UNTHA

The reliable brand!

ADVANCED GENERATION



RS CLASS

50 | 60 | 100 | 150

4-shaft shredder for industrial recycling applications



RS50 / RS60 / RS100
Maximum reliability for challenging applications

UNTHA is the pioneer of 4-shaft shredding technology, and has been contributing to the economical and ecological utilisation of many different types of 'waste' materials, for over 50 years.

But with this rich heritage comes continued innovation – engineering advancements that never stop. Working closely with customers to gather insights from our many global markets, UNTHA's R&D team consistently introduces progressive performance features that break new boundaries. The result: more strength, more versatility, more uptime, more efficiencies, more potential.

The world class RS range. Premium quality, manufactured in Austria, trusted globally.

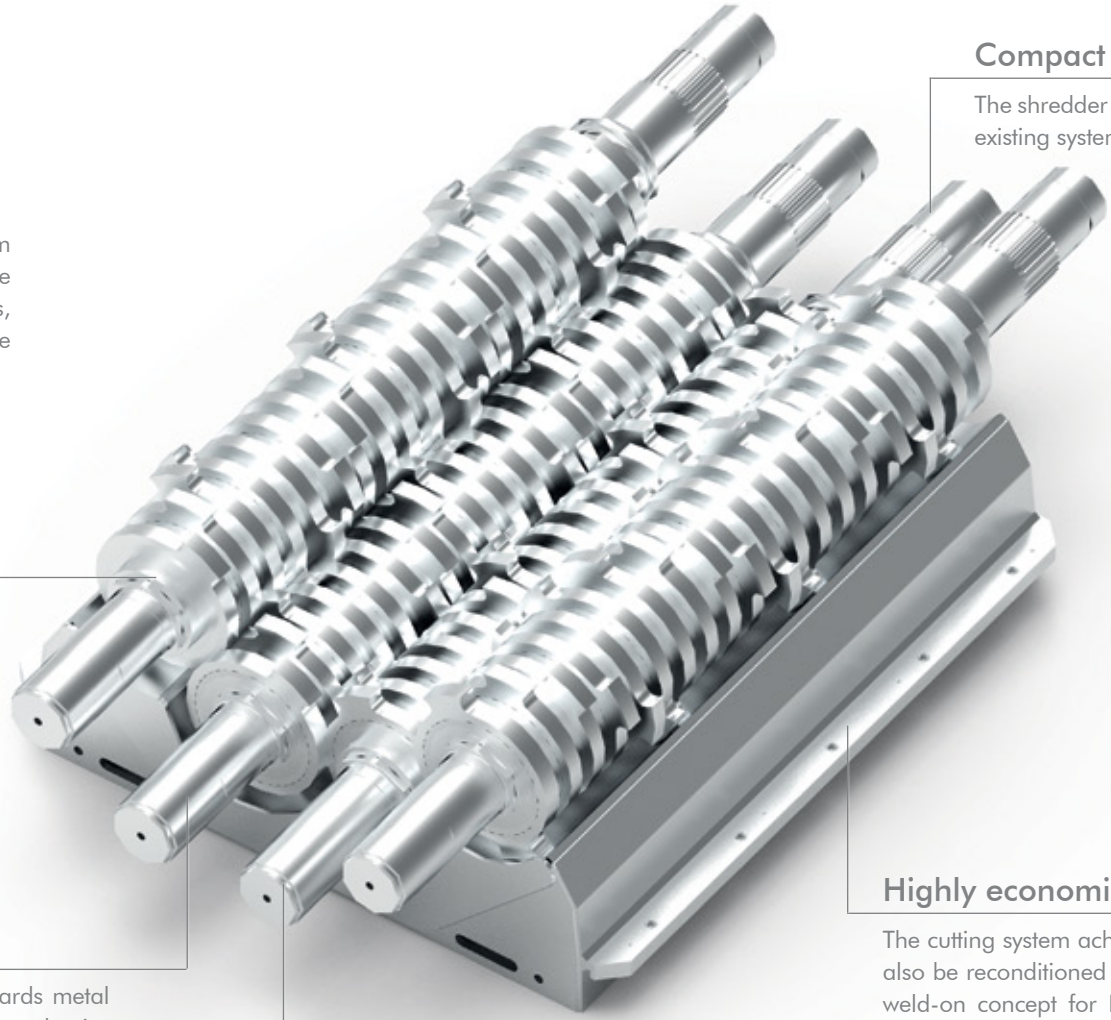
Suitable for

- Aluminium profiles
- Automobile interior linings
- Banknotes
- Batteries
- Car bumpers
- Cardboard
- Carpets
- Dashboards
- Dishwashers
- Electric cookers
- Electronic scrap
- Foils
- Hazardous waste in canisters/barrels
- Medical waste
- Metals/barrels/shavings
- Oil-containing waste (filters, etc.)
- Organic waste
- Packaging
- Paper
- Paper rejects
- Plasterboard
- Plastic barrels/bottles
- Plastic containers
- Production waste
- Punching scrap
- Radioactive waste
- Rubber waste
- Sprung mattresses
- Tetra Paks
- Textiles
- Tin cans
- Toxic waste
- Transformer coils
- Waste bins
- and much more

The tried-and-tested UNTHA
4-shaft cutting system

4-shaft cutting system

The tried-and-tested, patented 4-shaft cutting system was developed specifically for tough challenges. The cutting discs are resistant to non-shreddable items, designed for intense, continuous operation and are particularly economical due to their long service life.



Compact design

The shredder can be easily integrated into existing systems to defined interfaces.

Individually adaptable

The cutting system can be customised to the input material and fraction size requirements. Dynamically pretensioned cutting system for the quick and easy exchange of cutting discs.

Highly economical

The cutting system achieves a long service life and can also be reconditioned cost effectively. With the UNTHA weld-on concept for RS cutting system, costs can be saved and the machine service life extended. This is economical and sustainable.

Slow-running cutting system

The cutting system is particularly resistant towards metal non-shreddables and stands out for its low dust and noise production.

Low-wear screen

The screen ensures a defined fraction size and is easy to exchange thanks to the quick-change screen system.

Your benefits at a glance



Economical cutting system

The material is pulled in by the cutting system, eliminating the need for a ram device. The 4-shaft cutting system ensures a high torque, has a long service life and is highly resistant towards non-shreddables. The low speed keeps noise and dust production to a minimum. Thanks to the wide range of cutting units available, the shredder can be customised to meet individual customer requirements. The result is a resilient, versatile shredding process, with low whole life running costs.



