

KAWASAKI STEEL TECHNICAL REPORT

No.37 (October 1997)

Rolling Technology and Modernization: weight saving (RC).

High Quality Production Technology at the Chiba Works No. 3 Hot Strip Mill*



Taohiro Inoue



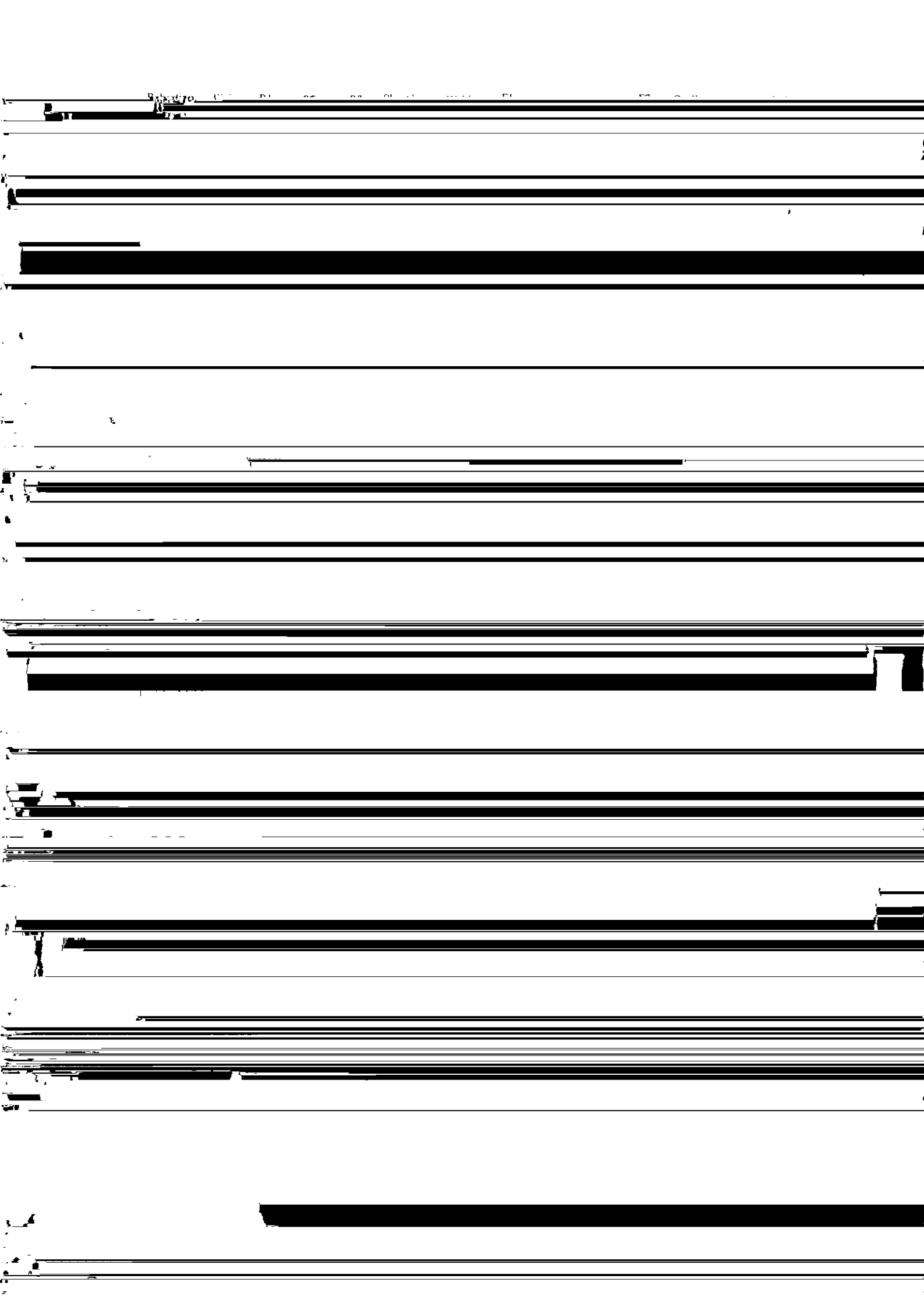
Nobuaki Momura



Sadayuki Miyoshi

Synopsis:

