



ROBUST TECHNOLOGY FOR ECONOMICAL TREATMENT

## XRipper twin shaft grinder

With monolithic ripper rotors for maximum efficiency



#### XRipper | Twin shaft grinder



For treatment of large and coarse solid matter in the food industry, wastewater treatment and biogas plants.



**XRipper XRL** 

The XRipper is at home wherever coarse and high-volume solid matter has to be reduced – whether it's bulk material or coarse matter in fluids. The sturdy twin shaft design is the economical solution to protect downstream units from damage and to treat solid matter.

#### Design and operating principle

The XRipper rotors are mounted in an interlocking manner on the shaft, which is itself untouched by the medium. The liquid suspension passes through the XRipper largely unobstructed. Organic waste, wood, plastic or fabric are caught by the XRipper rotors and automatically collected and ground: Coarse and brittle components are pulverized, while long-fibrous material is cut and solid matter is ripped apart. Thanks to the differing speeds of the two shafts, the XRipper rotors are self cleaning. To adjust to the medium and the size-reduction ratio, various XRipper rotors are available with blade widths from 6 mm to 32 mm. The Quick-Service system allows quick and simple execution of all service and maintenance work on site.



## For more power and efficiency: monolithic ripper rotors

The innovative design of the monolithic ripper rotors makes solids reduction with the XRipper particularly economical. Produced from a single block of special steel, stainless steel is also available as an option, they allow for hard, precise multiple cutting, combined with a highly durable, tough core for superior cutting effect and even power transmission from the shaft to the cutting components. The monolithic ripper rotors offer high ease of service. Instead of having to replace many individual cutting components, only between one and a maximum of six XRipper rotors require replacing per shaft. This makes assembly easier and servicing safer.

#### At a glance: Advantages of the XRipper

- Economical shredding of solid matter such as fruit, vegetables and organic waste
- Provides efficient protection for pumps and system components from coarse matter such as wood, plastic or textiles
- Minimal operation interruptions thanks to straightforward maintenance
- Added safety thanks to cartridge mechanical seal technology

#### Advantages of the monolithic ripper rotors

- Long service life thanks to wear-resistant cutting
- Better cutting effect and higher efficiency
- More straightforward and safer service, with reduced downtime

# reliable



XRipper <u>XRS</u>





XRipper XRP

**XRipper XRC-SIK** 

#### Efficient preparation of bulk material & solids XRipper XRL

The XRipper XRL in the sturdy QD design with two-sided shaft bearings treats coarse and large-volume bulk material and solid matter such as food remnants, organic waste, supermarket waste, bread or by-products of the food production industry. The large inlet opening enables simple insertation of the material to be reduced. The intermeshing XRipper rotors hold the solids, draw them in and shred them. The optional scrapers increase the self-cleaning effect of the XRipper XRL. Combined with an intelligent controller and selected sensor systems, it ensures continuous, efficient size reduction of solids.

#### **Reliable shredding in moving liquids**

### XRipper XRS: Protection and processing with maximum ease of service

The XRipper XRS delivers efficient protection against blockages in pipes and fittings caused by textiles, bulk materials, wood or plastic. At the same time, it provides economical treatment of solids such as bones, fruit, vegetables and waste in liquid media in the food production industry. Thanks to its easy-to-maintain design, all maintenance work can be done and parts can be replaced quickly on-site, without having to remove the XRipper from the pipe. An extensive range of features and options, such as stainless steel or duplex housing components, gear or parallel shaft gear motors and the flexible quality cartridge mechanical seal enable individual adaptation to all applications, irrespective of whether they are mechanically abrasive or chemically aggressive. There is always a suitable solution for pressures of up to 8 bar.

## Economical solutions for wastewater lines and channels

#### XRipper XRP: Reliable protection in a small package

The XRipper XRP is the solution when only limited space is available, such as in narrow ducts of underground pipes. It is highly compact because the motor is mounted vertically above the XRipper. The generous dimensions of the housing reduce pressure loss to a minimum to allow unobstructed flow in the liquid phase. The drive motor, gearbox, shafts and XRipper rotors are easily removed for maintenance and exchange of parts by hoisting them out using a cable or chain. The housing remains connected to the piping.

#### XRipper XRC-SIK: the solution for wastewater sewers

The XRipper XRC with the Sewer Integration Kit (SIK) is ideal for installation in wastewater sewers. The SIK positions the XRipper XRC directly in the sewer or in front of the outlet. Coarse matter contained in the wastewater, such as textiles, wood and plastic bags enter the XRipper XRC along with the fluid stream where they are reliably shredded, while the wastewater passes through largely unobstructed due to the generous dimensions of the XRC's housing. The complete XRipper is simply lifted out of the sewer using the guide rails for maintenance and replacement of parts.

#### Effective protection thanks to low power requirement

Because of their low speeds, XRipper XRS, XRP and XRC need only low drive power but can still produce high levels of torque for the reduction of coarse matter. This reliably avoids blockages, obstructions and damage to downstream pumps and fittings. Parallel shaft geared motors designed to IP54 or submersible motors are used as needed.



XRipper XRS – specifications							
Туре	Blade widths (mm)	Drive power (kW)	Drive speed (min <sup>-1</sup> )	Max.throughput Water (m³/h)	Max. pressure (bar)	Flange connector Ø (mm)	
XRS100-90Q	6 8	1.5	52	50	8	100	
XRS136-140Q	6 10 14	2.2	41	110	8	150	
XRS186-130Q	8 11 16 32	4.0	39	165	8	150	
XRS186-260Q	8 11 16 32	4.0	39	325	6	200	

XRipper XRP – specifications								
Туре	Blade widths (mm)	Drive power (kW)	Drive speed (min <sup>-1</sup> )	Max.throughput Water (m³/h)	Max. pressure (bar)	Flange connector Ø (mm)	Installation width (mm)	
XRP100-90Q	6 8	1.5	57	65	8	100	406	
XRP136-140Q	6 10 14	2.2	45	150	8	100	406	
						150	483	
XRP136-200Q	6 10 14	2.2	45	280	6	100	488	
						150	540	
						200	590	
XRP186-260Q	8 11 16 32	4.0	38	490	4	250	692	
						300	794	

XRipper XRC with SIK – specifications								
Туре	Blade widths (mm)	Drive power (kW)	Drive speed (min <sup>-1</sup> )	Max.throughput Water (m³/h)	Input opening L x W (mm)	Installation width* (mm)		
XRC136-280QD	6 10 14	2.2	45	405	310 x 280	625		
XRC136-560QD	6 10 14	2.2	45	740	310 x 560	625		
XRC186-260Q	8 11 16 32	4.0	38	490	435 x 260	850		
XRC186-260QD	8 11 16 32	4.0	38	490	435 x 260	850		
XRC186-520QD	8 11 16 32	4.0	38	980	435 x 520	850		
XRC186-780QD	8 11 16 32	4.0	38	1470	435 x 780	850		

\*with wall bracket

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XRipper XRL – specifications							
Туре	Blade widths	Drive power	Drive speed	Max.throughput Easily shredded solid matter	Input opening		
	(mm)	(kW)	(min⁻¹)	(m³/h)	L x W (mm)		
XRL136-280QD	6 10 14	11	166	10	310 x 280		
XRL136-560QD	6 10 14	11	166	20	310 x 560		
XRL186-260Q	8 11 16 32	15	139	20	435 x 260		
XRL186-260QD	8 11 16 32	15	139	20	435 x 260		
XRL186-520QD	8 11 16 32	15	139	40	435 x 520		
XRL186-780QD	8 11 16 32	15	139	60	435 x 780		

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