

KAWASAKI STEEL TECHNICAL REPORT

No.11 (March 1985)

Development of Ore Yard system in Total Ironmaking System at Mizushima Works

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Synopsis :

The total ore yard system has been developed as a part of the totalized ironmaking system at the Ironmaking Department of Mizushima Works. Many kinds of information can be summarized by process computer through an optical fibre cable network, and stored in business computer for improvement on the departmental management level. The system consists of several functions, namely, the ore handling schedule plan, operation guidance for ship unloading and ore treatment in the yard, electric utility management, bed quality control for sinter, and dynamic hopper level control. This system has brought about large profits, saving in labour and energy and quality improvement in the blended ore bed.

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The body can be viewed from the next page.

Development of Ore Yard System in Total Ironmaking System at Mizushima Works*

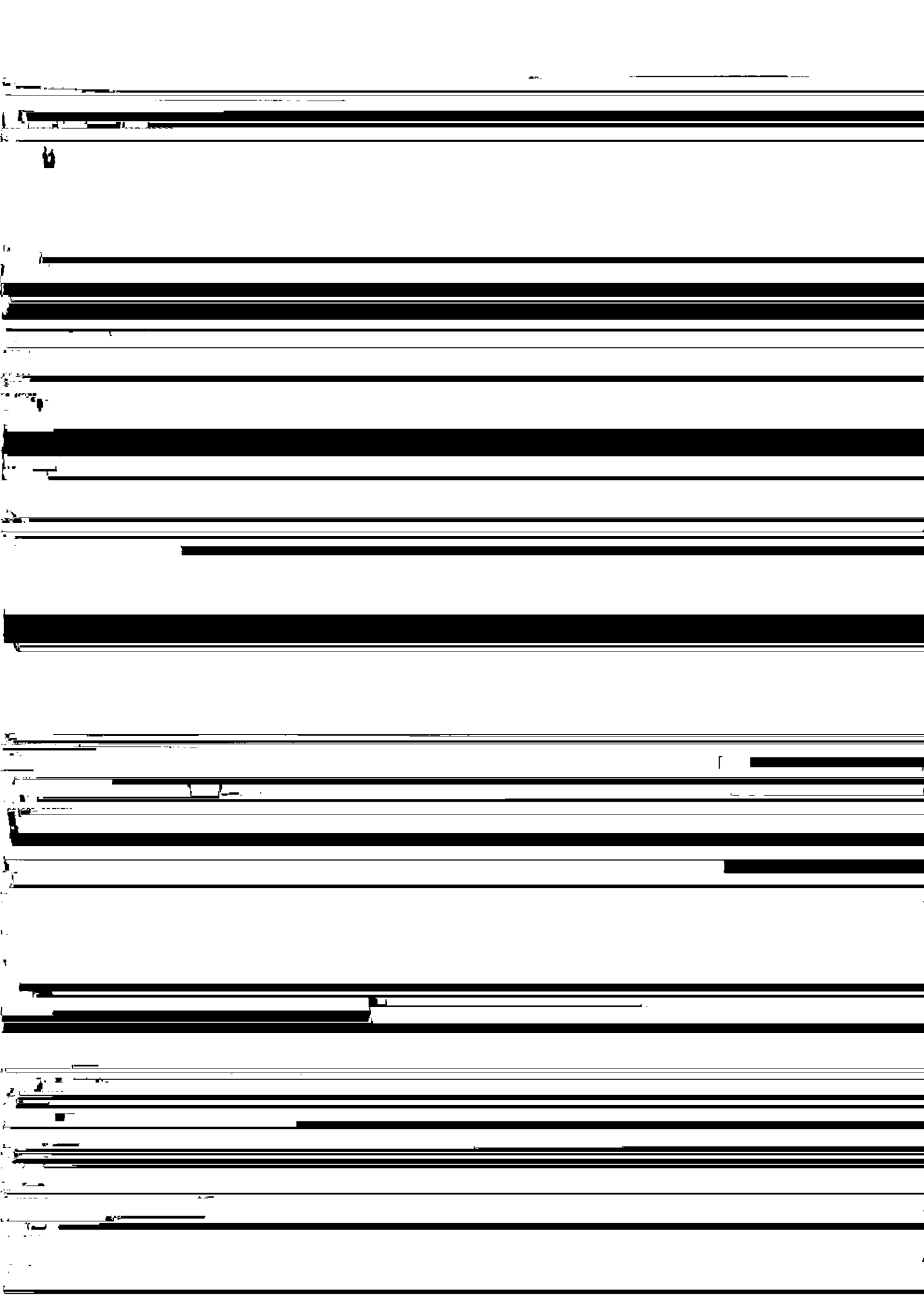
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marized by process computer through an optical fibre cable network, and stored in business



