



shredding technology

The reliable brand!

QR CLASS

1-shaft shredder for shredding of recyclable materials



INCLUSIVE
UNTHA
RELIABILITY
BONUS

QR800 | QR1000 | QR1200 | QR1400 | QR1700 | QR2100



TROUBLE-FREE SHREDDING OF RECYCLABLE MATERIALS

The QR class is a new generation of extremely reliable and versatile high-performance single-shaft shredders. These products are all about the trouble-free shredding of recyclable materials. With the QR class, operators can be sure of avoiding unscheduled downtime as these machines do what they were built for - the reliable shredding of material.

The QR class was developed and realised over a two-year period, in cooperation with users from industry and commerce. This cooperation has resulted in a new series of single-shaft shredders that leave nothing to be desired. In addition to the robust, universal cutting unit, indestructible body and reliable, completely maintenance-free pusher technology, the technical highlights of this product also include a resilient drive system that comes with a safety coupling. In contrast to standard units, the QR class does not require a shaft stub, as the gears are integrated in the rotor. This results in a significant reduction of repair efforts. Yet another outstanding technological feature is the multi-functional flap that allows quick and easy access to the cutting chamber for the efficient emptying of the hopper and removal of foreign objects.

Furthermore, the pusher may be cleaned in an ergonomic and safe position. The simple operation is based on a high-resolution touch-screen display, intelligent pusher controls, long maintenance intervals and the quick and safe access to all machine components. All these factors combined make operation and maintenance of these units as easy as never before!

AREAS OF APPLICATION

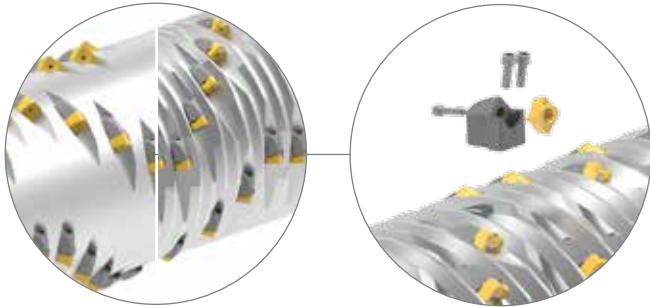
The QR class is particularly recommended for the processing of all kinds of plastics, independent of shape, state or properties of the material, ranging from foils, lumps, profiles, fibres, ribbons, hollow parts, post-consumer and production waste to composite materials, files and data, paper and cardboard, waste wood and pallets, etc.



YOUR BENEFITS:

- Outstanding reliability
- Maximum availability
- High performance
- Exceptional versatility
- Easy maintenance
- Premium granulate

QUALITY FEATURES



Effective cutting system

The **special rotors** (smooth or profiled) have a **large diameter** and are equipped with **bolted cutter holders**.

The **adjustable main and secondary cutting bar** as well as the cutters may be reversed up to 4 times.

