

Doppstadt

CURO

TYPE 250

MID SPEED SHREDDER LINE



Best Solution. Smart Recycling.

[doppstadt.com](https://www.doppstadt.com)





THE MID-SPEED SHREDDER **Ideal for refuse-derived fuel production**

It is about time that refuse-derived fuels get the attention they deserve as far as their ecological importance is concerned. Here – and not just here – is where the CURO Type 250 comes in.

The CURO's compact design and 2,000 mm working width make it the ideal mid-speed cutting shredder for waste processing plants. The material, which is continuously fed into the machine by a belt conveyor, is forced

into the cutting area by the load-controlled swing pusher. The knives attached to the rotor shred the material against the stator knives and separate it along screen baskets.

The finished material falls through the screen basket onto a discharge conveyor. Particles that are too large to fit through, are taken back to the stator knives by the rotor and shredded again. The larger the size difference between

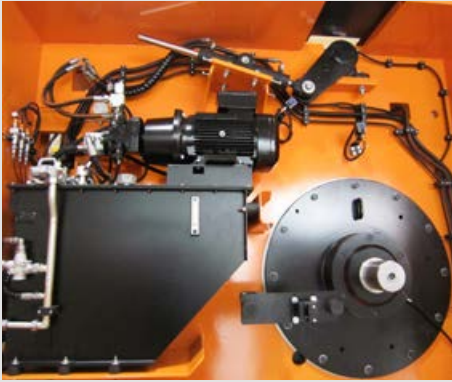
input and output is, the longer the residence time in the processing chamber and the lower the throughput. Power consumption is very constant during operation thanks to the load-controlled swing pusher and frequency-controlled drive. The rotor's solid forged shaft ensures high material strength during operation while the high moment of inertia of the massive rotor keeps current consumption constant.

THIS IS DOPPSTADT

Founded in 1965, Doppstadt is a family business based in Velbert. Having laid its foundations with the development of agricultural machinery, Doppstadt is now a globally active, leading solution and full-service provider in all areas of recycling and environmental technology as well as recyclable material recovery. 'Best Solution. Smart Recycling.' – With

this motto, we combine tried and tested processes with individual complete solutions, which are defined by innovative processes, unparalleled efficiency and superior productivity. Doppstadt has more than 15 years of experience in the field of chipping technology. Initially only in the industrial large-scale user range, we now also produce machines for pro-

fessional contractors. With locations in Velbert, Wülfrath, Calbe and Vienna, we serve customers in over 40 countries via our own dealership network as well as providing them with comprehensive services surrounding all aspects of the unique Doppstadt portfolio.

