

# UNTHA

The reliable brand!



The titan among shredders

## MR CLASS

Unbreakable single-shaft universal shredder  
for hard-to-shred materials



## **MR** Class

### **Unbreakable single-shaft universal shredder for hard-to-shred materials**

The MR1800C PRO was developed for applications where other machines reach their limits: plastic sprues, molded parts, pipes, profiles, bales of film, and waste wood. The MR1800C PRO universal shredder processes the entire spectrum of hard-to-shred materials without pre-treatment – reliably, powerfully, and designed for intensive multi-shift operation. This shredder is driven by the powerful UNTHA Power Drive, a beltless direct drive featuring an asynchronous motor, planetary gearbox, and maintenance-free safety clutch. This drive concept ensures maximum efficiency and exceptional operational reliability. Belt changes, tensioning work, and power losses due to slippage are completely eliminated. In the event of foreign material ingress, the integrated clutch reliably protects the cutting system and drive train from damage,

thereby ensuring consistently high machine availability. The C-cutting system is designed for varying material requirements. Four-way-usable rotor blades and cutting bars extend service life, while bolted blade holders allow for quick adaptation to different materials. The maintenance-free, external pressure slide with intelligent control ensures controlled material feed, even with high-volume, bulky, or difficult-to-grip materials.

Components such as the hydraulic service flap and a lowerable screen basket enable quick access to the cutting unit and screen changes in just a few minutes. This significantly simplifies maintenance work and reduces downtime to a minimum.

Machine data can be accessed in real time via the MyUNTHA customer portal and the UNTHA GENIUS digital assistance system; maintenance can be efficiently planned, and spare parts can be quickly identified using the 3D spare parts catalog. This promotes transparency and planning reliability in operations.

The MR1800C PRO is the ideal solution for plastics processors, compounders, recycling companies, and industrial production facilities that process a wide range of demanding materials. This universal shredder stands for maximum uptime, uncompromising robustness, and a machine design that operates reliably even under continuous heavy loads.