(2) Operation and control

sizing, ore bedding, ore charging into blast furnace and

(3) Control and regulation

control and regulation of the blast furnace

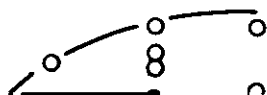
(4) Control and regulation of the blast furnace

control and regulation of the blast furnace

[REDACTED], known that variations in chemical composition during

the feeder (VVF control) Compared with the con

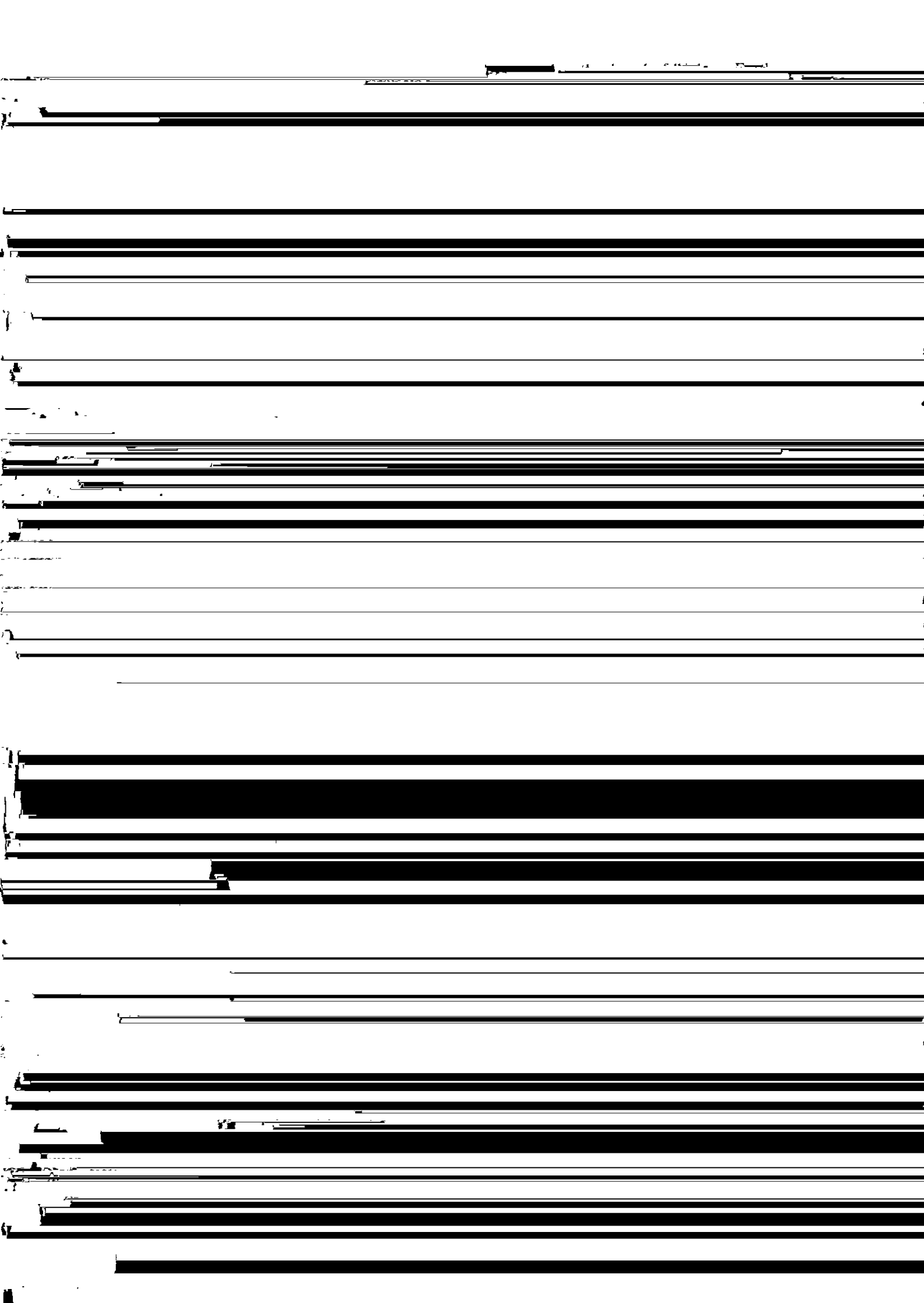
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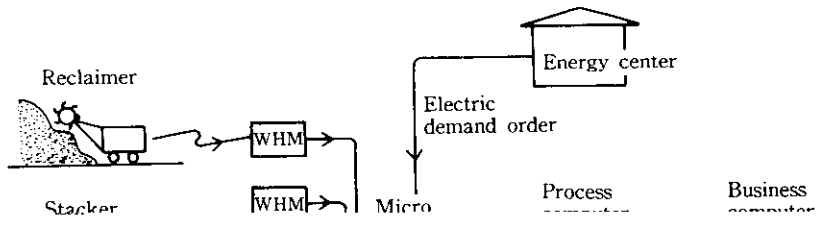