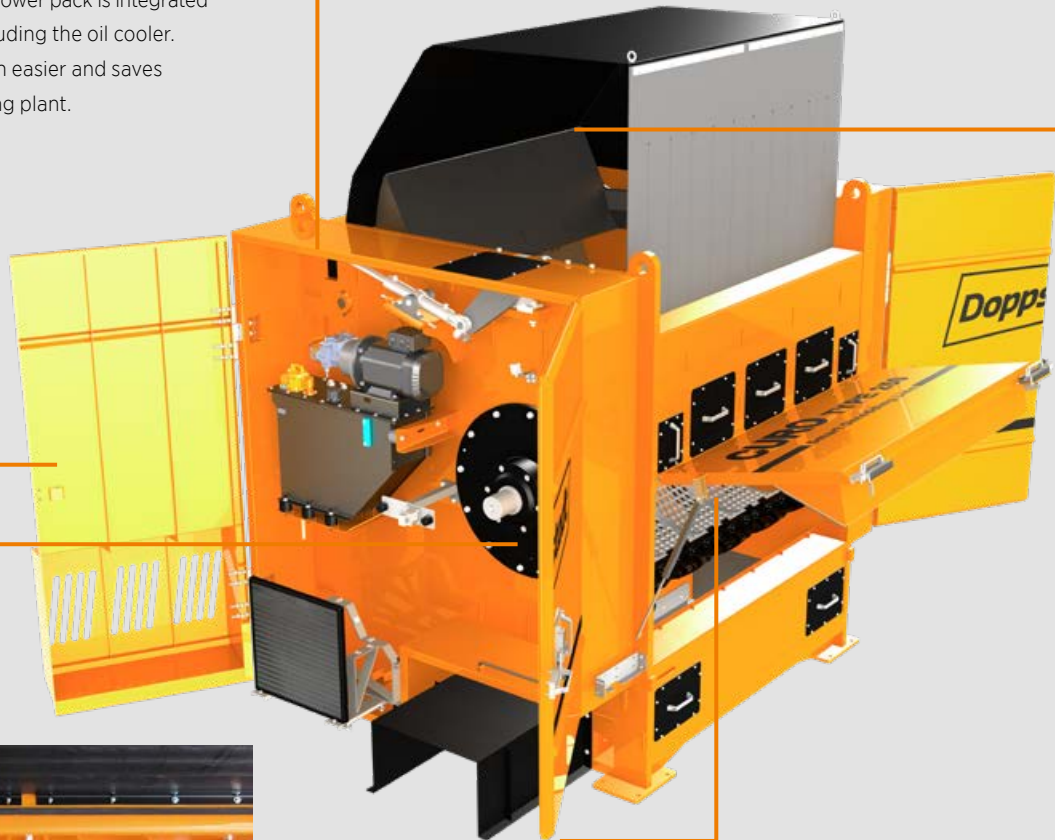


HYDRAULIC POWER PACK

The 7.5 kW hydraulic power pack is integrated into the machine, including the oil cooler. This makes installation easier and saves space in the processing plant.



CURO TYPE 250



ROTOR

The rotor is solid and weighs 6,350 kg. This gives it the moment of inertia necessary to balance out the peaks in performance resulting from the heterogeneous input material.

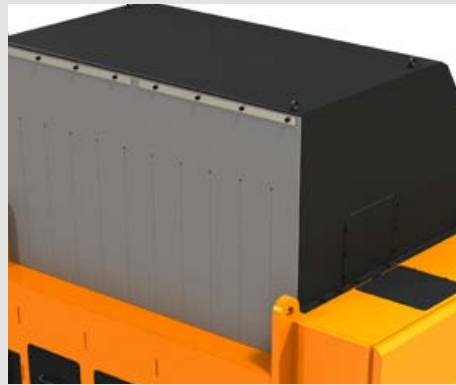


SCREEN BASKET

The finished product passes through the screen basket. Material that is too large is recirculated and shredded again, guaranteeing an end product with little variation in particle size.

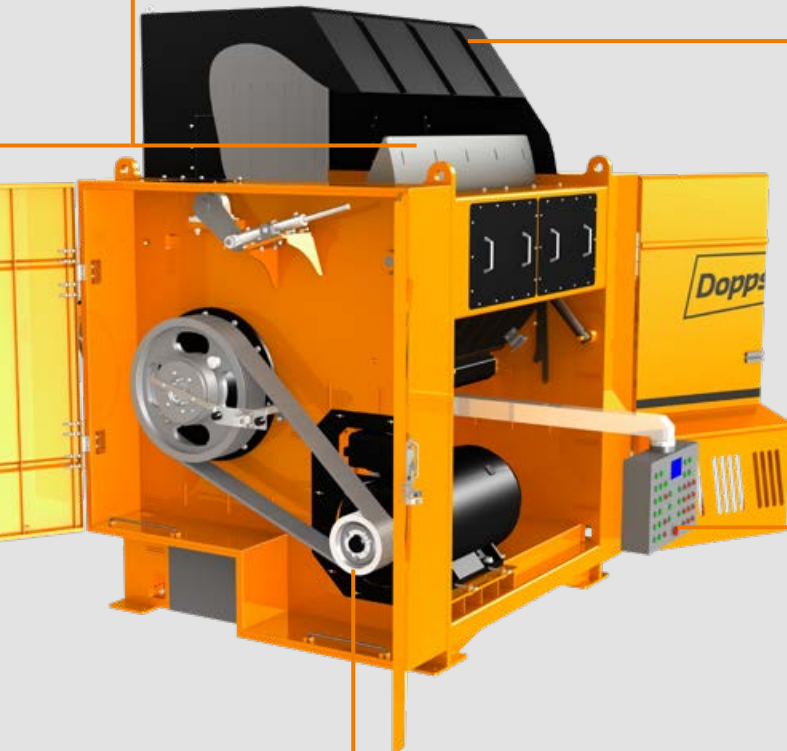
SWING PUSHER

The input material is pushed into the rotor to guarantee that the machine is working at full capacity at any given time. The lower the current drawn by the rotor, the more material is pushed forwards.