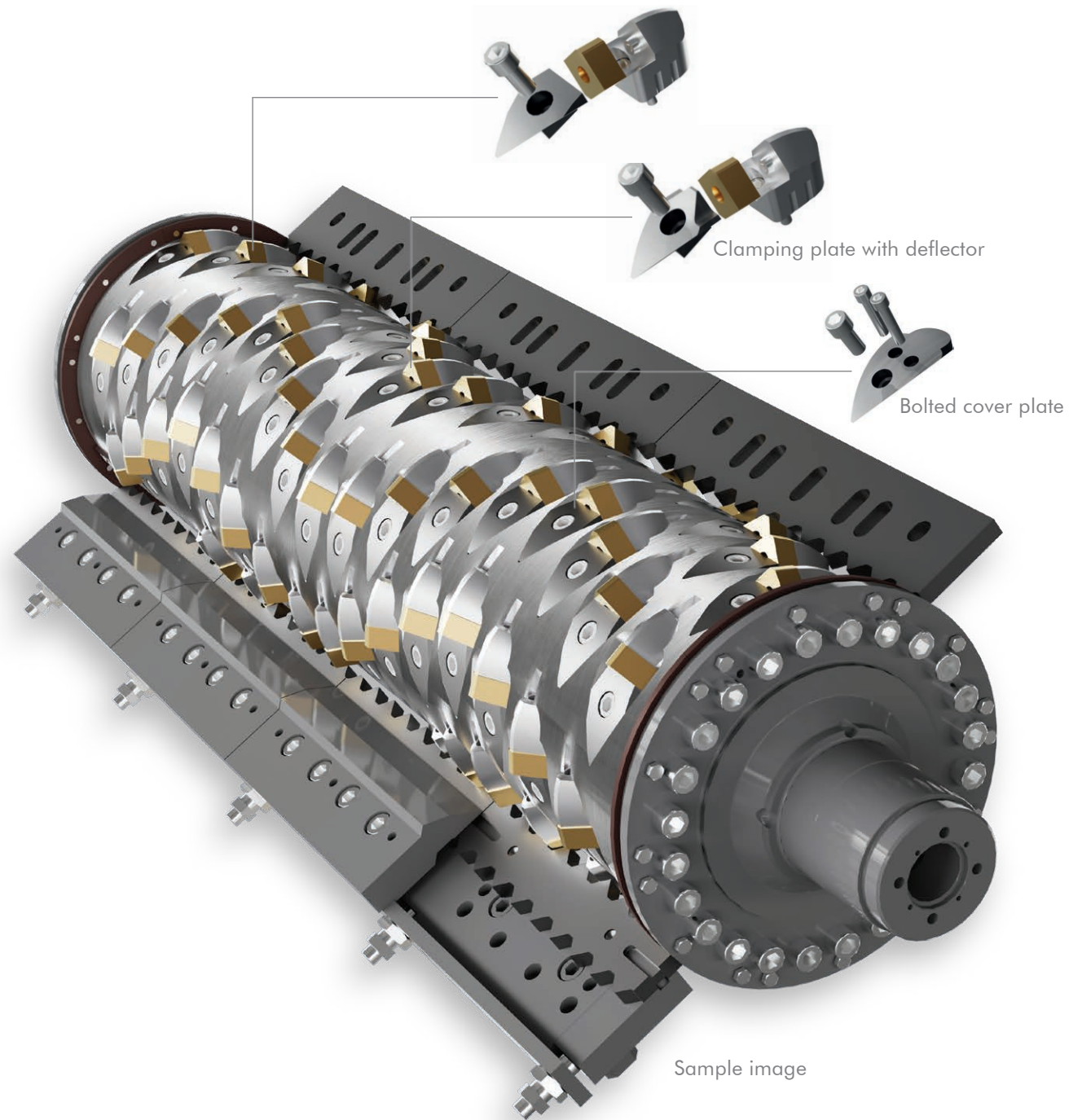
## C cutting system

The C cutting system is designed to shred a wide variety of materials. The large rotor diameter ensures secure material intake, while the screwed knife holders offer maximum flexibility. Depending on the application, both the number of knife rows and individual knives can be adapted precisely to the material being processed. The fourfold reusable, clamped rotor knives can be quickly and easily replaced, while the multi-use, adjustable main and secondary cutting bars significantly extend service life and minimise wear-related costs.

### Materials:

- » Plastics of all types:
  - Thick-walled plastic sprues
  - Thick-walled moulded parts
  - Pipes and profiles
  - Plastic lumps
  - IBC containers
  - Films and plastic bales (light packaging)
  - Strapping bands
- » Composite materials
- » Textiles
- » Waste wood (A1–A4)
- » Confidential files and documents
- » Paper and cardboard
- » Residual wood

### Achievable particle sizes [mm]:



# MR 1800C PRO

*Robust in design. Easy to maintain in everyday use. Uncompromising in performance.*



## External Feed Pusher

The maintenance-free feed pusher with intelligent control ensures controlled material feeding and a consistent throughput of 1–5 tons per hour. By eliminating internal components or linkages, the entire rotor width is optimally utilised – ideal for baled material. Even bulky or difficult-to-grip materials are processed reliably, continuously, and without loss of throughput.



## Hydraulic Service Door

The hydraulic service door provides direct access to the cutting unit for removing foreign objects and changing blades. During batch changes, the cutting unit compartment can be cleaned comfortably and thoroughly while in an upright position.

## Defined Particle Sizes

Different perforated screens enable homogeneous and defined particle sizes ranging from 10 to 60 mm. This allows the material quality to be precisely tailored to the subsequent recycling process.

## Hydraulically Lowerable Screen Basket

The screen basket can be lowered hydraulically, allowing screen changes to be performed quickly and by a single person. Three identical, interchangeable screen segments simplify spare parts management and reduce inventory costs.



## Large Loading Hopper

The spacious hopper allows for the handling of bulky materials using a telescopic loader or material-handling equipment.

## User-Friendly Display

The 7-inch touchscreen display enables direct and intuitive operation of the machine. Operating statuses, error messages and key parameters are clearly visible at all times and can be adjusted quickly and easily. The user-friendly interface simplifies daily operation and enhances overall process reliability.



