

KAWASAKI STEEL GIHO

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Total Remote Control of Soaking Pit Crane at No.3 Slabbing Mill of Chiba Works

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Synopsis :

An unmanned crane operating system has come to markedly improve the working environment of soaking pit cranes at slabbing mill. Controlled from the ground floor instead of from within the crane, the system makes utmost use of inductive radio and wireless ITV, solving the problems of crane operators with intense heat from beneath and strong vibration. The location of operation room, the proper position of ITV cameras, size and number of monitors, etc., to say nothing of the way of avoiding crane collision, were studied to minimize a sense of physical disorder caused by using monitored image instead of direct viewing from within the crane. Operating efficiency of the new system is almost as expected, though some minor camera troubles occurred during the test operation.

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千葉第3分塊工場ソーキングピットクレーンの遠隔運転

Remote Control of Pit Crane at No. 3 Slabbing Mill of Chiba Works

第3分塊工場は現在年産 300万 t (将来増産予
 定)の鋼塊を均熱炉に投入し、均熱処理し、鋼塊
 たは鋼塊を炉内に配列するときなど精密な操作が

18ホーリ、(将来22ホーリまで設置可能) イ、ブ、 鋼塊ナラフ、 出仕ホーリ、 押込ホーリ、 均熱炉

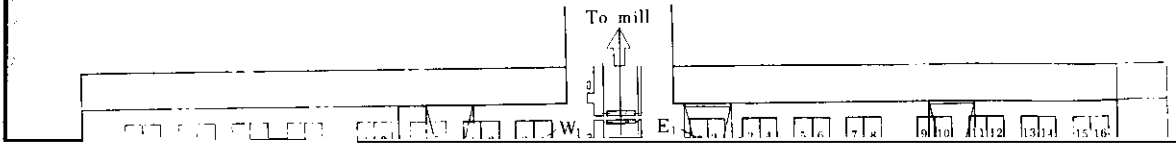
ットバギー 1 台、ソーキングピットクレーン 2 台
 (将来 3 台)と、それらの付帯設備である。Table 1
 に主要設備の仕様を示し、均熱ヤード全景を Photo.1
 に示す。

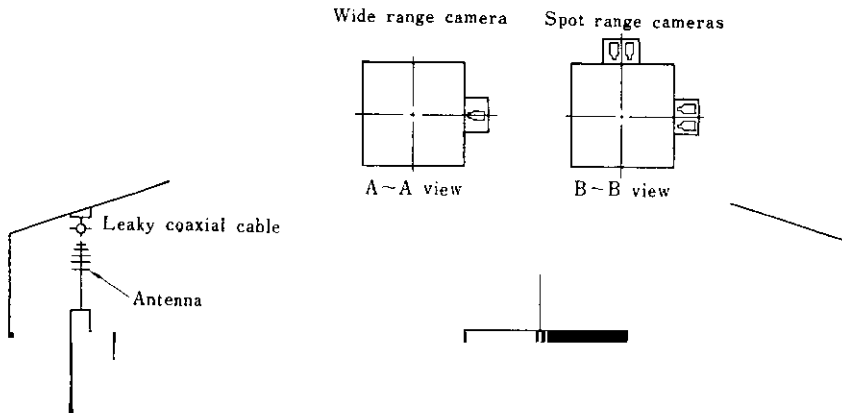
ソーキングピットクレーンは均熱炉への鋼塊の

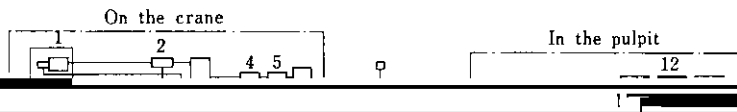
合はクレーンを直視して運転する。直視運転が可
 能な距離は運転室から 60m までで、これ以上遠く

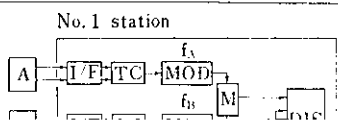
Table 1 Specifications of soaking equipment

Ingot	Weight
	4 - 25t









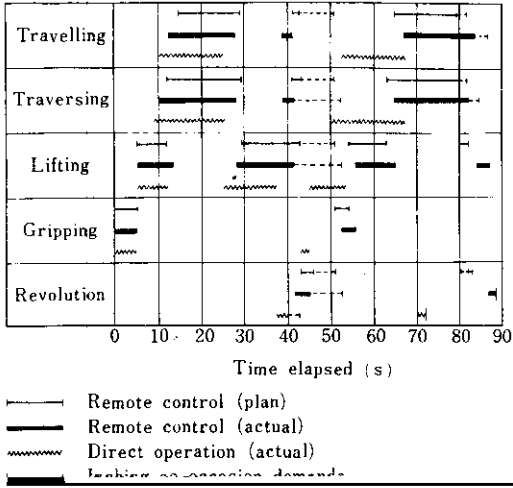
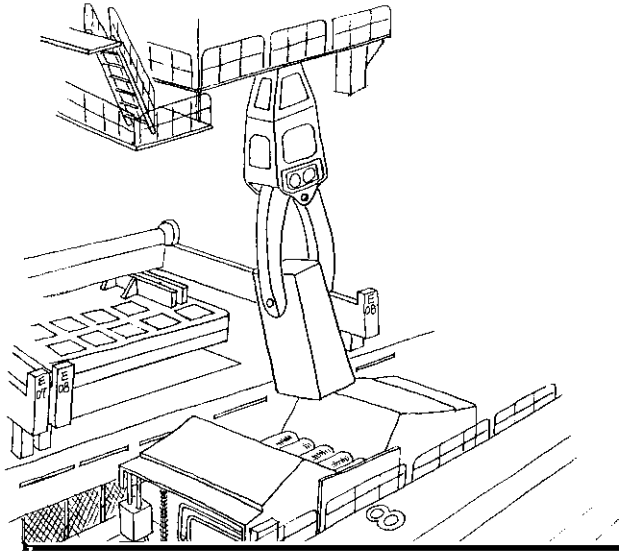


Photo. 4 Scenery of operation

Fig. 6 Comparison of charging cycle time of one input



千葉製鉄所第3分塊工場ソーキングピットクレーン