UNTHA direct drive system

The staggered start-up of two motors reduces current and power peaks. The simple design of the motor unit (pinion motor – bearing unit – gearbox) reduces susceptibility to faults and minimises maintenance costs.



Defined fraction size

Depending on the requirements, a range of different, quick change screens ensures the production of pre-defined fractions. The large screen area achieves high throughput rates.



Highly user- and maintenance-friendly

An integrated quick-change screen system maximises operational uptime.



Sample image RS50

Electronic protection systems

The automatic detection and switch-off of impurities and an automatic reversing function protects the drive unit from damage in the event of motor overload. An automatic switch-off switches the machine off when idling and ensures low energy costs.

Long machine lifespan

Easily replaceable wear elements in the cutting chamber extend the service life of the shredder. The maintenance-free mechanical seals prevent dust and dirt from entering gears and bearings. The torsion-resistant steel frame construction provides a stable, low-vibration base. The functional design protects the machine components from dirt.

User-friendly display

The shredder's settings can be optimally adjusted to the respective material using the intuitive 5-inch colour display. It also helps to quickly analyse and rectify faults and provides an overview of the shredder's entire maintenance history.



Options

Mechanical extras

- Automated central lubrication system
- Shaft ventilation for a longer service life of the cutting system
- Large selection of cutting discs
- Motor covers incl. LED status display

Electrical extras

- Frequency converter for the continuous adjustment of speed to the input material and the reduction of power peaks when starting up the machine
- Control system upgrade: light barrier, superordinate control system, BUS system
- Integration of on-site peripheral devices into the control system

MyUNTHA customer portal

- The MyUNTHA digital customer portal contains all relevant information about the shredder as well as services and assistance
- UNTHA Carefree Packages Basic, Comfort, Professional ensure that shredders are technically sound and ready for use at all times

Accessories

- Hydraulic ram system
- Customer-specific feed hoppers
- Range of discharge feed systems
- Bolted machine frame

UNTHA test centre & live demos

The UNTHA headquarters in Kuchl/Austria has a state-of-the-art test centre where experiments are carried out with different materials and according to customer-specific requirements. These enable us to always find the right shredding solution for every project, and customers are welcome to attend these test runs. There is also the opportunity to experience UNTHA shredders live in operation. Depending on requirements and availability, reference sites can be visited or shredders can be tested in your own company, globally.

