

# Universal Rotary Shear UC Pre-shredding without compromise



# **Powerful pre-shredding** of difficult materials

Wherever volume is to be reduced, waste prepared for incineration, or materials shredded for subsequent processing, the Universal Rotary Shear UC lays the foundation for a successful recycling process.

#### **Highlights**

- A wide variety of applications
- Large throughputs and homogeneous final material
- Strong and robust, also suitable for difficult materials
- Reliable and effective shredding
- Automatic/selective detection of impurities
- Reversing: Protects the machine, the rotor and the blades
- Hydraulic pusher for higher throughputs
- Cutter with polygonal rotor shafts for high power transmission
- Split cutter housing for faster shaft change
- Optimum power and torque transmission
- Special blade changing system with different blade sizes
- Precision-worked cutter blades for exact cutting
- Long service life above the average



Cutting unit



A Hydraulic pusher



 Various feed chutes adapted to the material to be processed

## **Operating principle**

All rotary shears have a slow-running and low-noise twin-shaft cutter. The pull-in lugs of the counter-rotating cutter discs grasp the shredding material and pull it in. The blades shred the material into strips. Here, the blade width determines the size of the shredded material. Fixed strippers between the rotating blades keep the cutter free of any material.

# Many potential uses for large-volume waste

Suitable machine sizes and different blade widths are available in each case for the various purposes and material types. In the subsequent recycling process, the material can be further processed to optimum benefit, with the ANDRITZ Universal Granulator UG for example.

	Cutter width	Drive power	Weight
UC 850	850 mm	2 x 15 kW	approx. 5.5 t
UC 1050	1,050 mm	2 x 22 kW	approx. 7 t
UC 1200*	1,200 mm	2 x 22 – 55 kW	approx. 9 – 13 t
UC 1300*	1,300 mm	2 x 55 – 75 kW	approx. 20 – 22.5 t
UC 1500*	1,500 mm	2 x 55 – 90 kW	approx. 23 – 30 t
UC 2000*	2,000 mm	2 x 55 – 90 kW	approx. 25 – 40 t

\* Also available in H-design with larger polygon for higher power transmission.

Whether it processes bulky material, tires, textiles, or solid metal parts – the Rotary Shear UC shreds the material vigorously, precisely and reliably.







▲ Steel barrels

Steel strips as output



Cable scrap



Cable parts as output



Aluminum profiles



Aluminum strips as output

## **Applications**

▲ Tire shreds as output

- Domestic, commercial and bulky waste
- Tires (cars, trucks, construction vehicles)
- Aluminum profiles, aluminum scrap
- Barrels made of steel and plastics
- Pulper rags, rejects

- Textiles, carpets, flooring
- Plastic films, paper
- Light fraction from the shredder
- Automotive parts, such as oil filters, engine blocks, catalytic converters
- Mattresses
- Cable scrap





# Robust pre-shredding for a successful recycling process



#### **Reliable Rotary Shear UC**

The success of a recycling plant depends essentially on its first stage: Pre-shredding of difficult materials. The Universal Rotary Shear UC takes care of this task vigorously and reliably and prepares the large-volume material to best advantage for further processing. ANDRITZ MeWa offers the entire process chain, from infeed to shredding technology, to strict separation of the valuable fractions.

## **Possible applications**

### Professional recycling of pulper rags

#### Material: Pulper rags from the paper industry

Recommended machine: Universal Rotary Shear UC 1300

The Rotary Shear UC with a cutter width of 1,300 mm has optimum proportions and is suitable for reliable pre-shredding of large-volume pulper rags.

Throughput up to 10 t/h\*

Output: Shredded reject pulper rags, perfectly prepared for the next step in an ANDRITZ MeWa Universal Granulator UG.



# Professional recycling of used tires

Material: Tires from cars, trucks, and construction vehicles.

Recommended machine: Universal Rotary Shear UC 1500 or UC 2000

The rotary shear takes the first step in processing used tires into rubber granulate. In the optimum process, the tires undergo a first shredding cycle and are then fed to

the shredder a second time on a return conveyor belt. This relieves the burden on the subsequent granulator stage: The overall throughput increases.

#### Throughput up to 15 t/h\*

Output: Pieces of tire the size of the palm of your hand, perfectly prepared for the next step in an ANDRITZ MeWa Universal Granulator UG.



\* All throughputs mentioned depend on the machine size, peripheral equipment and operating mode, as well as the type and properties of the input material. As a result, the throughput in the plant may not correspond exactly to the machine data stated.

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