## Cost-Effective UNTHA Power Drive

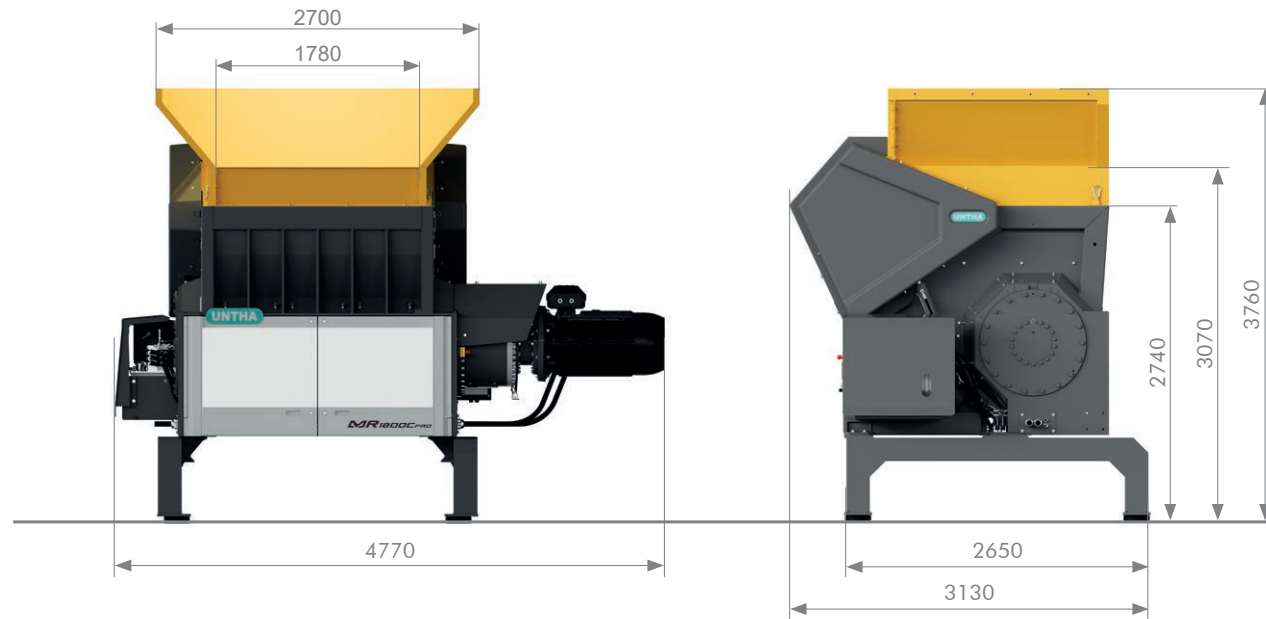
The beltless asynchronous direct drive with planetary gearbox and maintenance-free safety clutch operates without tensioning mechanisms, shaft stubs, or a flywheel. Mechanical wear is reduced, and maintenance requirements are significantly minimised.

## Solid Machine Frame

Solid, torsion-resistant profile tubes provide exceptional stability and low-vibration operation, even under the most demanding conditions. The robust construction protects both the machine and its foundation, ensuring long-term reliability and an extended service life.

## Options

- » **Rotor cooling**  
Stabilises the surface temperature of the rotor when processing heat-sensitive plastics and ensures consistent processing performance even during intensive continuous operation.
- » **Automatic Central Lubrication:**  
Automatically supplies all relevant lubrication points, extends maintenance intervals, and reduces service requirements.
- » **Protective Covers:**  
Protects the drive unit and hydraulic unit from dirt, falling materials, and damage caused by handling equipment, thereby increasing operational reliability in daily use.
- » **Frequency converter:**  
Enables precise performance optimisation of the machine while ensuring low current peaks during start-up and reversing. In addition, the rotor speed can be flexibly adjusted to suit different materials.



TECHNICAL DATA		MR1800C PRO
Drive Power	kW	1 x 110
Number of Blades	pcs.	35   67   101
Rotor Diameter	mm	500
Rotor Length	mm	1800
Rotor Speed	rpm	82 rpm at 50 Hz (with Y-D drive) <sup>1</sup>   49–115 rpm (with variable-frequency drive) <sup>2</sup>
Weight	t	approx. 12

<sup>1</sup> Y-drive: Star-delta connection or star-delta start-up  
<sup>2</sup> VFD drive: Variable frequency drive



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## 5 reasons to choose UNTHA



Customised, long-lasting shredding solutions



Premium products developed and manufactured 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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