



shredding technology

The reliable brand!

XR

1-shaft shredder for efficient coarse,
medium and fine shredding
of different material streams



XR2000 | XR3000 | XR3000 mobil-e

APPLICATIONS



Industrial and commercial waste



Domestic waste



Bulky waste



Waste wood



Pulper ropes



Production waste



Plastic bales



and many more

XR CLASS

BUILT TO PERFORM

Highest possible performance and flexibility and even greater reliability when it comes to shredding different materials: these are the benefits we have achieved through the ongoing development of the XR class. Thanks to numerous innovative features, the unit is now even more adaptable to specific customer requirements. For single-pass waste reprocessing in particular, we have set completely new standards, making it possible to process specific material flows more efficiently while improving the output size quality at the same time.

SUITABLE FOR UNIVERSAL USE

Thanks to different cutting systems, drive power ratings and gear ratios, the XR class is the perfect choice for processing many different material streams, offering fraction sizes from 30 mm to 400 mm and throughputs ranging from 10 t/h to 70 t/h.

For the robust XR class, processing untreated or contaminated materials is no problem – a discharge system means that foreign matter is removed speedily, thereby reducing downtime to a minimum.

ENERGY-EFFICIENT DRIVE SYSTEM

The unique UNTHA Eco Drive ensures unprecedented low energy use at considerably higher performance to standard drive types.

The wear-free direct drive reduces maintenance costs as belts or shaft stubs are not required. Water-cooled drive motors do not require fresh air supply and are not susceptible to thermal failures.

HIGH AVAILABILITY

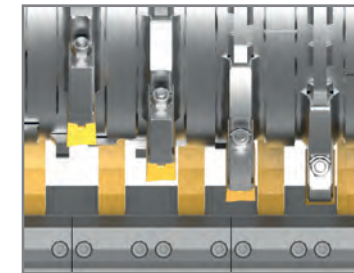
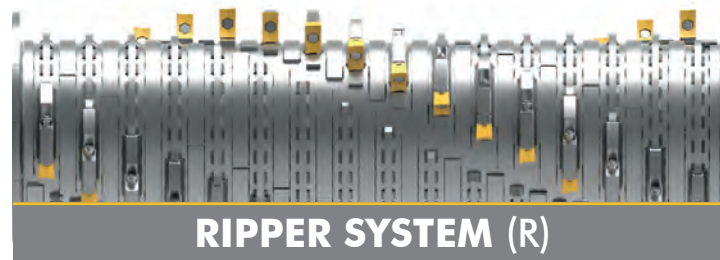
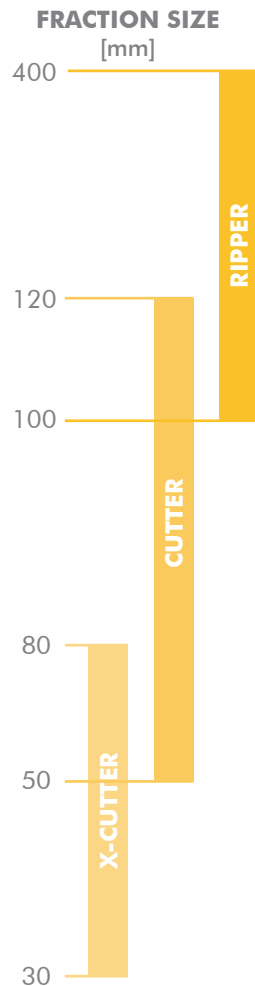
As the unit is highly service- and maintenance-friendly, operators are able to work comfortably, speedily and safely, and in an upright position. Cutting bars that are adjustable from the outside and the quick-change screen system (optional) mean that the XR class is ready for use again in no time.

MOBILE VERSION

The option of purchasing the XR class as a mobile version with a crawler track is also a fantastic additional benefit – the mobile version offers all the commercial advantages of the electromechanical drive system as well as the highest possible level of flexibility, as the unit may be positioned anywhere on the customer premises.

