

Environmental performance

Zero emission of industrial wastes

We at Kubota promote zero emission activities, increasing recycling rate of wastes, which generate as a by-product of our business activities.

In fiscal 2000, the amount of industrial wastes discharged was 130 thousand metric tons, 37 thousand metric tons of which we treated and dumped.

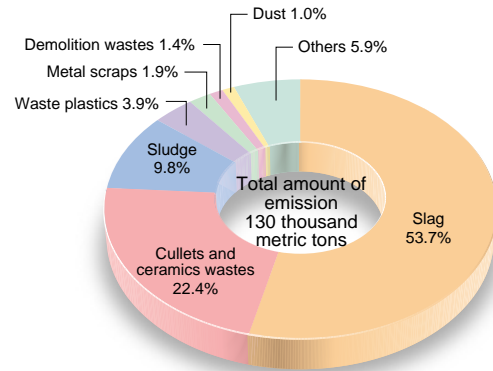
The remaining 93 thousand metric tons were recycled by outside vendors.

In addition, we sold 44 thousand metric tons as valuable substances.

As a result of efforts to recycle these wastes, our recycling rate increased by 1.7 points, compared with previous year, to 78.7%.

We promote generation control and reduction of discharged amount of industrial wastes, providing objectives.

Amount of company-wide industrial wastes and its breakdown in fiscal 2000



Goals for generation control, reduction of discharged amount and zero emission of industrial wastes, and our achieved plants (as of end of March 2001)

Goals for generation control and reduction of discharged amount of industrial wastes

We reduce generation and discharged amount of industrial wastes by 15%, compared with fiscal 2000, in fiscal 2005.

Goal for zero emission

Definition: the amount of wastes that were dumped into landfills shall be "zero" inside and outside of the company

- "zero" means that the amount of wastes that were dumped into landfills should be less than 1% of wastes discharged, in general
- Only wastes discharged by the company concerning, are targeted.
- The wastes collected at distribution stage are not targeted.

Our goals:

Cast iron products manufacturing plants and machinery manufacturing plants: by fiscal 2003

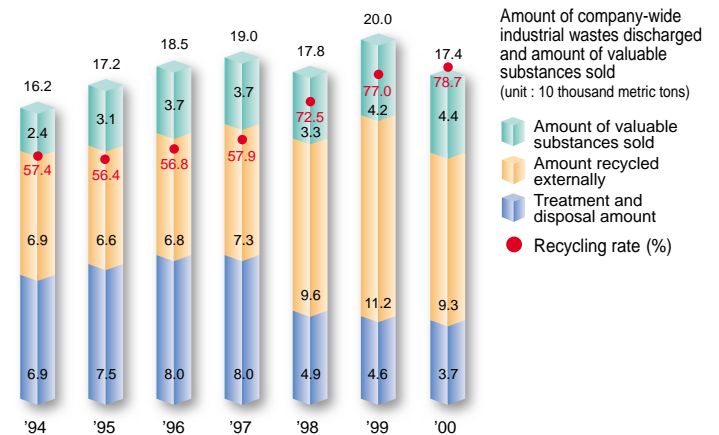
Other plants: by fiscal 2005

Plants achieved zero emission

Seven plants

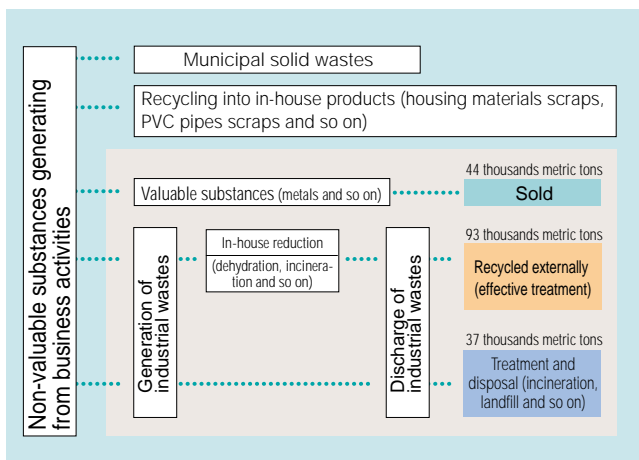
(Funabashi, Okajima, Sakai coastal, Naniwa, Utsunomiya, Tsukuba and Kyuhoji)

Transition of the amount of company-wide industrial wastes discharged, valuable substances sold, and recycling rate



- amount of company-wide industrial wastes discharged = treatment and disposal amount + amount recycled externally
- recycling rate (%) = (amount recycled externally + amount of valuable substances sold) / (amount of company-wide industrial wastes discharged + amount of valuable substances sold) × 100

Amount of company-wide industrial wastes discharged in fiscal 2000 and treatment flow chart



Wastes reduction and cost reduction effect

Slag, recycled externally for use as roadbed material and raw material for cement, accounted for 53.7% of our industrial wastes, in fiscal 2000.

