

LINDNER



**SYSTEM SOLUTIONS
MOBILE SHREDDING**

**WIN EVERY
RACE.**



YOU'RE JUST PERFECT.

When it comes to hiring first-class machines, you must pay the Tuytel Group near Rotterdam a visit. Since 1999 the company has been renting out heavy construction machinery as well as offering transport solutions and recycling machines. It relies on Lindner's Urraco series 75 and 95 to process waste wood grades A1 to A4 for subsequent shipping. If you ask why, Jan Arie van der Meijden, the person responsible for recycling technology at Tuytel, will give you a clear-cut answer: 'We don't want our customers having to change or screw on knives every day to obtain a clean fraction without any irritating oversized particles. With the Urracos we easily manage to shred for 600 to 700 hours without having to deal with the cutting unit. The machine operator can concentrate on feeding and the machine produces a whole lot of perfectly sized final output at a throughput rate of up to 65 metric tons per hour.'

'With Lindner's Urraco shredder the machine operation can focus on what's really important: the feeding.'

Jan Arie van der Meijden
Recycling Technology Officer
Tuytel Group
The Netherlands

AS DIVERSE AS LIFE ITSELF.

LINDNER'S MOBILE SHREDDING
AND PROCESSING SOLUTIONS

Diversity is what counts when it's about Lindner's mobile system solutions. They are the product of powerful drives and mighty technology. Where dedicated specialists encounter universal geniuses. And they all have one thing in common, that's just so Lindner: the robustness and quality of the components and the welded cutting system for maximum reliability with minimum maintenance.



1 MIURA 1500 DT | DK

Ingeniously flexible: With the innovative FX fast exchange system, the Miura twin-shaft shredder is ready for action in a minimum amount of time, making long maintenance breaks unnecessary. Thanks to its 3-axle trailer it can be conveniently transported to any desired location or easily manoeuvred on site using the tracked chassis.

2 URRACO 95 DK

Endlessly powerful: Thanks to its extremely powerful engine, a shaft length of 2500 mm and its aggressive intake, Lindner's Urraco 95 DK twin-shaft shredder makes short work of any material. Enjoy an incredibly reliable machine with low wear and tear, easy maintenance and low energy consumption per shredded tonne.

3 URRACO 75 D | DK | E

Compact yet incredibly strong: A robust design with powerful diesel engines or electric motors, Lindner's Urraco 75 shreds even difficult materials with its two 1500 mm long shafts. Depending on the mobility required, it is available with a wheel axle and drawbar, heavy crawler-tracked chassis or as a stationary version.

4 ZETA STAR 75 F2 D/DK | 95 F2 DK

Extremely precise: This winning combination of tried-and-tested shredding technology and incredibly flexible screening equipment make Lindner's Zeta Star screens the ideal companion for every mobile Urraco and Miura shredder. Together, they are a turn-key, highly efficient system solution for turning waste wood into a strictly standardised end product.

VOLUME DOWN, VALUE UP.

SINGLE-STAGE WASTE WOOD PROCESSING



THE FIRST STEP TOWARDS HIGH PROFIT MARGINS

Transporting waste wood over long distances to the recovery site is not economically viable without volume reduction. It makes perfect sense to shred the material on site at the collection centre to significantly reduce the number of required containers. An overbelt magnet fitted right after the shredder is also able to directly remove metals such as nails or screws from the shredded material. The resulting fraction can then be recovered directly, for example, depending on the combined heat and power plant's design. Alternatively, it can be processed further with less effort, as the first process step has already been completed.

APPLICATION NOTE:

Shredder	Urraco 95 DK
Engine	diesel hydraulic
Cutting system	synchronous fine SF 12.10
Screen	--

Material	waste wood A1-A4
Throughput	up to 65 t/h
Final output	90% < 180 mm



IT'S ALL ABOUT THE DETAILS.

DUAL-STAGE WASTE WOOD PROCESSING

'Our customers want clean P63 particles. With Lindner's solution, we produce this in a cost-saving manner without expensive secondary shredding.'

Christoph Kottmann
Head of Production
Steil Entsorgung GmbH
Germany

GUARANTEED STANDARDISED

For a proper energy recovery from waste wood in power plants, the particles need to be homogenous and defined, since conveying and combustion equipment is always designed with specific particle sizes in mind. The widely used P63 F5 classification is a required fuel specification according to EN ISO17225-1, which specifies that the bulk of the particles must be smaller than 63 mm. It also states that only up to 10% of the oversized particles may be larger than 100 mm and fine particles smaller than 3.15 mm cannot constitute more than 5% of the final output. To achieve this, the perfectly matched star screen from the Zeta Star series is installed after the shredder, which can produce the coarser P100 particles without any problems thanks to Lindner's patented cutting unit, resulting in only the finest materials for recovery without oversized particles.

