

# UNTHA

shredding technology

The reliable brand!

## RS SERIES



### RS150

## INTELLIGENT POWER PACK FOR EXCEPTIONAL REQUIREMENTS

The new RS150 is the largest 4-shaft shredder that UNTHA has manufactured. Designed specifically for extreme applications where operators require very high throughputs, low operating costs and high availability.

The all new UNTHA Torque Drive forms the highlight of this unique and innovative new shredder. The cleverly designed dynamic and energy-saving drive concept can optimise the power consumption whilst ensuring that any stresses on the cutting shafts are constantly monitored. Foreign objects are detected early and the shredder stopped immediately, thus preventing damage to the cutting tools.

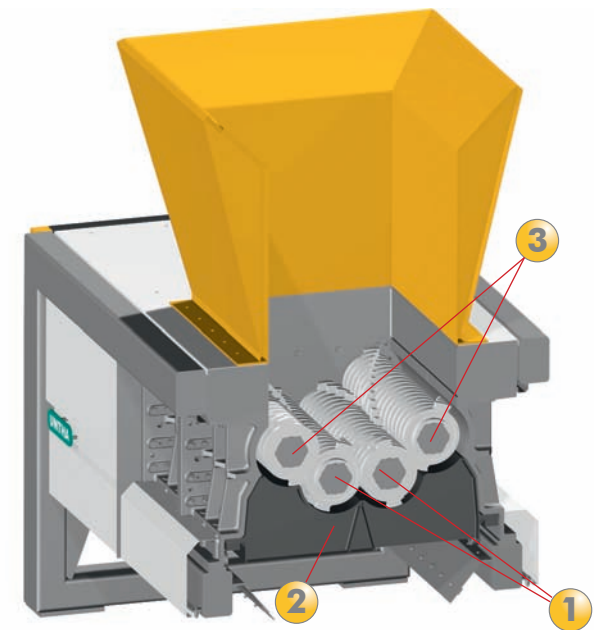
The UNTHA Torque Drive system is designed to automatically control the cutting speed and torque delivery, whilst allowing the cutters to frequently reverse without damaging the machine. This is particularly useful when shredding problematical materials, with high torque requirements. Using the infinitely adjustable cutting speed and torque delivery system the shredding output rate can be optimised depending on the material being shredded. This new simpler drive system works without couplings, fly wheels or shear pins and is therefore more reliable and less prone to mechanical failure.

Increased process uptime, lower energy consumption with easy maintenance all go together to make the UNTHA RS150 a world leader in its class.

If you have a difficult material to shred then this machine should be on your shopping list.

## FUNCTION AND DESIGN

The material is drawn into the main cutters (1) and both pre-shredded and re-shredded in a single pass. Material that does not pass through the screen (2) is transferred to the secondary cutters (3). The secondary cutters then transport the material back into the cutting chamber for re-shredding. The final granule size is defined by the screen diameter.



## TYPICAL APPLICATIONS

**Non-ferrous scrap metal:** sections, sheet metal, casings, aluminium rims, tubes...

**Electronic WEEE scrap:** large and small appliances, IT and telecommunications equipment, consumer electronics, electrical and electronic tools, cooling units and refrigerators...

**Hazardous waste:** filled metal drums and IBCs, radioactive waste, workshop waste, batteries, hybrid cells, hospital waste...

**Tyres:** cars, trucks, buses, agricultural machines, construction machines, air planes...

**Cables:** copper, aluminium

**Tough applications:** spring mattresses, rope shredding, pulper ropes, GoreTex rolls, thaws, FIBC's, carpets...

## QUALITY FEATURES

### Dynamic and energy-saving drive concept thanks to UNTHA Torque Drive

- Optimum protection of the cutting tools
- Variable speed optimisation with full torque achievable from 0 rev/min
- Infinite number of reverse operations without damage
- High efficiency and low energy consumption
- No wear parts (no couplings, belts, shear bolts...)

