

KAWASAKI STEEL TECHNICAL REPORT

No.1 ( September 1980 )

---

Slab Width Change during Continuous Casting

Hisashi Omori, Mizuo Maeda

---

Synopsis :

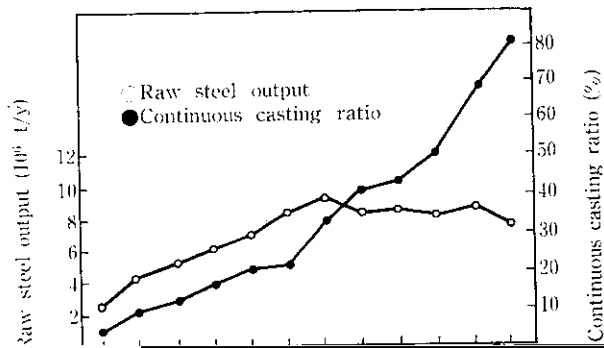
Two different techniques were developed for changing slab width during continuous casting. In one way, casting is continued without decreasing its speed. In this case, some vertical edges a rolling process are needed for correcting tapered portion of casting slab. In the other way, casting is paused, and step -like part connecting two slabs should be scrapped. These slab width changing techniques will promise: (1) Productivity gain: 30-50% (2) Refractories curtailment: 30-50% (3) Yield improvement: 0.5% (only by the farmer way) (4) Energy saving: 30-50%

(c)JFE Steel Corporation, 2003

The body can be viewed from the next page.

## Slab Width Change during Continuous Casting\*

casting.



**Table 1** Main specification of No.5 CCM at Mizushima Works

	Specification
Ladle capacity	275t (270t LD×2/3)
Type of CCM	2 strands curved type slab machine
Steel grades	C-steels and low alloy steels
	190 × (1400~1900)

(3) Slab width change can be performed without yield loss.

### 3.2 Method

(2) Narrowing slab width in high speed casting gives no problems to operation. Not only that, it tends to reduce the force; and

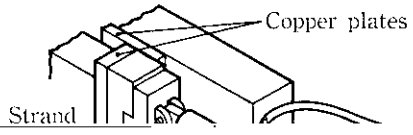
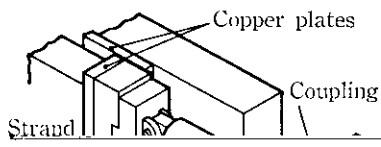
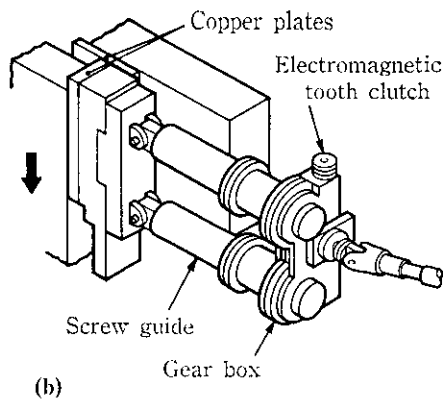
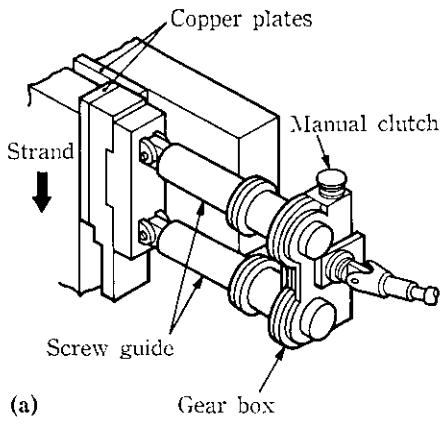
engineers that any attempt to move narrow faces of

width became clear.

Shown in **Photo. 2** is a piece of cast slab to which the new technique was applied. **Table 2** lists operational conditions under which that slab's width was changed.

mechanism, opening units for wide face and electrical control units. Also, major equipment used in this technique include the following:

- (1) Special support system for the narrow face which



(c) Most stable mechanism

applied to the continuous caster rated at some 80 000

features such as follows: