

From low-grade waste plastics to
wood and lengthy materials

MASTIFF NEO

Single-shaft shredders



Champion Mastiff

Well-developed muscles and strong teeth. The Mastiff war dog of the ancients is back as a patron saint of waste recycling.



Upgradable with additional functions for different
recycling-facility scales and purposes

Torque Limitter prevents drive system-related trouble
caused by foreign objects.

Power Drive with KIDS (optional) allows for frequent forward &
reverse rotor rotation and **improved energy-saving** operation.

type R, specially designed **for primary shredding**, is added to
the product line.

Full range of new functions to ensure more cost reduction and higher resistance to foreign object-induced damage

Highly efficient shredders handling a wide range of material

Reducer and Torque Limiter

The industry's first shredder-specific reducer.

Kubota successfully developed the industry's first gear reducer designed specially for shredders by applying its most advanced proven technologies accumulated through the development of agricultural machinery.

Torque Limiter prevents drive system-related trouble caused by foreign objects.

The newly developed reducer for shredders is equipped with a torque limiter that releases impact caused by a misfeed of foreign objects so as to protect the drive system. At the same time, the misfed foreign objects is detected by a foreign object detection device (vibration sensor) installed in the shredder unit, which then activates an emergency stop of the main electric motor, so that damage to the cutters can be minimized.

Power Drive (optional)

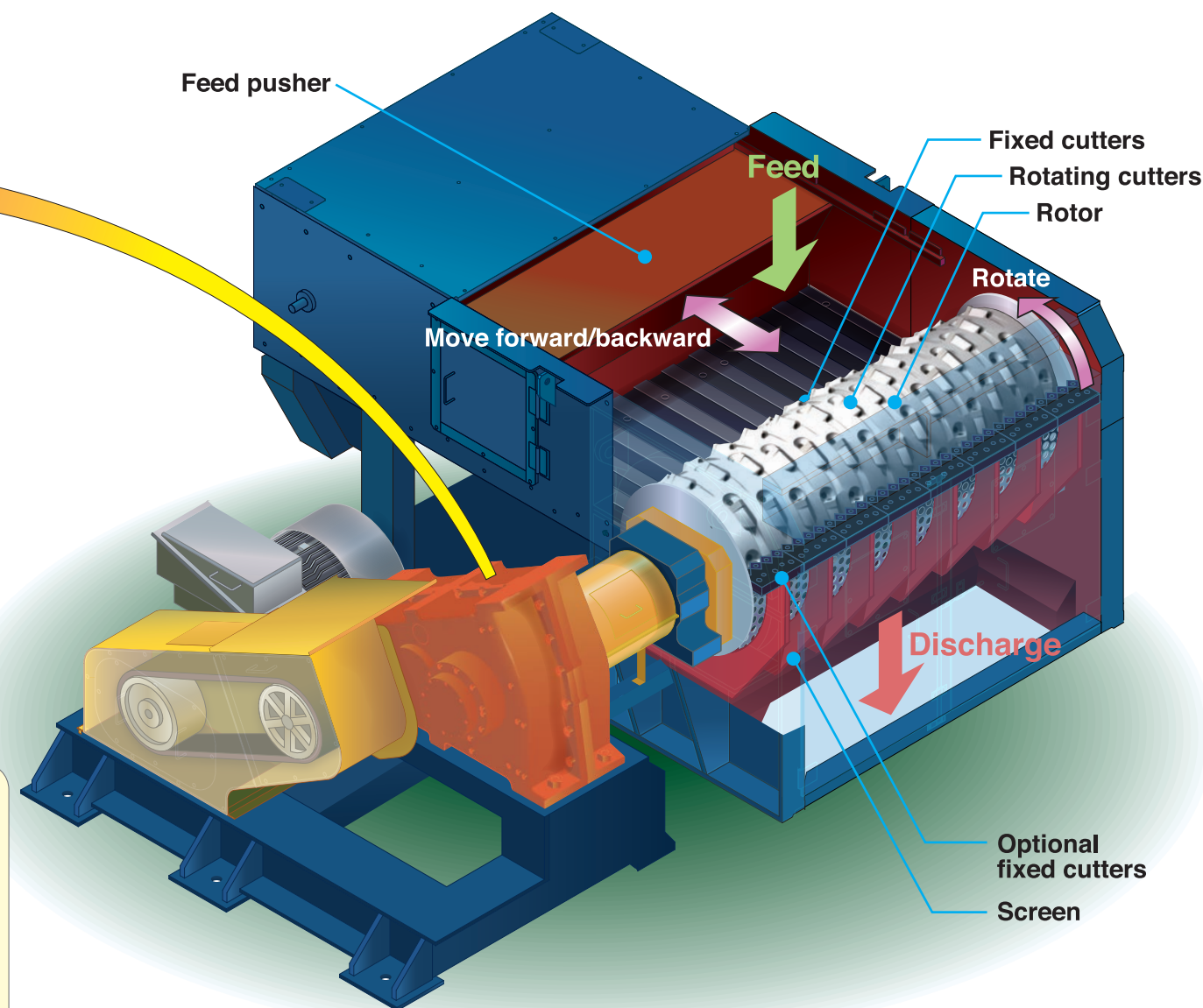
Combines advantages of hydraulic drive and electric motor drive: rapid activation and cost efficiency.