### Rugged and economic cutting system

- Large cutting discs with integral collar (A)
- Interchangeable main and secondary cutting discs
- Dynamic cutting disk pre-tensioning system (B)
- Cutting shaft ventilation for self-cleaning purposes (C)
- Low-wear screen (D) in HARDOX design

### Break-proof machine design

- Rigid machine frame (E) fabricated using large special-section steel tubes
- Robust ribbed design of the cutting system housing (F)
- Hopper (G) in double-walled design
- Protected components (motors, electric system...) due to sheet steel housing

### Special bearings and shaft sealings

- High-quality bearings
- Three bearings (H) for each cutting shaft
- Multi-stage sealing system
- Integrated and easy-to-exchange bearing stiffener walls (I)
- Bearing stiffener walls including wear plates

### Ease of maintenance

- All machine components are easily accessible
- Fully automatic central lubrication system
- Integrated quick change screen system (J)
- Long maintenance intervals
- UNTHA remote diagnosis via modem

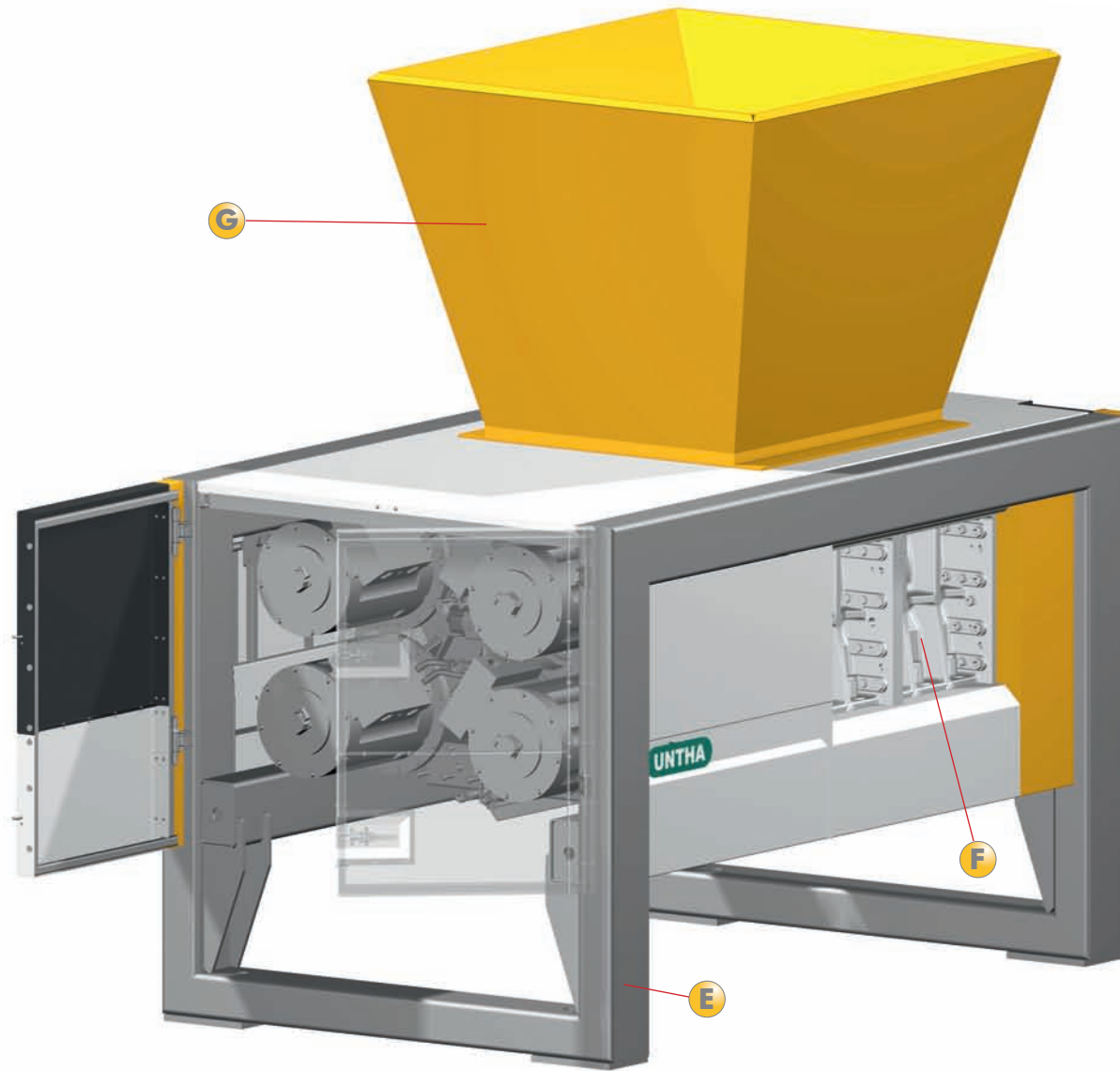
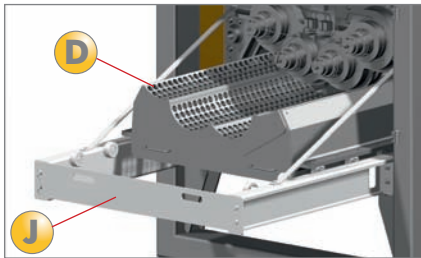
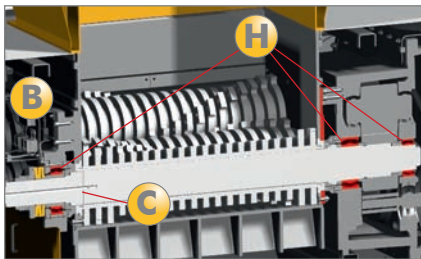
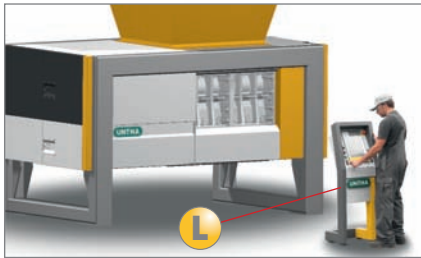
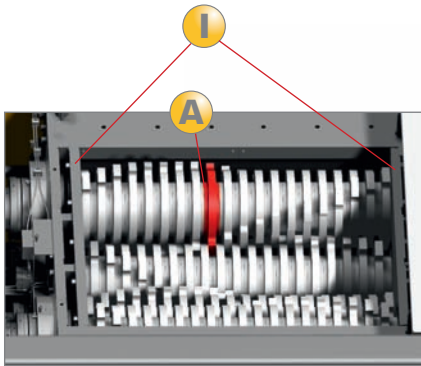
### Easy to use control systems

