KAWASAKI STEEL TECHNICAL REPORT No. 35 Nobember 1996

Development of Continuous Casting Technologies at Kawasaki Steel*

Synopsis:

The development of continuous casting technologies

Efforts were therefore made to improve the operating ratio by casting super-long continuous sequences, and in 991, a super-long sequence of 927 casts was achieved,

width changes are no longer required.

(3) Tundish hot recycling

Preheating of the next tundish is sometimes inade-

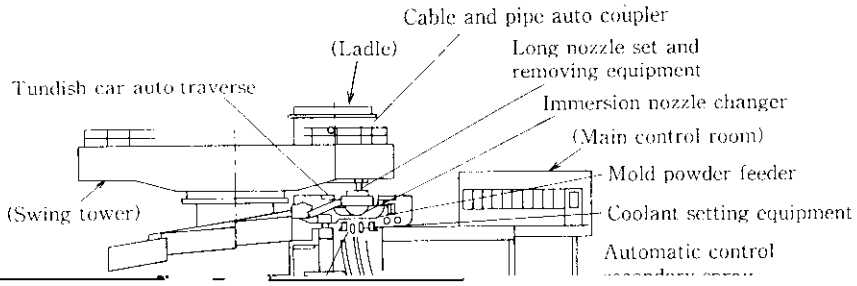
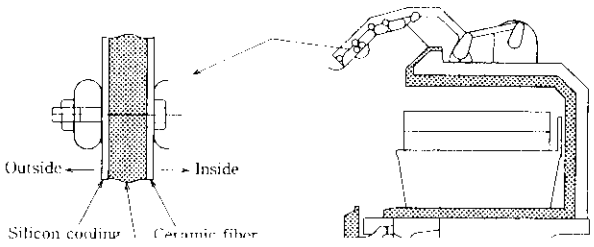
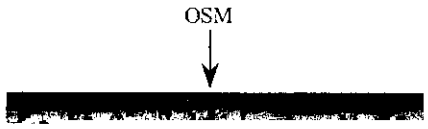
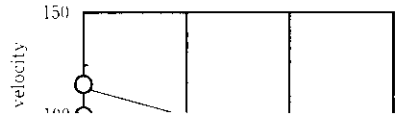

Cable and pipe auto coupler
(Ladle)
Long nozzle set and removing equipment
Tundish car auto traverse
Immersion nozzle changer
(Main control room)
Mold powder feeder
(Swing tower)
Coolant setting equipment
Automatic control

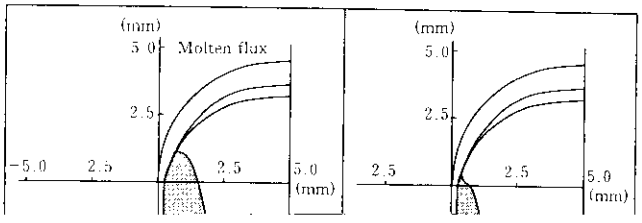
Table 1 Key technologies for high productivity and high quality

Equipment	Technologies of No. 4 C C at Mizushima Works
Tundish	Large tundish without air contamination
Mold	Adoption of Flow Control Mold High accurate and reliable mold level control High frequency oscillation system with




OSM


150
velocity


(mm)
5.0
Molten flux
2.5
−5.0
2.5
2.5
5.0
(mm)
(mm)
5.0
2.5
2.5
2.5
5.0
(mm)

	Thickness	Steel grade(C%)	Amount of	

1.0

transport cars allows DHCR with charging into the reheating furnace at temperatures of more than 850°C. Element technologies have also been developed to