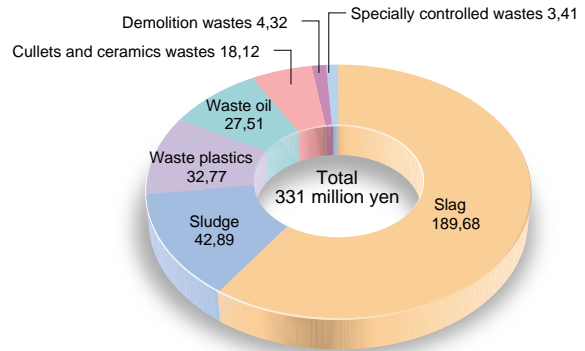
As a result of reduction and recycling activities, the amount of wastes treated or dumped into landfills decreased nine thousand metric tons in fiscal 2000, compared with previous year.

We reduced our annual costs by 331 million yen, by the reduction of costs of industrial wastes treatment commission, and procurement of raw materials, recycling wastes.

Weight reduction of industrial wastes and its breakdown in fiscal 2000



Cost reduction and its breakdown in fiscal 2000

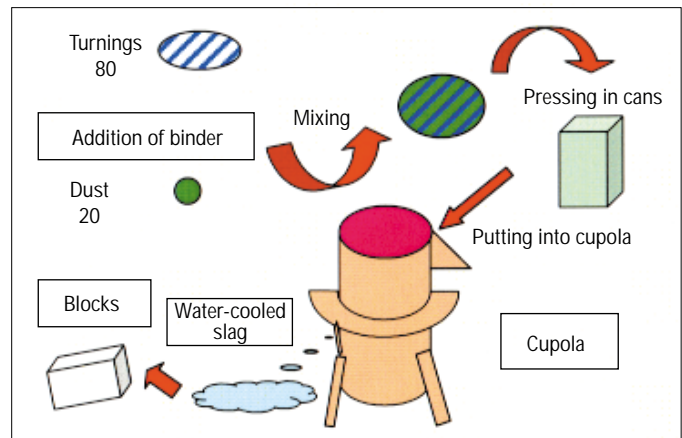


Examples of industrial wastes recycling (Okajima plant)

We introduce the examples of recycling, won a prize in our in-house contests which was held from fiscal 1998 to fiscal 2000, aiming at industrial wastes reduction, in Okajima plant (Osaka city).

Recycling cupola dust

Cupola dust was dumped into landfills. We turned it into slag, mixing it with turnings, then pressing it into cans, putting them into cupola again, finally melting them. This slag is used as material for inter-locking blocks. Dust becomes valuable substance in this way.



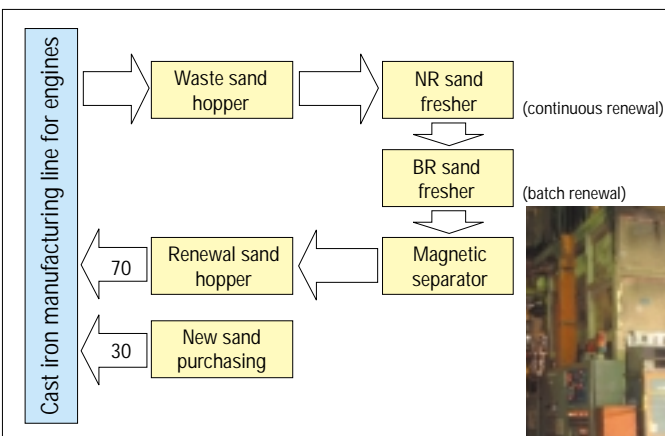
Cans containing dust and turnings



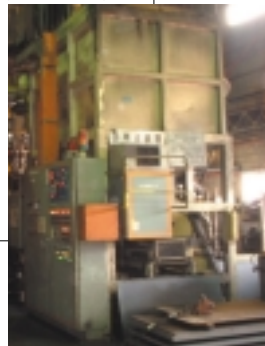
Water-cooled slag



Inter-locking blocks



Waste sand renewal equipmen



In-house recycling of waste sand of cores

We reduced amount of waste sand by recycling it, recovering waste sand in manufacturing lines of cast iron for engines, mixing it with new sand for cast sand of cold-boxes.

Though the ratio of waste sand to total sand was 50 % at first, the ratio increased to 70 % step by step by, conducting some compounding change tests, and increasing capacity of recycling equipment.

We substituted waste sand for new sand by 20 %, cutting material cost, and reducing industrial wastes amount.