- SRC(E)<sup>1</sup> operating panel with integrated industrial PC (K) and 15" touch screen
- Mobile control column (L)
- Various pre-installed programmes for diverse applications
- Integrated and interactive operating instructions
- Display of all essential operating states (current consumption, motor temperature...)
- Programmable operating parameters
- Fault indication including troubleshooting

### Low noise and dust generation

- Due to UNTHA Torque Drive
- Due to low-speed cutting shafts

<sup>1</sup>) Safety Remote Control (Expert)



# RS150

## Four-shaft shredding system

### Options

- Hydraulic ram
- Wide range of cutting disc designs
- Control system add-ons (signal exchange, limit switches, fill level monitoring)
- Extended warranty period
- Maintenance contracts and carefree packages
- Special designs



TECHNICAL DATA		RS150-1500	RS150-1500
Driving Power	kW	4 x 78	4 x 45
Charging hole	mm	1,500 x 1,260	1,500 x 1,260
No. of cutting shafts	units	4	4
Speed main shafts	rpm	15 - 30	25
Speed secondary shafts	rpm	17 - 34	28
Ø Perforated screen	mm	50 - 100	50 - 100
Direct drive		yes	yes
Drive type		UNTHA Torque	Asynchron
Weight	kg	ca. 22,000	ca. 21,000

All dimensions in mm.



**40 years of expertise  
More than 8,000 shredders  
in daily operation!**





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