





SINGLE SHAFT SHREDDER

VVSG

## >>> ABOUT THE TECHNOLOGY



**Versatile Solution:** Single rotor shredders excel in shredding a wide range of materials including wood, rubber, plastic, paper, light metals, and general waste, even medical waste. Their adaptability suits woodworking companies seeking efficient waste management.



Waste Reduction: Implementing single rotor shredders enables companies to convert waste into briquetteable mass, reducing volume and easing storage, transportation, and potential resale. This maximizes raw material utilization and minimizes waste, improving sustainability.



Cost-Effective: Despite offering features comparable to pricier units, single shaft shredders maintain an affordable price point. This accessibility allows businesses, including smaller woodworking operations, to enhance waste management without overspending.



Customizable and Adaptive: These shredders easily adapt to different production needs and materials. Whether adjusting shredding mechanisms or integrating features, customization ensures optimal efficiency and productivity while remaining cost-effective.



### >>>> TECHNICAL HIGHLIGHTS

#### **Basic information**

The VVSG Single-Shaft Shredders offers a versatile solution for efficiently processing various materials, including wood, rubber, plastic, paper, metals, and general waste, including medical waste. Designed for woodworking companies, these shredders transform waste into briquetteable mass, enhancing storage, transport, and resale possibilities.

The shredder is primed and ready for action, requiring only a power source to unleash its full potential. With its versatile capabilities and robust design, this machine stands poised to tackle a wide array of materials, from wood and plastics to metals and general waste.

Ambient operating temperature range of the vehicle spans  $5 - 40^{\circ}$ C. Machine should be installed indoors, protected from the elements (rain, sleet, snow).

Each shredder is designed, built and tested in Ukmergė, Lithuania by UMP Technika. Not only do we manufacture, but we also use our machines - all products of UMP Technika are also used daily in our sister woodworking companies.

### **Hydraulics**

Horizontal Hydraulic Ram is assisting the rotor by pushing material, maximizing the working area efficiency of the shredder. By ensuring efficient material feeding, it enhances overall shredding productivity.

The hydraulic ram is controlled by an algorithm, prioritizing both safety and efficiency. This intelligent control system optimizes the ram's movements maximizing operational effectiveness.

The hydraulics are mounted on gimbals, providing exceptional stability and durability. This design choice contributes to a longer service life, minimizing maintenance requirements and ensuring consistent performance over time.

The hydraulic components are housed within an enclosed system, reducing noise and vibrations during operation. Additionally, the ladder frame chassis further enhances stability and safety, creating a robust foundation for the shredder.

#### **Electricals**

Shredder operates on a standard 380-volt electrical supply at a frequency of 50 Hz. The main motor has a power rating of 22.5 kW, providing the necessary torque and speed for efficient shredding operations. The revolutions per minute (RPM) of the shredder's rotor are set at 98, ensuring optimal performance during material processing.

**Power supply:** 380 V, 50 Hz **Main motor power:** 22.5 kW

### Material infeed

**Revolutions:** 98 RPM

VVSG shredders are horizontal infeed systems. Material is put onto the line where it is automatically reduced by the machine.

Allows to shred pieces up to **170mm** height, **510mm** width.

**Rotor:** The shaft is monolithic, axes are changed separately (there is no need to change the entire shaft).

Blade holders are screwed on, not welded. The blade holder is changed much faster and easier.

Blades are used, one blade is used 4 times.

Pre-blades are used and adjustable.

Screens are replaceable

## >>>> TECHNICAL HIGHLIGHTS

### Manufacturer's warranty

24 month / 1000 work hour warranty <sup>1</sup>

Service, materials and parts provided by the seller.

Servicing done following the manual & service plan.

### Customisation

- Cutting blades adapted to required material
- Screw unloading conveyor
- Air transport connection
- Installation and training

SPECIFICATIONS:	VVSG
THROUGHPUT <sup>2</sup> :	Up to 13m3/h, ~2225kg/h
MAIN MOTOR:	37/45kW
MATERIAL SIZE:	Up to 170mm height, 510mm width.
BLADES:	38 units
BLADE SIZE:	40x40 for softwood, 35x35 for hardwoods.
WIDTH:	1550mm
LENGTH:	2100mm
HEIGHT:	1350mm
WEIGHT:	3500kg
SCREEN:	D20 / 35x35
WARRANTY:	2 years / 1 000 workhours

<sup>&</sup>lt;sup>1</sup> Which ever comes first, either 24 months or 1000 work hours.

<sup>&</sup>lt;sup>2</sup> Depends on sieve size, material size & material type. Accurate numbers provided after tests with clients material.

# **»»TOGETHER.**

# EVERY STEP OF THE WAY



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