Adding the KIDS function allows for energy-saving operation.

Power Drive employs an inverter control that adds to Mastiff Neo using an electric drive system advantageous dynamic properties of a hydraulic drive, such as smooth start-up, frequent and quick change of rotational directions and immediate stop in case of overload.

*KIDS:Kubota Intelligent Drive System

MASTIFF NEO



For primary shredding of low-quality material before separation, as well as for debaling

MASTIFF NEO *type R*

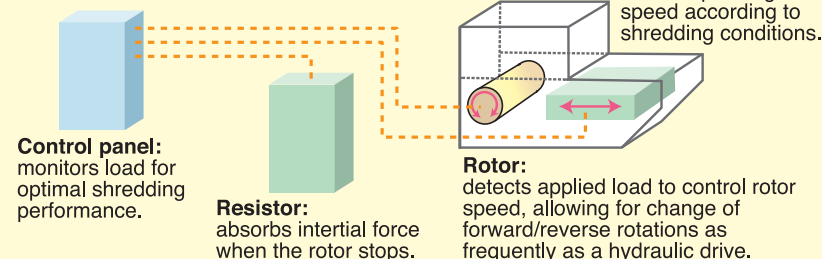
Reduces potential damage to the subsequent facility

The *type R* series is capable of producing coarse shreds approximately 100 mm on a side, which two-shaft shredders are incapable of. Installing an air separator or magnetic separator improves the accuracy of removing foreign objects, further reducing potential damage and overload to the subsequent secondary shredder.

Processes low-quality waste plastics using welded hard facing rotor

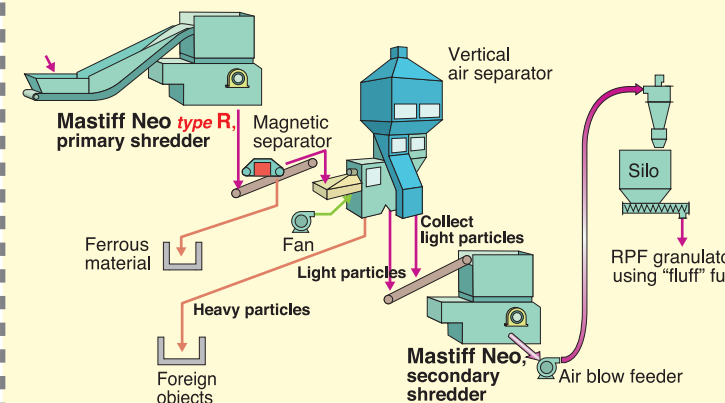
The *type R* has a welded hard facing rotor fitted as standard equipment for improved abrasion resistance and is well suited to shred low-quality waste plastics.