INFEEED COVER

Reduces dust emissions when loading the machine and guarantees high safety standards.



CONTROL PANEL

The control panel gives the operator precise control over machine operation and enables data to be read. It is mounted on the machine on a swivel arm. Normally, the machine will be incorporated into an overriding plant control system.



250 KW AC MOTOR

The rotor is powered by a V-belt drive and three-phase motor. A shear pin disengages the pulley from the rotor in case unshreddable contaminants get into the shredding chamber, thus protecting the drive from damage.

At a glance

The production of RDF for the cement industry requires a high level of reliability and robustness without compromise and therefore calls for a machine renowned for its short maintenance times.

- Load-controlled hydraulic swing pusher
- Start-up is possible with a full shredding chamber
- Easy to change cutting tools thanks to bolted assembly and inching mode
- High cutting efficiency thanks to the heavy rotor
- Shear pin coupling to protect the machine against damage from contaminants
- Variable rotor speed from 100 to 350 rpm



CURO TYPE 250

The energy-efficient mid-speed shredder

The CURO Type 250 offers you a robust, efficient basis for secondary shredding applications in the production of RDF. The 2,000 mm-long rotor is powered by a 250 kW three-phase motor. The large moment of inertia of the rotor enables efficient operation with a constant working load. Its compact design with large maintenance doors ensures good accessibility. Alongside the ease with which the tools (knives and screen

baskets) can be disassembled, this results in very short maintenance and set-up times. The CURO reliably meets all demands you could place on a cutting mill for pre-sorted, high-calorific residual material. It is primarily used for plastic foils, paper, cardboard and lightweight fraction of packaging material. The load on the cutting rotor drive is kept constant by means of the hydraulic pusher that feeds the input material

into the rotor. In this way, the machine is steadily working at its top performance. It can be started under load with a full shredding chamber, simplifying operation enormously and reducing downtime. This makes the CURO Type 250 extremely operator friendly – you just have to make sure that the material flow into the machine doesn't run out.

THE END PRODUCT

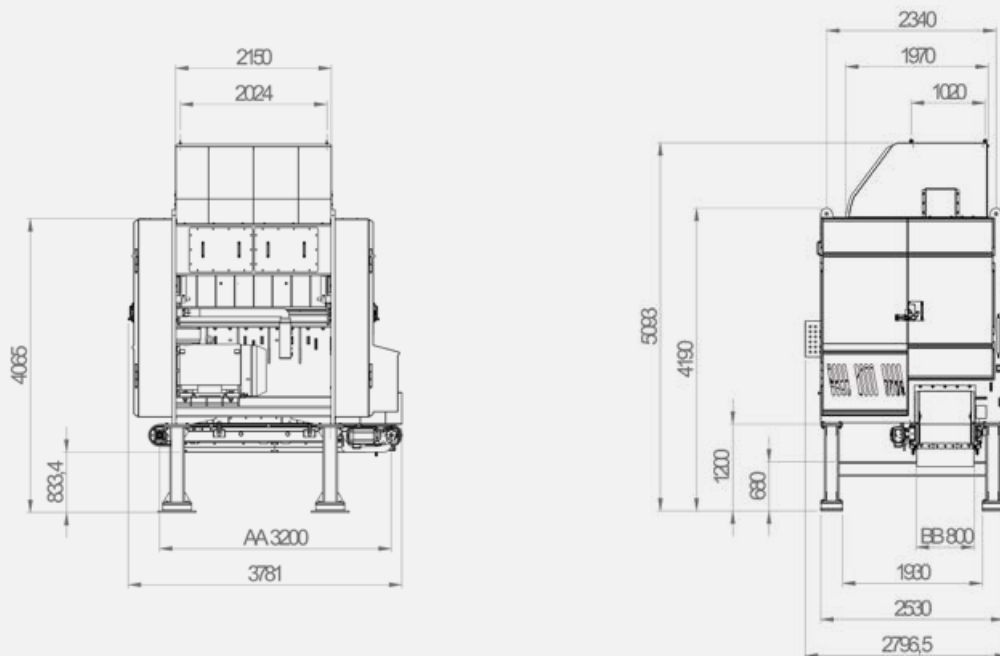
The CURO Type 250 is primarily used for evenly shredding plastic foils and lightweight packaging, paper and cardboard. This makes it a must-have for all treatment plants in refuse-derived fuel production.