Contact us – together we will find the perfect solution for you.





RS150
The intelligent power package for extraordinary requirements

The RS150 is UNTHA's largest 4-shaft shredder and was specially developed for challenging applications that require high throughputs, high availability and low operating costs.

The crowning glory of this shredder is the energy-saving UNTHA Eco Power Drive. The drive concept ensures that the cutting shafts stop immediately when non-shreddable material is detected to prevent damage to the cutting system. In addition, this drive concept allows for frequent reversing – a non-negotiable when it comes to shredding problematic materials. Thanks to speed adjustable cutting shafts, it is possible to constantly adjust the throughput to match the material to be shredded in the best possible way. Unlike with fast-running systems, there are no wear parts such as couplings, belts, shear pins or flywheels, which reduces vulnerability to faults to a minimum. High availability, outstanding efficiency, low energy consumption and straightforward maintenance make the RS150 the absolute winner in its class.

Suitable for

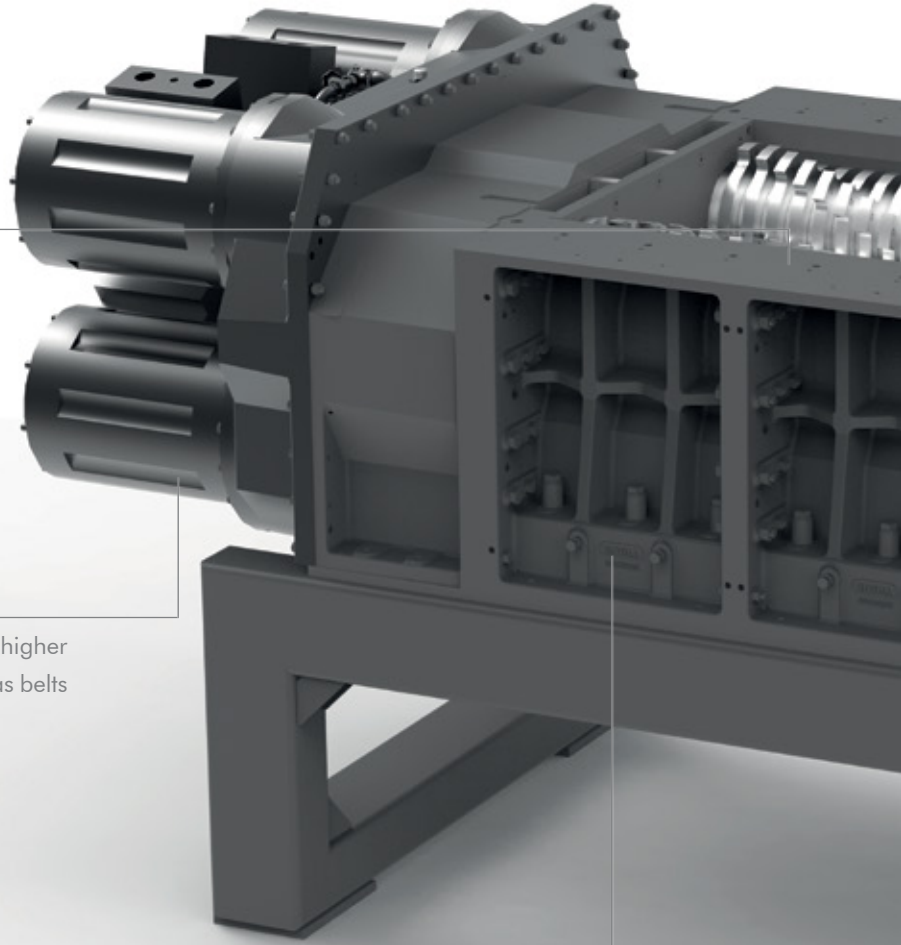
- **Non-ferrous scrap**: profiles, sheet metal, casings, aluminium rims, pipes, etc
- **Waste electrical and electronic equipment (WEEE)**: IT and telecommunications devices, consumer electronics, electrical and electronic tools, etc
- **Hazardous waste**: full metal barrels and IBCs, radioactive waste, workshop waste, hospital waste, etc
- **Tough applications**: sprung mattresses, paper rejects