Kawasaki Steel started the operation of the No. 3 hot strip mill at its Chiba Works in May 1995. This is the first fully continuous hot strip mill in the world. To satisfy customer demands for the improvement of product qualities, the mill has the following features: (1) A high skid button was installed in reheating furnace to remove skid marks. (2) High speed processing, hydraulic



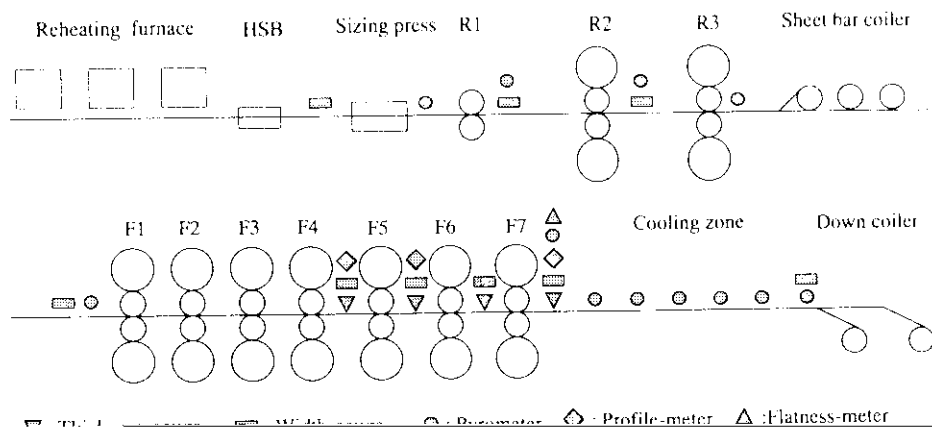
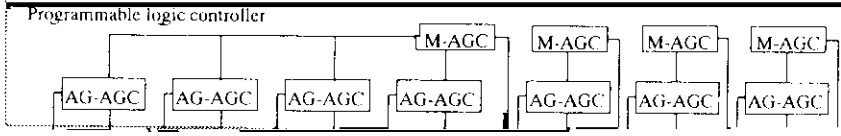