TECHNICAL DETAILS

CURO TYPE 250

| | | | |
|-----------------------|----------|--|-----------------------|
| Type | Type 250 | Feed height (mm) | 2,978 |
| Total weight (kg) | 22,000 | Dimensions (L/B/H) (mm) | 3,780 x 2,606 x 4,013 |
| Output (kW) | 250 | Hydraulic power pack (kW) | 7.5 |
| Rated current (A) | 743 | Number of stator knives | 10 |
| Operating voltage (V) | 400 | Number of rotor knives | 48 |
| Rotor diameter (mm) | 600 | Example: pre-shredded RDF with an input size of 300 mm and a 50 mm screen basket | |
| Rotor length (mm) | 2,080 | Throughput (t/h) | 8 |
| Rotor weight (kg) | 6,350 | Rotor speed (rpm) | 339 (100 to 350) |
| Feed width (mm) | 2,000 | | |



Doppstadt Umwelttechnik GmbH
Steinbrink 13, D-42555 Velbert

doppstadt.com

Fon +49 2052 889-0
info@doppstadt.de

Doppstadt

KIMO

TYPE 16 . TYPE 20

MID SPEED SHREDDER LINE



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ROTOR

The rotor consists of a solid forged shaft and has an outer diameter of 785 mm.



CUTTING KNIVES

The knives are screwed into high knife holders and ensure a low level of friction as well as good intake behaviour.



MAINTENANCE DOOR

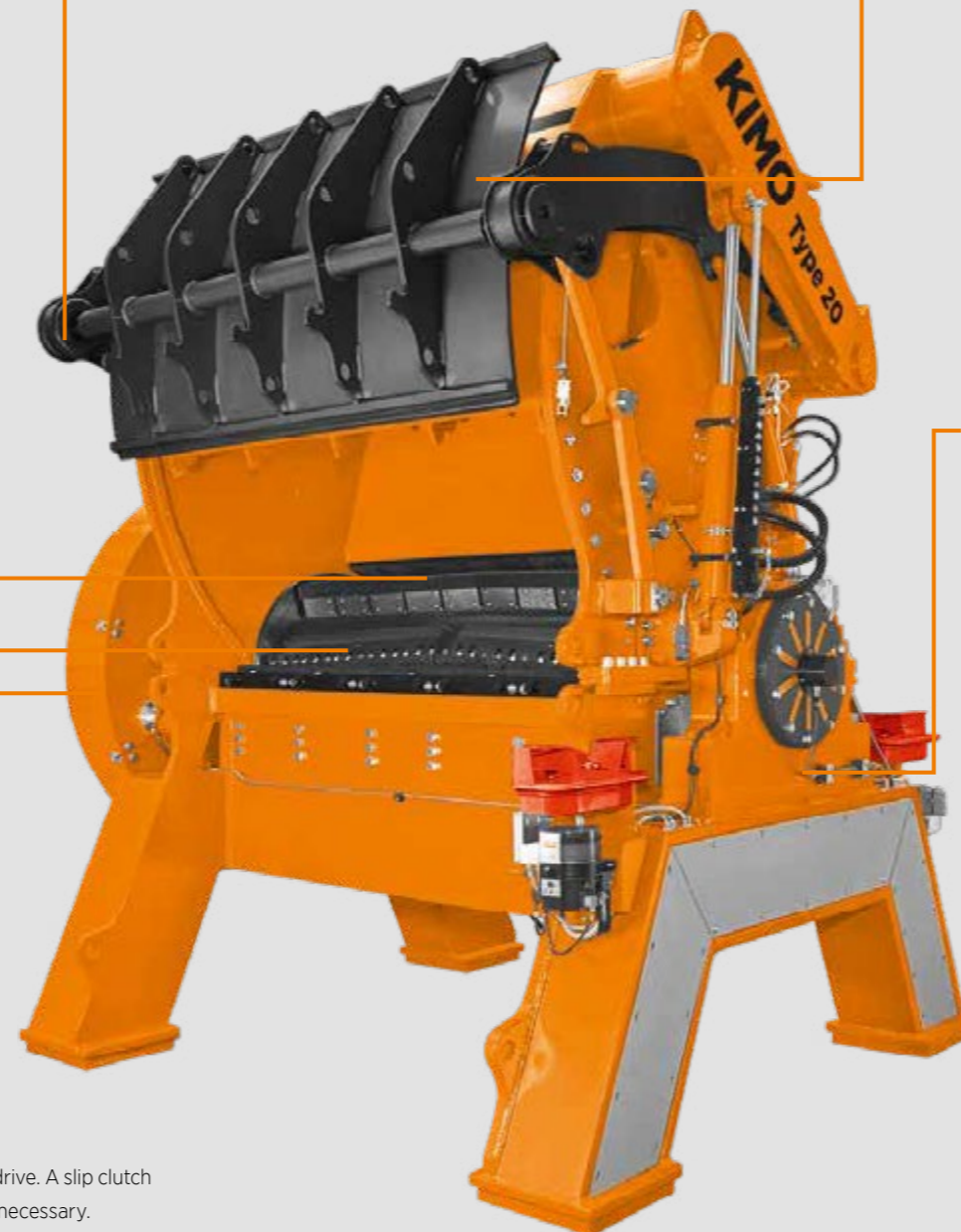
The front maintenance door is opened by a hydraulic cylinder and ensures a large working space for carrying out service and maintenance work on the rotor knives and stator blade.



HYDRAULIC POWER PACK

The hydraulic power pack on the KIMO Type 16 has an 11 kW drive. That of the Type 20 got 15 kW of power. The hydraulics are used to lift up the swing pusher, to open the front maintenance door and to lower the screen basket.

KIMO TYPE 20



BASKET MAINTENANCE DOOR

The screen basket is lowered by hydraulic cylinders to ease maintain such as changing the screen segments. For operation the screen basket is hydraulically lifted and firmly screwed onto the frame.



At a glance

The production of RDF for the cement industry requires a high level of reliability and robustness without compromise. It calls for a machine that doesn't immediately come to a standstill when faced with larger, solid contaminants.

- Low running costs on account of the low energy consumption and costs for spare and wear parts
- High throughput thanks to the high knife holders
- Low vibrations
- Simple maintenance thanks to large access areas and easy tool replacement
- Consistently good shredding quality thanks to the adjustable, static knife blocks



DRIVE UNIT

The motor is positioned on a height-adjustable platform. To tension the V-belt the motor can be raised via a threaded steel rod. Thanks to this arrangement, both pulleys constantly remain in alignment.



BELT DRIVE

The motor powers the large flywheel and rotor with a V-belt drive. A slip clutch disengages the rotor from the flywheel to protect the drive if necessary.

KIMO TYPE 16 AND TYPE 20

The high-performance cutting mills.

The KIMO isn't fussy about its input. It is so robustly outfitted for the secondary shredding of any type of refuse-derived fuel that not even larger contaminants can slow it down.

The KIMO is available in two sizes. Its Type 16 and Type 20 models reliably meet all demands you could place on a mid-speed cutting shredder. With its rotor diameter of 785 mm, the KIMO is an unrivalled market leader. In combination with the large rotor pulley, this results in a very high moment of inertia, which helps to even out peaks in power demand caused by the heterogeneous input material. As a result, the drive can be scaled down to save on energy.

The material, which is continuously fed into the machine by a belt conveyor, is forced into the cutting area by the robust, polymer concrete-filled swing pusher. The rotor mounted knives cut the material against the stator blade and guides it towards the screen through which the finished product falls onto a belt conveyor. The KIMO is so heavily and robustly built that it does hardly vibrate at all. Thus, no anchors are needed to fix the machine in place.