THE PERFECT CUTTING SYSTEM FOR EVERY APPLICATION

Depending on the individual material and required fraction size, the XR comes equipped with a ripper system, cutter system or X-cutter system, offering different cutter geometries. These cutting systems produce fraction sizes of 30 to 400 mm. The throughput is between 10 and 70 t/h, depending on material properties and the screen size.



RIPPER SYSTEM (R)

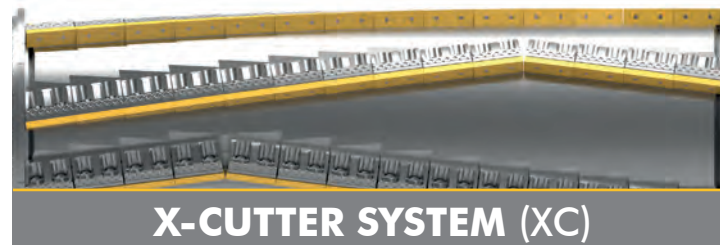
- > Ripper teeth can be used twice
- > Stator teeth can be used once

At the end of their service lives, the ripper and stator teeth can be built-up by welding outside the machine.



CUTTER SYSTEM (C)

- > Square blades can be used four times
- > Stator bar can be used four times



X-CUTTER SYSTEM (XC)

- > Flat blades can be used four times
- > Stator bar can be used four times

QUALITY FEATURES

Energy-saving UNTHA Eco Drive

Drive system with water-cooled synchronous motor ensures an exceptionally low energy consumption with a far better performance than conventional drive concepts. The non-wearing direct drive reduces maintenance costs because it works without belts or shaft stubs. The load-dependent speed control ensures a high throughput.



Operator convenience and ease of maintenance

The machine is operated via 7" colour touchscreen. The clever machine design enables safe and fast working in an upright position for the operating personnel.



Defined fraction size

Screen bars or a screen ensure a homogeneous and defined fraction size.

Rugged hopper

3-sided hopper for feeding with a wheel loader or 4-sided hopper for greater feeding volume and charging by material handlers or belt conveyors.



Massive steel frame structure

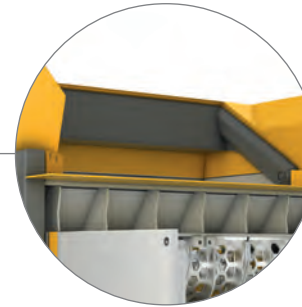
Warp resistant and large specially-fabricated tubes excel in even the toughest operating conditions with very little vibration. However, thanks to its compact design, the machine can easily be integrated into existing plants. Due to its low charging height, the machine can also be charged with a wheel loader.

Effective cutting concepts

Ripper, Cutter and X-cutter system for different requirements and materials. All cutters are reusable and can be exchanged quickly.

Internal pushing system

Ensures a continuous material infeed as well as the processing of bulky materials and bales.



Central lubrication system

Enables longer maintenance intervals and reduces the servicing required.

Efficient discharge system for non-shreddable items

Allows for the fast removal of foreign materials from the cutting chamber.

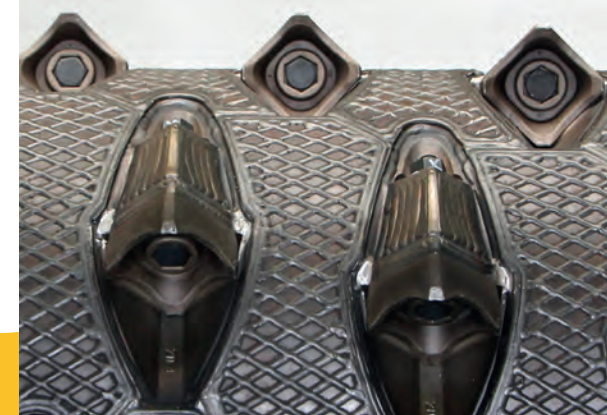
Adjustable cutting bars

The cutting gap can be adjusted from the outside without opening the maintenance flap.



Options

- > **Reliable security coupling:** Protection of the cutting system and drive train by an exact torque control for higher rotational speeds.
- > **Control cabinet room:** Reduces the cleaning effort by 80 % and increases the service life of the electrical components.
- > **Screen quick-change system:** Simple and time-saving one-man screen change.
- > **Condition Monitoring:** Analysis and evaluation of all relevant machine data to increase productivity.
- > **Radio remote control:** The machine can be operated in a trouble-free manner from different positions.
- > **Waste wood package:** Ensures the perfect processing of waste wood.
- > **Hard-facing rotor:** Significantly increases the rotor service life with abrasive materials.





XR SYSTEM SOLUTION

TURNKEY SOLUTIONS FROM A SINGLE SOURCE

UNTHA shredding technology offers complete turnkey solutions for the single-step production of alternative fuels. Reasonable investment, compact design and low operating and maintenance costs, make this solution particularly economical. It is also extremely versatile and can be used for the processing of industrial and commercial waste as well as production waste or waste wood, delivering particle sizes of 40-300 mm in a single shredding step.

High-quality individual components that are perfectly coordinated ensure maximum availability of the overall complex. Both the individual components and the shredder itself are quick and easy to operate via a central

control console.

The control cabinet room also houses the hydraulic system and the cooling unit. Permanent overpressure inside the control cabinet room protects components from dust and dirt, thereby significantly extending the service life of the units. This handy solution is available for all models of the XR class.

Our highly competent project managers are at your disposal for reliable and efficient project completion, from the planning and project execution phase all the way to the successful commissioning of your facility.

YOUR BENEFITS:

- > Complete turnkey solution from a single source
- > Low operating and maintenance costs
- > Compact design
- > Speedy, hassle-free installation of the complete solution on site
- > High level of availability thanks to the use of high-grade individual components
- > Easy operation of the complete system via a centralised operating console
- > Easy integration in existing plant concepts
- > Low-cost, uncomplicated overseas shipping in a sea freight container



Fire extinguishing system

Magnetic separator

Discharge transport system

Control cabinet room



XR3000 mobil·e

ELECTRO-MECHANICAL DRIVE AND STILL MOBILE!

The new XR3000 mobil-e is a breakthrough machine concept in mobile waste shredding. It capitalises on many benefits of an electromechanical drive without having to forego the advantages of a mobile machine. This gives you maximum efficiency and flexibility.

Just like all our XR products, the XR3000 mobil-e is also equipped with an energy-efficient UNTHA Eco Drive. This ensures that your operating costs are minimised and that throughput and material quality are maximised. Also, unlike traditional diesel-driven, energy-guzzling, polluting, noisy and above-all high-maintenance mobile machines, the XR3000 mobil-e's electric and

thus cost-saving drive protects employees, neighbours and the environment. This magnifies the 'green' benefits of this feature, in addition to the economic advantages that it brings.

Mobility is ensured through a reliable crawler-type undercarriage in combination with a small petrol-powered engine. The XR3000 mobil-e can then be reconnected to a power supply via our quick-fastening system. A height-adjustable discharge conveyor belt and an optionally available magnetic separator give you everything you need for an efficient operating mobile shredding system.

YOUR BENEFITS:

- > Up to 75 % less energy costs compared to diesel-driven mobile machines
- > Single-pass shredding solutions for a homogeneous and defined fraction size
- > Flexibility regarding location on premises
- > Low noise and exhaust emissions
- > Low operating and maintenance costs
- > Remote maintenance
- > High availability of spare parts
- > Modern and sustainable machine concept

Magnetic separator
(optional)



