

Self-exhaust
heat recovery
Melting furnace

D-SPACE

Internationally patented

Development of a [circulation system] for combustion exhaust gas

The **Exhaust heat** that was previously released from the exhaust port can now be utilized inside the furnace!!

Adopts Venturi principle

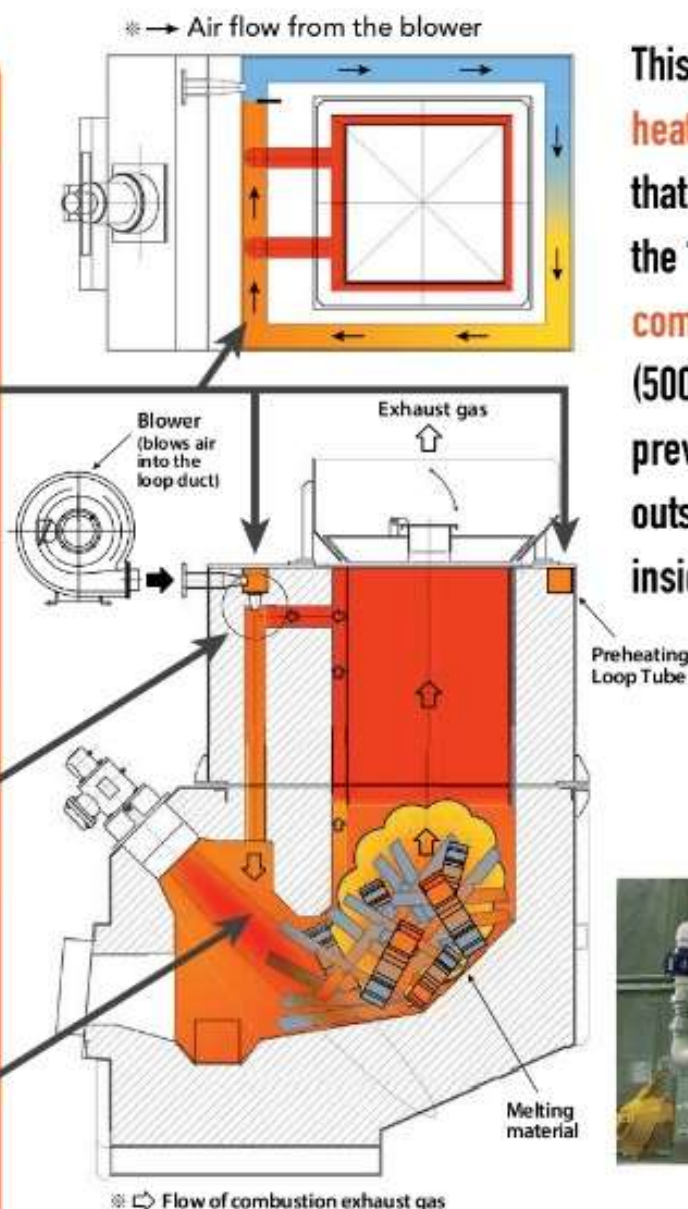
Self-exhaust heat recovery system

The air sent to the Venturi tube is **heat exchanged** with the sensible heat of the refractory material in the loop at the top of the furnace.

※ It is also possible to use the exhaust heat from the heat exchange burner.

Preheated air is used for suction of **combustion exhaust gas**

The drawn-in **combustion exhaust gas** is returned to the vicinity of the melting burner and circulated.



This is a “self-exhaust heat recovery” system that circulates the “high-temperature combustion exhaust heat” (500°C~700°C) that was previously “discharged” outside the furnace inside the furnace.



Achieves improved combustion efficiency

Reduce
consumption
per unit of
production

Energy
saving effect

CO₂
reduction

[Keywords]

Combustion
Exhaust heat Circulation
Self-recovery