System overview



Example thermal recycling system

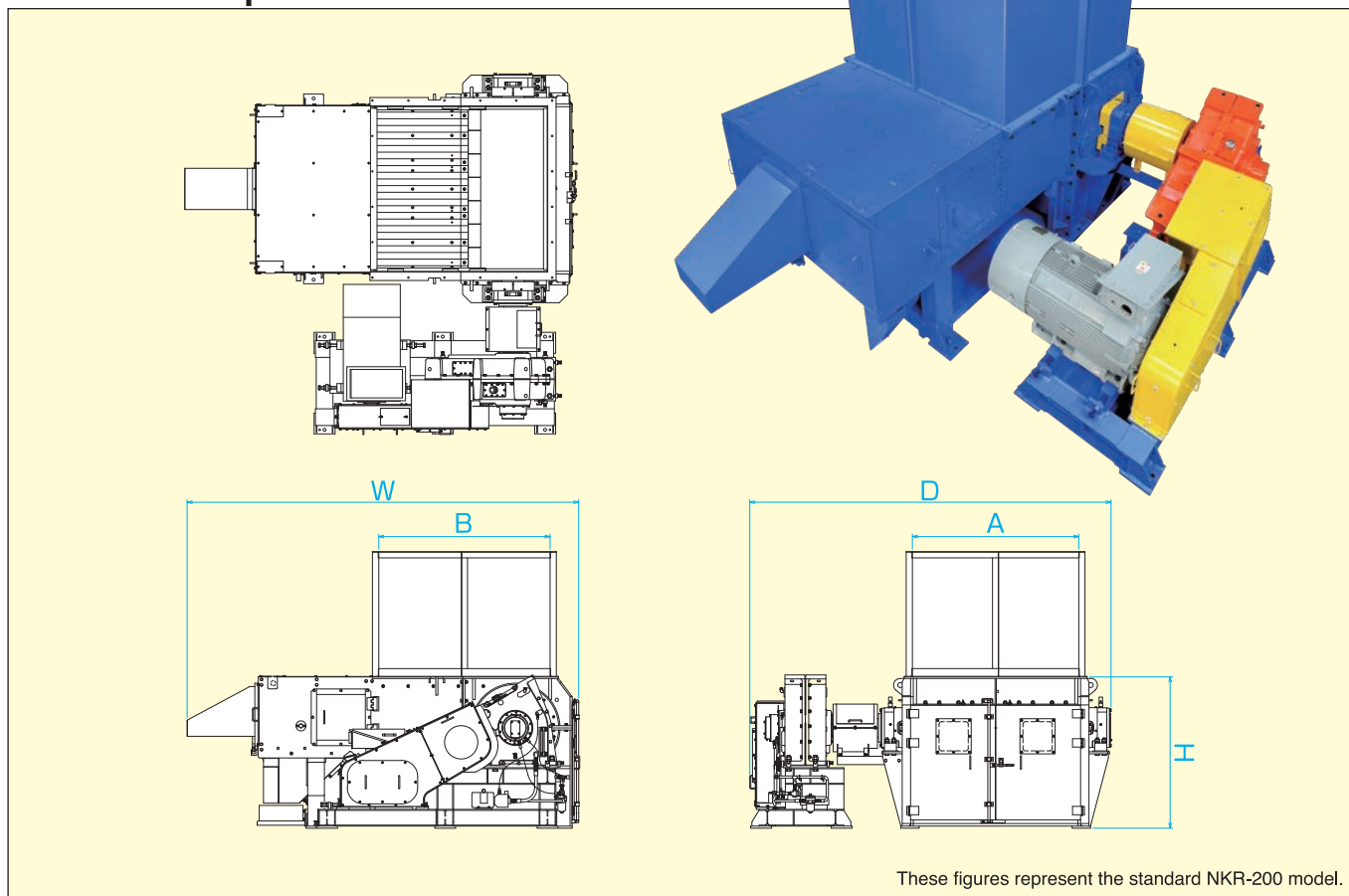
At a recycling center that produces RPF (Refuse Paper & Plastic Fuel) or "fluff" fuel from low-quality waste plastics, the potential of the Mastiff Neo shredders is fulfilled by combining Mastiff Neo *type R* with an air separator for the primary shredding process, resulting in more resistance to misfed foreign objects and load conditions.



Multiple applications



Models and specifications



Mastiff Neo

Model	Capacity (t/h)	Feed opening (A×B) (mm)	Rotor (kW)	Pusher motor output (kW)	Rotor dia. (mm)	Dimensions (W×D×H) (mm)	Weight (kg)
NKR-75	0.6~1.0	1430×2042	75(75~90)	11	φ850	4687×3574×1810	13300
NKR-150	2.0	1430×2042	150	11	φ850	4687×3574×1810	13500
NKR-200	3.0	1990×2042	200	15	φ850	4687×4322×1810	17000
NKR-250	4.0	1990×2302	250	15	φ1200	5029×4562×2360	24100
NKR-315	5.0	2302×2830	315	22	φ1200	5029×5652×2360	32500

Note: The above capacity values, which were obtained by shredding waste plastics (bulk density: 0.05 t/m³) with a Mastiff shredder using new cutters and a ø30-mm hole screen, are provided for reference only. Shredder capacity varies depending on material properties.

Mastiff Neo *type R*

Model	Capacity (t/h)	Feed opening (A×B) (mm)	Rotor (kW)	Pusher motor output (kW)	Rotor dia. (mm)	Dimensions (W×D×H) (mm)	Weight (kg)
NKR-150R	4.5	1430×2042	150	11	φ850	4687×3574×1810	13500
NKR-200R	7.0	1990×2042	200	15	φ850	4687×4322×1810	17000

Note: The above capacity values, which were obtained by shredding waste plastics (bulky density: 0.05 t/m³) with a Mastiff Neo type R shredder using new cutters and an 80-mm wide zigzag slit screen, are provided for reference only. Shredder capacity varies depending on material properties.

Kubota Environmental Service reserves the rights to modify the product specifications and product exterior in this brochure without prior notice.



KUBOTA ENVIRONMENTAL SERVICE Co.,LTD.

Waste Recycling Engineering Dept.

Head Office

1-3-5 Matsugaya, Taito-ku, Tokyo 111-0036, Japan Phone: 81-3-3847-3920 Fax: 81-3-3847-3397

Osaka Regional Office

1-1-1 Hama, Amagasaki, Hyogo 661-8567, Japan Phone: 81-6-6470-5938 Fax: 81-6-6470-5958

Kyuhoji Business Center

2-35 Jinmu-cho, Yao, Osaka 581-8686, Japan Phone: 81-72-993-8408 Fax: 81-72-993-7664

URL: <http://www.kubota-ksk.co.jp/>