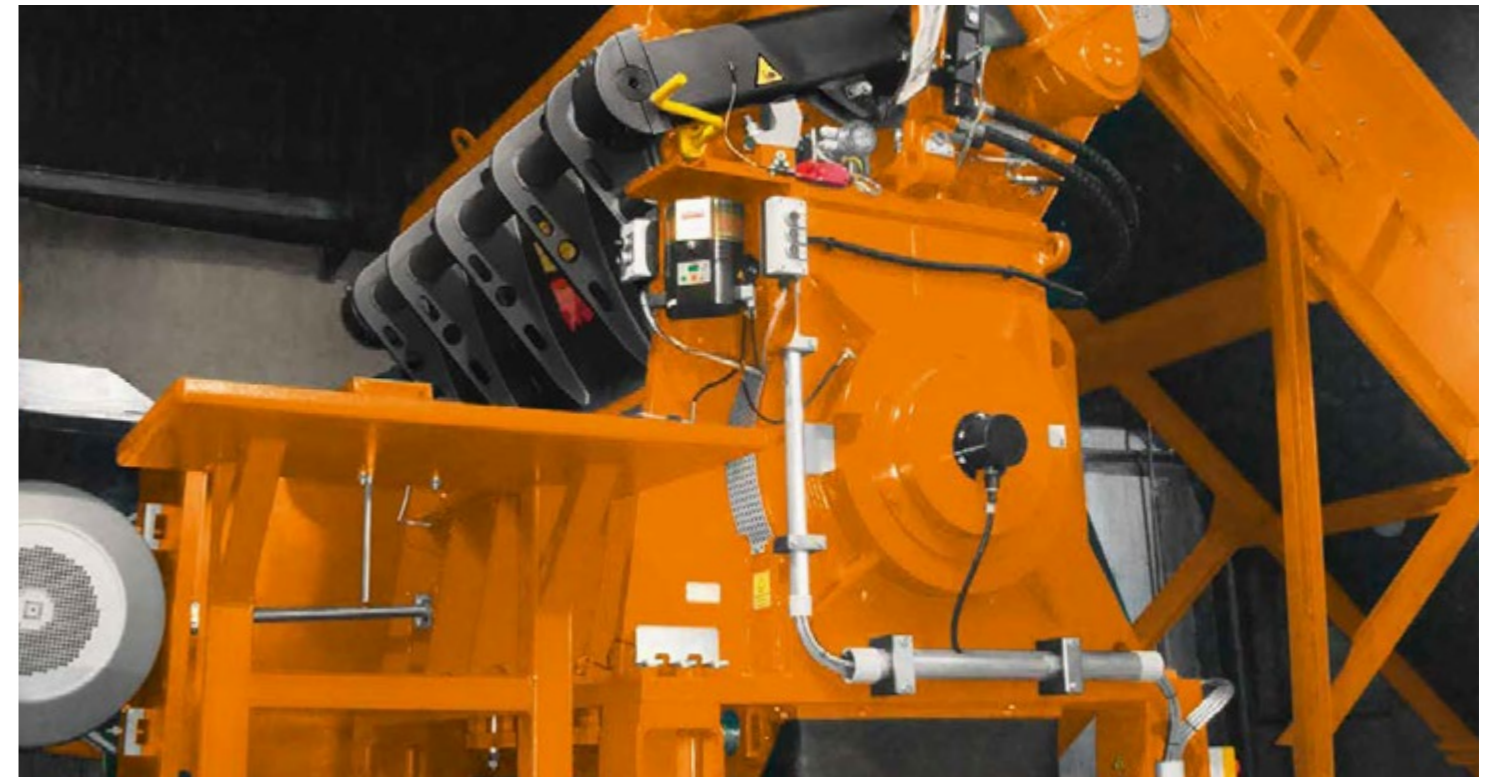


THIS IS DOPPSTADT

Doppstadt is one of the world's leading suppliers of innovative solutions in the field of environmental technology. The company specialises in the treatment and processing of reusable materials obtained from waste, biomass, earth, sand and gravel. Its portfolio includes easy-to-maintain, easy-to-use machines for the most complex

and challenging applications such as crushing, separating, sifting, mixing, splitting, wet processing and conveying. The company employs 700 people in locations all over the world to work on its machines, processes and solutions. The Group has an international network of dealers, with 42 partners in 45 countries. The

Doppstadt Group was founded in 1965 and has centres of expertise at Velbert (prototype development and production), Wülfrath (sales and service), Calbe (series production) and Wilsdruff (water based separation), in Germany.