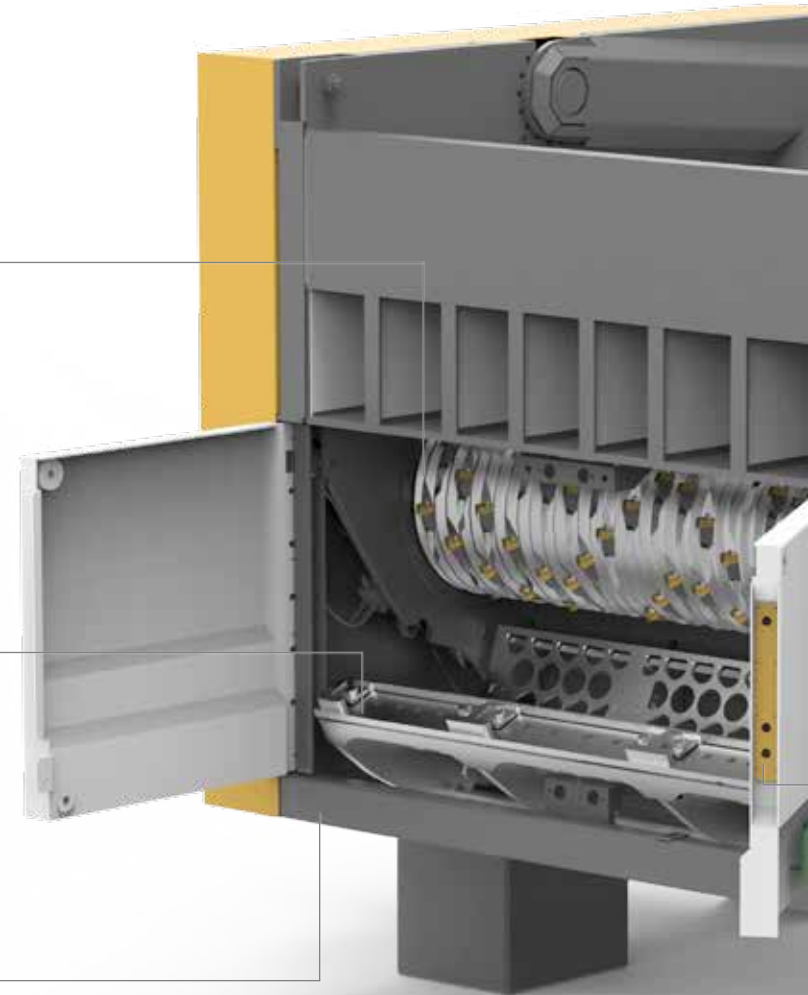


Flexible perforated screen unit

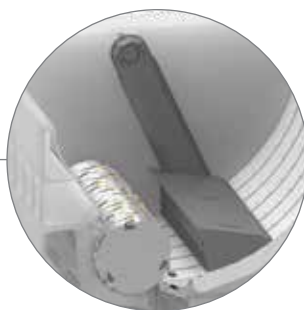
The **hydraulically lowerable screen corpus** ensures an ergonomic and time-efficient cleaning/replacement of the perforated screen. The **convenient screen pan** system allows an easy and quick replace of the screen segments. In addition the screen troughs are two-way exchangeable.

Robust machine body

The **compact construction** facilitates a space-saving set-up and smooth integration in the overall plant. A **low filling level** ensures maximum flexibility when it comes to loading. The **large filling volume** increases the process safety and reduces the risk of bridge formations.



Symbolic image QR1700: The individual machine types may vary in terms of design and finish.



Maintenance-free pusher system

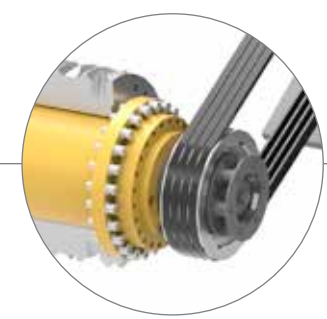
The **hermetic, internal pusher system** requires no maintenance and prevents material leakage.

The **profiled pusher floor** prevents the pusher getting jammed and facilitates the processing of thin-walled materials.

Fail-safe power train

The **reliable safety coupling** protects the cutting system and the power train. Due to the integrated **planetary gear**, there is no shaft stub required.

The **service window** enables a direct and speedy access to the safety coupling.



Exceptionally user- and maintenance-friendly

The **hydraulic multi-functional flap** ensures an easy and fast access to the cutting chamber (more details on page 6)

An **integrated operating element** for the multi-functional flap and the screen corpus provides a good view of the hazard area and facilitates operation.

All components may be accessed quickly, safely and ergonomically and have long maintenance intervals.