UNTHA Eco Drive



Discharge system



Petrol and
hydraulic unit



Crawler unit



Simple operation

Water-cooling
system



Quick fastener
for power supply





REFERENCE VISITS

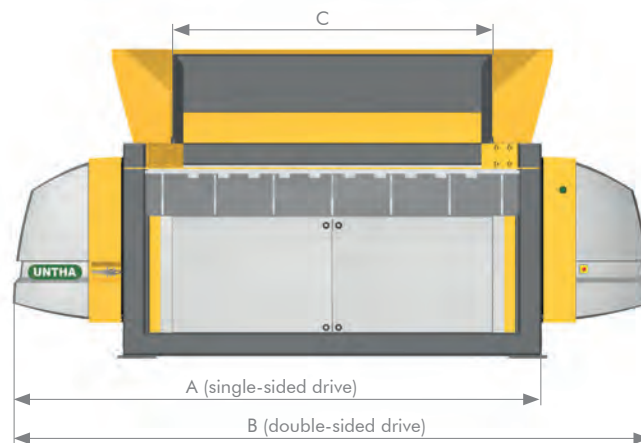
We would be delighted to organise a visit to one of our reference sites for you. There, you would have the chance to see our machines in action and speak to the plant operators about the operational efficiency of this innovative waste shredder. To arrange a reference visit please contact our sales team.



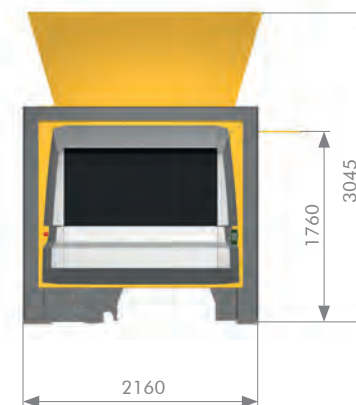
TECHNICAL DATA		XR2000	XR3000	XR3000 mobil-e
Drive power (valid for all types)	kW	1 x 65 1 x 113 1 x 132 2 x 65 2 x 113 2 x 132		
Rotor speed	rpm	max. 36 (R) max. 53 (C) max. 87 (XC)		
Rotor length	mm	2,000	3,000	3,000
Rotor Ø	mm	1,000	1,000	1,000
Weight	t	appr. 21	appr. 24	appr. 37

XR CLASS

	XR2000	XR3000
A	4,070	5,070
B	5,280	6,280
C	1,960	2,960



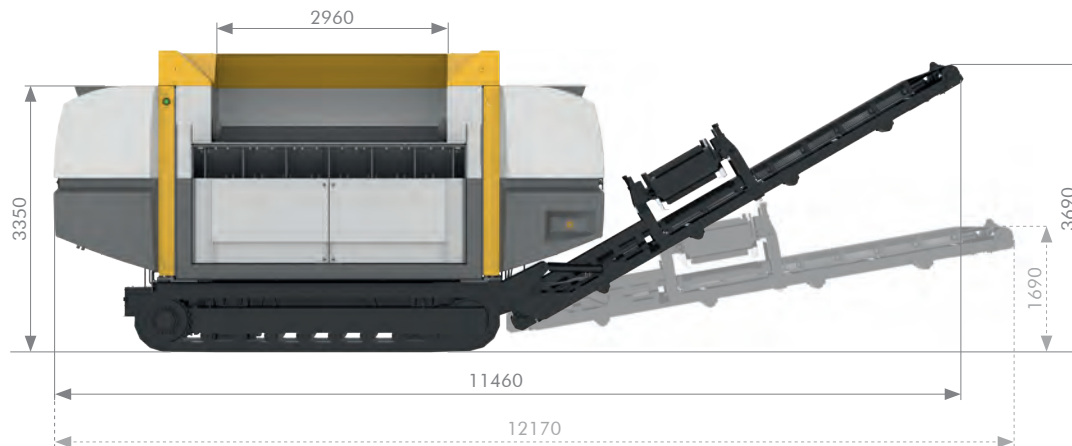
All dimensions in mm



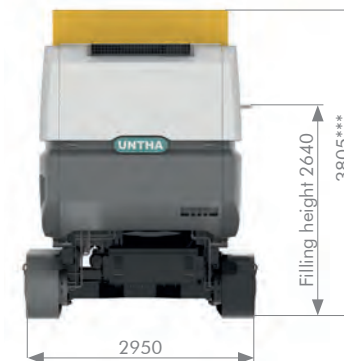
XR SYSTEM SOLUTIONS



XR3000 mobil·e



Transport dimensions (L/B/H): 12170/2950/3350
All dimensions in mm.



*With an attached hopper



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UNTHA shredding technology

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