated edge ram	<b>O</b> <sup>1)</sup>						
Ram on rollers	0	0	0	0	0	0	0
Ram extension	0	0	0	0	0	0	0
Turbo hydraulics	•	•	•	٠	٠	•	•
Free cutting hopper	0	0	0	0	0	0	0
DRIVE							
Electromechanical drive	٠	•	٠	٠	٠	٠	•
Hydraulic drive	0	0	0	0	0	0	0
High-torque drive	0	0	0	0	0	0	0
WEIMA WAP gearbox	•	•	•	٠	٠	٠	•
Transmission oil cooling	0	0	0	0	0	0	0
Hydraulic oil cooling	•	•	٠	٠	٠	٠	•
Hydrodynamic start-up clutch	•	•	•	٠	•	•	•
CUTTING GEOMETRY							
V rotor	٠	•	٠	٠	٠	٠	•
F rotor	0	0	0	0	0	0	0
Special rotor	0	0	0	-	-	-	-
Additional rotor knife row	0	0	0	0	0	0	0
Adjustable counter knife	•	•	•	٠	٠	•	•
Vautid rotor wear protection	0	0	0	0	0	0	0
Rotor cooling	0	0	0	0	0	0	0
Detached bearings	•	•	•	•	•	٠	•
MATERIAL DISCHARGE							
Lift-up screen	٠	•	•	٠	٠	٠	•
Conveyor belt cutout	•	•	•	٠	٠	٠	•
Vibration damping machine feet	٠	•	•	٠	٠	٠	•

1) Serrated plate

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



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