KIMO TYPE 16 AND TYPE 20

Economical, reliable secondary shredding

The KIMO Type 16 offers you a robust, efficient solution for a wide range of secondary shredding applications. The 1,600 mm long rotor of the Type 16 is powered by a 250 kW three-phase motor. The large momentum of inertia of rotor and flywheel accounts for the energy-efficient drive. For facilities with higher throughputs, the KIMO Type 20 is ready and waiting with a

2,000 mm long rotor and 315 kW drive. As far as screening area is concerned, its rotor geometry means that the KIMO Type 20 can more than keep up with conventional machines with rotor lengths of 3,000 mm and achieves similar throughputs. The KIMO shreds pre-sorted, high-calorific residual material. The finished product can then be used as refuse-derived fuel. The

KIMO is predominantly used for plastic foils and lightweight packaging, but also for shredder light fraction, carpets and pre-shredded tyres. The KIMO comes into its own where other shredders reach their limits. Even so for applications such as cable scrap, car radiators or electronic waste with electric motors of up to 1.5 kg.

THE END PRODUCT

The KIMO performs different tasks depending on the input material. For refuse-derived fuels, it serves as a secondary shredder at the end of the treatment cycle for achieving a defined particle size distribution for good transportability and combustion properties. For electronic waste, car radiators, oil filters etc., it serves to break up and separate the material before sorting.

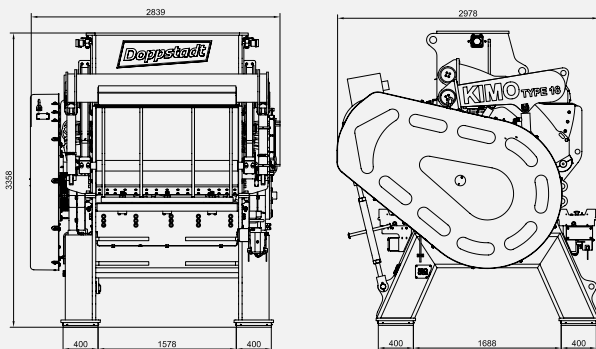


TECHNICAL DETAILS

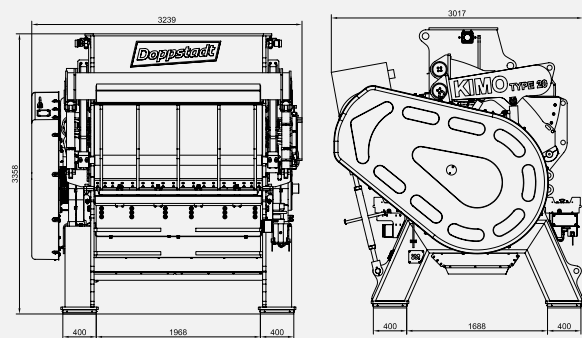
KIMO

| | | |
|---|-----------------------|-----------------------|
| Type | Type 16 | Type 20 |
| Set-up | Stationary | Stationary |
| Total weight (kg) | 23,500 | 26,000 |
| Drive | Electric | Electric |
| Output (kW) | 250 | 315 |
| Rotor diameter (mm) | 785 | 785 |
| Feed width (mm) | 1,630 | 2,020 |
| Working width (mm) | 1,600 | 2,000 |
| Dimensions (L/W/H) (mm) | 2,990 x 2,800 x 3,360 | 2,990 x 3,200 x 3,360 |
| Hydraulic unit (kW) | 11 | 15 |
| Rows of rotor knives | 5 | 5 |
| Rows of stator knives | 1 | 1 |
| Number of rotor knives | 40 | 50 |
| Example: pre-shredded RDF with a planar input material of up to 300 mm and 35 mm screen baskets | | |
| Throughput (t/h) | 6 – 8 | 8 – 12 |
| Rotational speed (rpm) | 250 | 250 |

KIMO Type 16



KIMO Type 20



Werner Doppstadt
 Umwelttechnik GmbH & Co. KG
 Steinbrink 13, D-42555 Velbert

doppstadt.com

Telefon +49 2052 889-0
info@doppstadt.de