APPLICATION NOTE:

Shredder	Urraco 75 DK
Engine	diesel hydraulic
Cutting system	synchronous fine SF 10.8
Screen	Zeta Star 75 DK

Material	waste wood A1-A3
Throughput	up to 25 t/h
Final output	P63 (EN ISO17225-1)



EXTREMELY VALUABLE.

MSW AND C&I WASTE
PROCESSING



INPUT



OUTPUT

THAT'S HOW TO TURN WASTE INTO A RESOURCE

When recovering municipal solid, commercial and industrial waste, it is important to first shred the material roughly. The reduction in volume and the direct elimination of ferromagnetic metals makes material handling easier and reduces transport costs accumulated between decentralised collection centres and larger RDF/SRF processing and recycling facilities. Thanks to shredding, it is possible to use subsequent sorting equipment. Sorting is usually only possible if the material is loose, for example material that is not bagged, and has a certain chunkiness to it. Furthermore, it is important to keep the fine particles content as low as possible, as they are very difficult or impossible to sort.

APPLICATION NOTE:

Shredder	Miura 1500 DT
Engine	diesel hydraulic
Cutting system	synchronous rough SR 6.7
Screen	--
Material	bulky waste, MSW, C&I waste
Throughput	up to 40 t/h
Final output	90% < 300 mm

BRILLIANT PERFORMANCE.

ALUMINIUM SCRAP PROCESSING



NEAT YIELD

When recycling scrap metal, the first step in the process is to reduce the volume. This leads to an increased bulk density and thus to better yields in the next step. Lindner's mobile shredders cut and crush the materials at the same time with their twin-shaft cutting systems, which additionally break up mixed materials such as aluminium-iron or aluminium-plastic compounds to obtain the ideal particle size for subsequent sorting. This is an essential step because the source material's purity is crucial for subsequent recycling.

APPLICATION NOTE:

Shredder	Urraco 95 DK
Engine	diesel hydraulic
Cutting system	synchronous rough SR 10.10 scrap
Screen	--
Material	aluminium profiles and sheets
Throughput	up to 35 t/h
Final output	90% < 300 mm

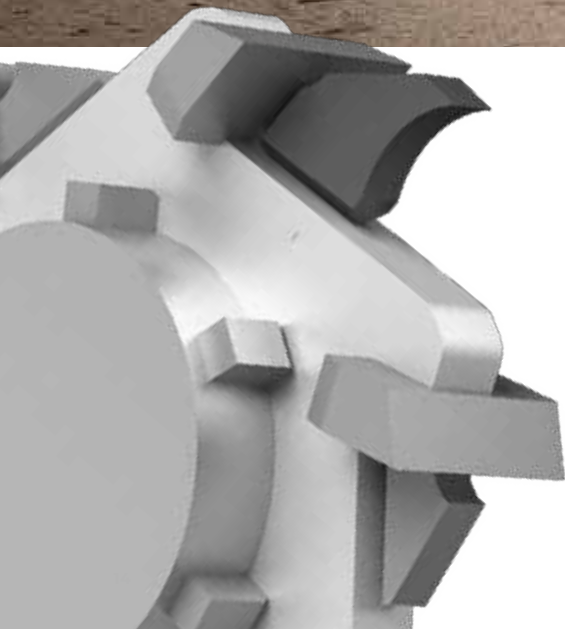


HARD CURRENCY.

CONTAMINATED WASTE WOOD PROCESSING

‘The fact that the shredder operates for 900 hours without having to maintain the shredding unit – even with the hard materials we process – made it a winner.’

Oskar Preinig
CEO
Gojer, Kärntner Entsorgungsdienst GmbH
Austria



IF IT’S ROUGH AND TOUGH

When it comes to rough and tough waste wood recovery, hardly anything beats the processing of railway sleepers or electricity poles. The heavily treated and very hard types of wood do not break as easily as conventional waste wood and therefore require machines with sufficient power reserves. The input material may also contain foreign particles such as heavy iron fittings or massive screws. Although these can be separated from the waste wood fraction using a magnet, they are particularly tough on the cutting unit. To recover these materials efficiently, it is important that the shredding equipment is robust and the cutting unit is premium quality.

APPLICATION NOTE:

Shredder	Urraco 95 DK
Engine	diesel hydraulic
Cutting system	synchronous rough SR 8.10 wood
Screen	--
Material	railway sleepers
Throughput	up to 140 t/h
Final output	90% < 300 mm



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