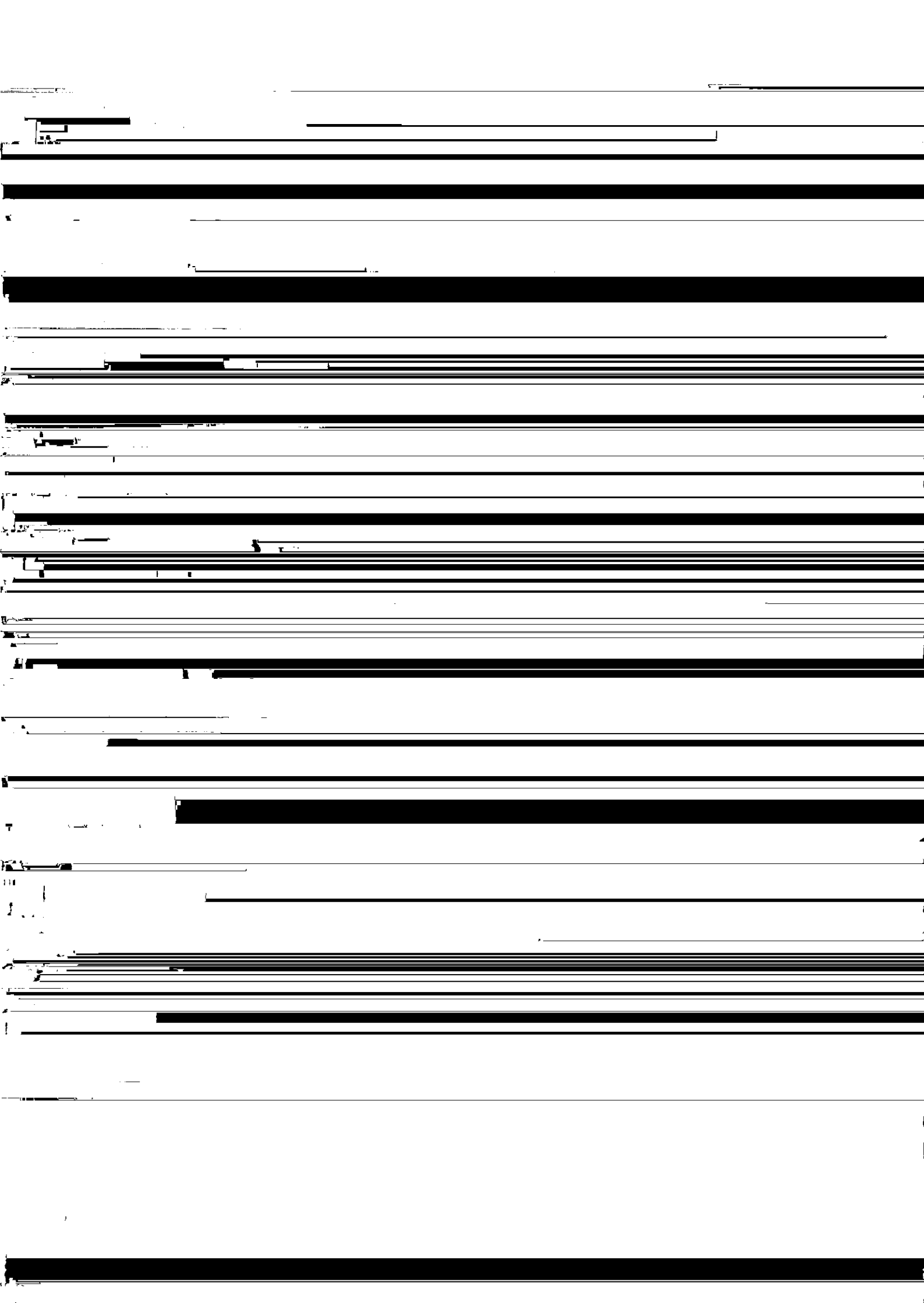
Fig. 3 Sensor arrangement in No. 3 hot strip mill

JMC (Internal model control)

30

25





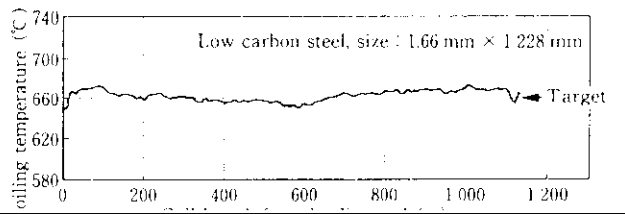
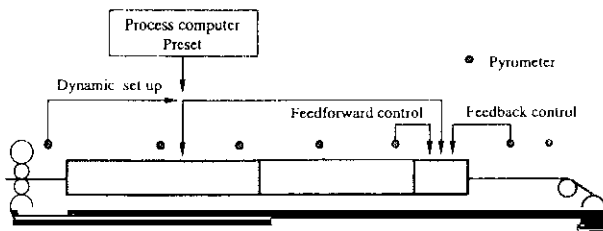


Fig. 14 Outline of coiling temperature control system in No. 3 hot strip mill

virtual out sheet enters the finishing mill. (2) Dynamic

control, (2) gauge control, (3) width control, (4) crown and flatness control, (5) FDT control, and (6) CT control. In each of these functions, the precision of the control has