

# Recycling & Waste-to-Energy Equipment/Shredder

## • Industrial shredder for solid waste recycling and its peripheral technologies

### Overview (Technical principles, actions, etc.)

- We offer industrial shredders and peripheral technologies to reduce solid waste for recycling.
- Our shredders handle mainly solid waste, including metal scrap, waste home electric appliances, PCBs, turnings, bulky waste, and combustible/incombustible waste.
- We provide best shredder solutions to each customer that results in simple, low-cost separation for more efficient recycling.
- Our recycling systems use either of the shredders below as their core, depending on the properties of material to be fed.



Vertical Shredder: KE Series



Single-shaft Shredder: NKR Series

### Features

#### ● Vertical Shredder: KE Series

1. Features compound shredding with special hammers for improved processing of materials into generally uniform, small particles.
2. Employs a particle size control mechanism that allows easy adjustment of product particle size.
3. Ensures high shredding efficiency with a large shredding area stretching along the rotor circumference. Bulky waste is also shreddable.
4. Targeted markets: waste home electric appliances, automobile scrap, waste PCBs, turnings, processing before incineration, etc.

#### ● Single-shaft Shredder: NKR Series

1. Features shear-shredding with both rotating and fixed cutters for improved processing of materials into generally uniform, small particles.
2. Employs detachable cutting elements that are easily replaceable when worn down, which helps reduce running cost.
3. Equipped with a special shredder-specific torque limiter in its reduction gear for the protection of drive system in case of jamming by contaminants.
4. Different rotor profiles are available and user selectable for improved wear resistance, as well as to flexibly meet the requirements of different types of materials.
5. Targeted markets: waste plastics, used paper, tires, wood offcuts, etc. An increasing number of waste-to-energy plant operators is using our shredders.

## Introductory Track Record

### ● Vertical Shredder: KE Series

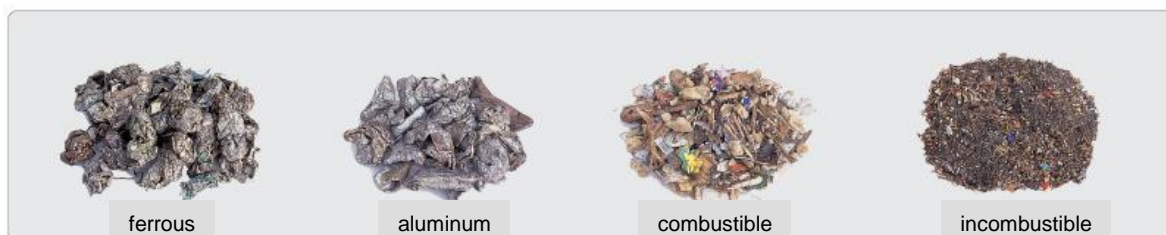
	End User	Product: Q'ty	Application
South Korea	Metal scrap processor/recycler	KE-600, etc.: 5 units	Aluminum scrap
China	Metal scrap processor/recycler	KE-400S, etc.: 3 units	Waste home electric appliances
Europe	Metal scrap processor/recycler	KE-600, etc.: 2 units	Waste home electric appliances
South East Asia	Metal scrap processor/recycler	KE-400S, etc.: 2 units	Aluminum scrap

### ● Single-shaft Shredder: NKR Series

	End User	Product: Q'ty	Application
South Korea	Cement manufacturer	KR-200, etc.: 4 units	Blowing in the kiln
	Waste plastic processor/recycler	KR-200, etc.: 4 units	RPF pretreatment
Europe	Waste plastic processor/recycler	KR-150: 1 unit	Waste plastics
South East Asia	Paper manufacturer	NKR-150: 1 unit	Alternative fuel to the boiler

## Effects

### ● Vertical Shredder: KE Series



### ● Single-shaft Shredder: NKR Series



Inquiries

**KUBOTA Environmental Service Co., Ltd.**

Waste Recycling Engineering Dept.

<http://env.kubota.co.jp/recycle/english/index.html>

E-mail: [d-sakamoto@osa.kubota-ksk.co.jp](mailto:d-sakamoto@osa.kubota-ksk.co.jp)

1-1-1, Hama, Amagasaki, Hyogo, 661-8567 Japan

TEL +81-6-6470-5938 FAX +81-6-6470-5958