of construction cost at the same feeding accuracy.
(2) End-point bedding control
When multiple brands of ore are continuously stacked, the conjunction between two different

Business
computer

Process
computer





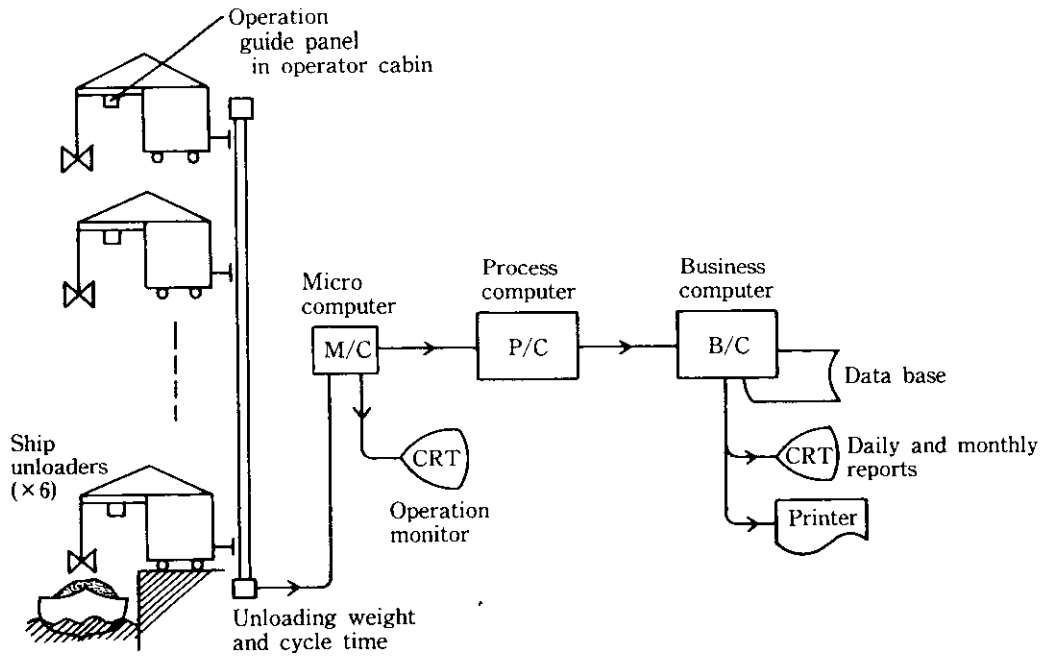


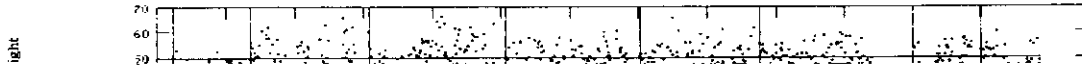
Fig. 12 Ship unloading management system

SENMEI = CHISIRO

START=84-05-28 18:00

U-L = 1434R METGARA= NUN-A

END =84-05-29 13:19



12 HCHI 10:00

16

RUE= 55.2805(SEC)

RUE= 19.7927(T)

The labor and economic environments of the steel industry are expected to become increasingly severe in the future and substantial rationalization is required also in the ore yard department of steelworks. To cope with

tion extended in the electrical and instrumentation phases in the construction of this system.

References