YOUR CUSTOMISED MACHINE: EXTRAS

- **Frequency converter:** Ensures optimised machine performance and short current peaks during start-up and reversing.
- **Flexible controller upgrades:** Facilitates customer-specific control system adaptations and upgrades.
- **Special attachment hoppers:** For optimal adjustment to the input material and feeding method.
- **Rotor wear protection (hard surfacing):** Significantly increases rotor availability with abrasive materials.
- **Automatic central lubrication system:** All important lubrication points are supplied continuously with lubricant and hence are less prone to wear
- **Rotor cooler:** Ensures the reliable shredding of materials with a particularly low melting point.
- **Remote maintenance:** For speedy fault diagnosis and trouble-shooting as well as machine optimisation.
- **Operating status display:** For the speedy, visual display of the machine operating status.
- **UNTHA Carefree Packages (gold, silver, bronze):** Ensure that machines are technically sound and ready for use at all times.
- **UNTHA Lifetime Support:** Guarantees maximum availability throughout the lifetime of the machine.

HYDRAULIC MULTI-FUNCTIONAL FLAP

The innovative service and maintenance flap is hydraulically operated and offers easy, quick access to the cutting unit.



INSPECTION AND MAINTENANCE POSITION



The **inspection and maintenance position** makes the indexable cutters and cutting bars **easy to replace**, the **removal of foreign objects** and the **process of adjusting** the cutting gap particularly efficient and straightforward.

CLEANING POSITION



The **cleaning position** guarantees a **quick emptying of the hopper** and the **cleaning of the pusher** in an ergonomic, safe position.

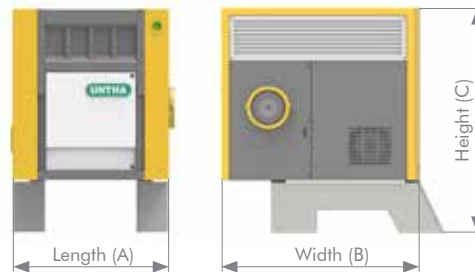
QR CLASS

1-shaft shredding system

TECHNICAL DATA		QR800	QR1000	QR1200	QR1400	QR1700	QR2100
Drive power	kW	22/30	22/30/37/45	37/45/55	45/55	55/75/90/110*/150*	90/110*/150*/180*
Rotor length	mm	800	1000	1200	1400	1700	2100
Ø Rotor	mm	450	450	450	450	560	560
Rotor speed	rpm	Standard = 97 (optional 80 - 120)					
Fill opening	mm	800 x 1300	1000 x 1800	1200 x 1800	1400 x 1800	1700 x 2100	2100 x 2100
Hydraulic power	kW	2.2	2.2	2.2	2.2	4	4
Ø Screen	mm	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100
Size cutters	mm	34	34	34	34	40 (optional 60)	40 (optional 60)
Weight**	kg	3800	4600	5100	5600	12000	13000

DIMENSIONS	A	B	C
QR800	1580	1745	2200
QR1000	1790	2150	2400
QR1200	2010	2150	2400
QR1400	2190	2150	2400
QR1700	3340	2410	2600
QR1700 (drive on both sides)	4200	2410	2600
QR2100	3770	2410	2600
QR2100 (drive on both sides)	4620	2410	2600

QR800 - QR1400



QR1700 - QR2100



Dimensions in mm.
 *) Two-sided drive
 **) With the lowest drive power



shredding technology

The reliable brand!



UNTHA shredding technology

Kellau 141
A-5431 Kuchl / Salzburg, Austria
Tel +43 6244 7016 0
Fax +43 6244 7016 1
info@untha.com
www.untha.com

Authorised partner of UNTHA



ReTec Miljø ApS
Fjordagervej 38
DK-6100 Haderslev
Tel: +45 7456 8106
www.retec.dk

ReTec Automation ApS
Fjordagervej 38
DK-6100 Haderslev
Tel: +45 2040 0082
www.retec-automation.dk

ReTec Miljö AB
Box 16
SE-283 50 OSBY
Tel: +46 (0) 479 130 30
www.retecmiljo.se