Your benefits at a glance



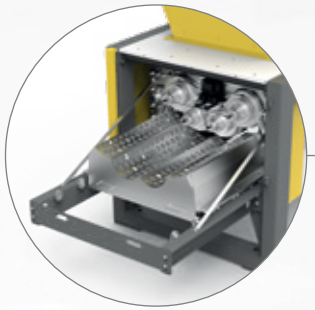
Economical cutting system

The material is pulled in by the cutting system, eliminating the need for a ram device. The slow-running cutting system keeps noise and dust levels low. The cutting system is pretensioned using spring assemblies, ensuring a constantly high level of stability during cutting. They reduce the shock resulting from non-shreddables, thereby protecting the entire drive train. The robust cutting discs made from forged materials significantly increase the wear interval.



Energy-saving UNTHA Eco Power Drive

The drive system with a water-cooled synchronous engine ensures an unprecedented low energy use at higher performance compared to standard drive types. The wear-free direct drive reduces maintenance costs as belts are not required. The load-dependent speed control ensures a high throughput rate.



Defined fraction size

Depending on the requirements, different perforated screens can be used for a defined fraction size. The screens are made of low-wear Hardox. An integrated quick-change screen system makes the screen easy and quick to exchange.



Sample image RS150

High level of user-friendliness

The machine is operated via a 5" colour touch display visualising all relevant operating statuses and error messages. If the input material changes, the machine settings may be adjusted accordingly by means of predefined programmes.

Long machine lifespan

A torsion-resistant machine frame with solid steel profiles ensures low-vibration operation. The robust cast-steel casing and bulkhead walls with integrated wear plates in the cutting chamber, make for a long lifespan of the machine. A multi-layer sealing system prevents dirt from entering gears and bearings.

Options

Mechanical extras

- Large selection of cutting discs
- Automatic central lubrication

Electrical extras

- Control system upgrades: signal exchange, SE switch, filling level control
- Integration of peripheral devices into the control system
- Automatic start

Services

- Extended warranty period
- Maintenance contracts

MyUNTHA customer portal

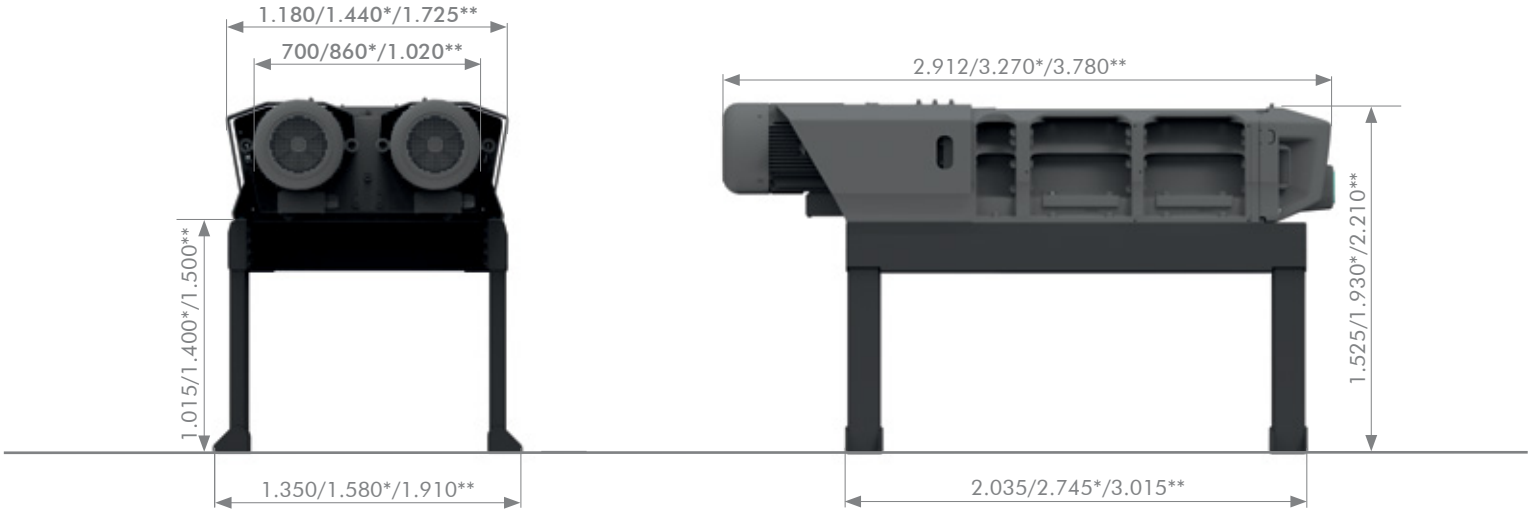
- The MyUNTHA digital customer portal contains all relevant information about the shredder as well as services and assistance
- UNTHA Carefree Packages Basic, Comfort, Professional ensure that shredders are technically sound and ready for use at all times

