

## **Universal Granulator UG**

Flexible and versatile shredding





### Flexible and reliable

### for mono-fractional results

The Universal Granulators UG from ANDRITZ MeWa process a large number of different materials with mono-fractional results and convince customers particularly with their dynamic application and shredding results.

### **Highlights**

- Uniform high quality of final product
- Able to process very solid, non-hardened metals
- High performance reserve, also for shredding of challenging materials
- Uniform cutting quality thanks to adjustable cutter blocks
- Low-wear cutter blocks, rotatable in four different ways and suitable for fast changing
- High stability thanks to solid structure, absorbs impacts safely
- Precise setting of the cutting gap for very fine composite materials
- Specially hardened screens with a hole size of up to 120 mm
- Robust and reliable rotor forged out of solid material
- High throughput thanks to further developed pusher
- Energy-efficient, inertia-type machine drive
- Very maintenance-friendly
- Maintenance-free coupling system to protect the machine
- Long lifetime
- Also very popular as second-hand unit





Feed chute with pendulum pusher



Inertia-type drive with safety slipping clutch



Blade made of high-strength, hardened and guenched special steel



Specially hardened screens up to a hole size of 120 mm

### **Operating principle**

The Universal Granulator UG operates according to the guillotine shear principle. Rotating cutter blocks in conjunction with stationary cutters are used to cut the material. This material remains in the process until it reaches the size at which it can

pass through a screen with a defined hole size. Thus, the material is shredded to the optimum grain size. The granulating screen mounted on the underside determines the output grain size and the throughput in each case by means of variable hole sizes from 8

to 120 mm. Cutter blocks are placed in the mountings provided both at the rotor and at the stator. The gap between the cutter blocks is adjustable. This ensures optimum processing of thin and composite materials.



### Many possible applications

# for individual grain sizes from 8 to 120 mm

The granulator machine series consists of four different machine sizes: the granulators UG 600, UG 1000, UG 1600, and UG 2000. The main purpose here is determined by the

machine tooling, which allows the features to be adapted to optimum benefit for the respective needs. The success of the Universal Granulator UG is attributable not

only to its flexibility and convincing results, but also to its high operating availability and reliability.

|         | Types*     | Drive power  | Cutting area<br>Length | Number of blades<br>Rotor/Stator | Turning circle | Weight     |
|---------|------------|--------------|------------------------|----------------------------------|----------------|------------|
| UG 600  | S          | 55 kW        | 600 mm                 | 27/3                             | 600 mm         | 6.5 t      |
| UG 1000 | S, R, H    | 90 – 160 kW  | 1,000 mm               | 25/5 – 30/5                      | 500 – 800 mm   | 15 – 19 t  |
| UG 1600 | S, R, H, E | 110 – 250 kW | 1,600 mm               | 40/8 – 48/8                      | 500 – 800 mm   | 22 – 23 t  |
| UG 2000 | R, E       | 315 kW       | 2,000 mm               | 50/10                            | 800 mm         | up to 29 t |

\*Different types:

S (Scrap): Machine with low blade holders and a standard diameter of rotor and turning circle, universal use.

R (Rejects): The special machine with higher blade holders, larger rotor diameter, a larger turning circle for higher cutting speeds and up to 40% more throughput

due to the enlarged screening area. Particularly suitable for light feed material.

H (Heavy): The machine for demanding materials such as metals, with large turning circle and rotor diameter, high blade holders and special cladding on the rotor.

E (Eco): The specialist for homogeneous material flows (e.g. production residues) with lower energy consumption and space requirement (low overall height and integrated pendulum pusher) and increased maintenance-friendliness (split granulate screen, split rotor casing).

The range of input materials is very broad: The Universal Granulator UG deals systematically with domestic and commercial waste, electrical and electronic scrap, cables, plastics, rejects, aluminum, and used tires: Dynamic in throughput and flexible in result.



### **Applications**

- Domestic, industrial and bulky waste
- Tires
- Electrical/electronic scrap, electric motors
- Cable scrap
- Oil filters
- Shredder light fraction

- Metal composites
- Glass-fiber reinforced plastics (GFRP)
- Waste from the paper industry: rejects, pulper rags
- Textiles, carpets, PVC flooring
- RDF material (packaging, production residues, commercial waste)



### The basis of a successful recycling process

# Reliable operation and high throughputs



#### **Optimum solution**

The Universal Granulator UG is one of the most successful recycling machines in the ANDRITZ MeWa product portfolio and has convinced customers worldwide with its flexibility, reliable operation and high throughputs. This also provides a decisive advantage for the recycling plant: As a result of the more stable process as a whole, which is largely trouble-free, higher throughputs can be achieved and the plant becomes more economically efficient.

ANDRITZ MeWa offers the entire process chain, from the infeed to the shredding technology, to strict separation of the valuable fractions.

### Possible applications

### Professional recycling of RDF material

Material: Domestic/commercial waste, production residues, packaging, plastic, free of solid impurities

Recommended machine:

#### Universal Granulator UG 1600 E/R or UG 2000 E

A higher cutting speed and more throughput within the same period: Especially for homogeneous materials from the commercial sector, the R and E types offer the optimum properties. The Eco variant is even more space-saving, more maintenance-friendly and is also more energy-efficient in operation.

Throughput: up to 20 t/h\*

Output: Iron, nonferrous metal, plastic, paper, granulated to between 8 and 120 mm

### Professional oil filter recycling

Material: Oil filters from cars and trucks, free of explosive, combustible and solid materials

Recommended machine:

#### Universal Granulator UG 1000 H or UG 1600 H

H-type granulators are designed specially for shredding challenging material and shred the oil filters in only one stage without pre-shredding.

Throughput: up to 6 t/h\*

Output: Iron, oil, nonferrous metal residues, paper





\* All throughputs stated depend on the machine size, screen size, peripheral equipment and operating mode, as well as the type and properties of the input material. As a result, the throughput may differ from the values stated for the machine concerned.

ANDRITZ MeWa GmbH

Gechingen, Germany Tel. +49 (7056) 925 0 ANDRITZ AG

Graz, Österreich Tel. +43 316 6902 0 info.mewa@andritz.com www.andritz.com/mewa