Accessories

- Double-walled hopper
- Hydraulic ram system for the improved infeed of bulky materials
- Range of discharge feed systems as conveyor belts, screw conveyors and extraction systems

RS50/60/100

4-shaft shredding system

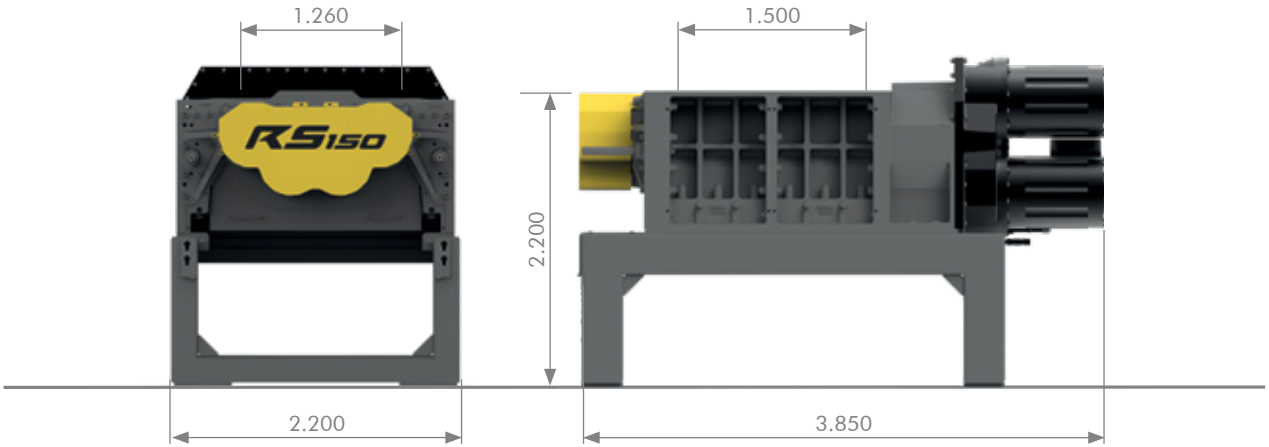


TECHNICAL DATA		RS50	RS60*	RS100**
Rated capacity	kW	44/50/60	60/74	110/150
Cutter clearance (S)	mm	750/1.000/1.230 x 700	1.000/1.200/1.440 x 860	1.200/1.500 x 1.020
Number of shafts	pcs	4	4	4
Speed of the main shafts	rpm	21 - 29	17 - 21	20 - 28
Speed of the secondary shafts	rpm	32 - 43	21 - 25	21 - 29
Ø perforated screen	mm	15 - 40	20 - 100	20 - 100
Weight	kg	3.200 - 3.500	5.500 - 6.000	10.000 - 11.000

All dimensions in mm

RS150

4-shaft shredding system



TECHNICAL DATA		RS150	
Rated capacity	kW	4 x 80	4 x 45
Cutter clearance (S)	mm	1.500 x 1.260	1.500 x 1.260
Number of shafts	pcs	4	4
Speed of the main shafts	rpm	22 - 30	25
Speed of the secondary shafts	rpm	25 - 34	28
Ø perforated screen	mm	40 - 100	40 - 100
Drive type		UNTHA Eco Power Drive	UNTHA Power Drive
Weight	kg	ca. 22.000	ca. 22.000

All dimensions in mm

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5 reasons to choose UNTHA



Customised, long-lasting shredding solutions



Premium products developed and produced in Austria



All-encompassing expertise, from development to production, under one roof



Reliable customer service with the best technical know-how



More than 10,000 satisfied reference customers worldwide

We deliver what we promise

Since our founding in 1970, we've followed our promise of being "the reliable brand", which applies to every product and service that UNTHA delivers.

We work hard to consistently outperform our competitors, and provide customers with the confidence that – in choosing UNTHA – they have made the best decision for their business.

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