

KAWASAKI STEEL TECHNICAL REPORT

No.36 (July 1987)

Overseas Engineering Operations

Engineering and Construction for Railway Projects in Southeast Asia

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Synopsis :

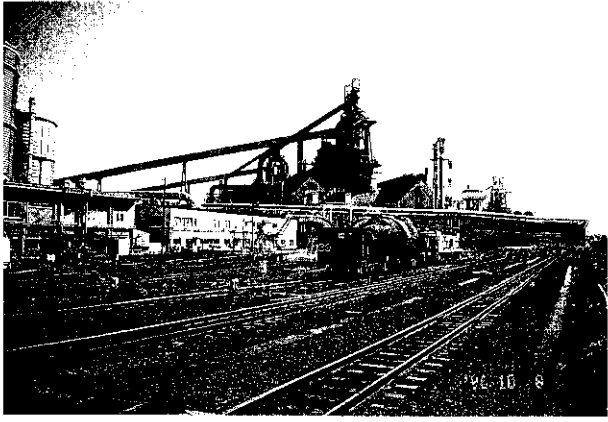
Kawasaki Steel has executed several railway construction projects, both in Japan and overseas, based on the construction experiences of its own integrated steel mills which included railway systems for bulk materials transportation. This report describes Kawasaki Steel's development of railway construction and engineering and railway systems for tracks, electric facilities, signals and telecommunication, by referring to executed projects for Indonesian National Railways.

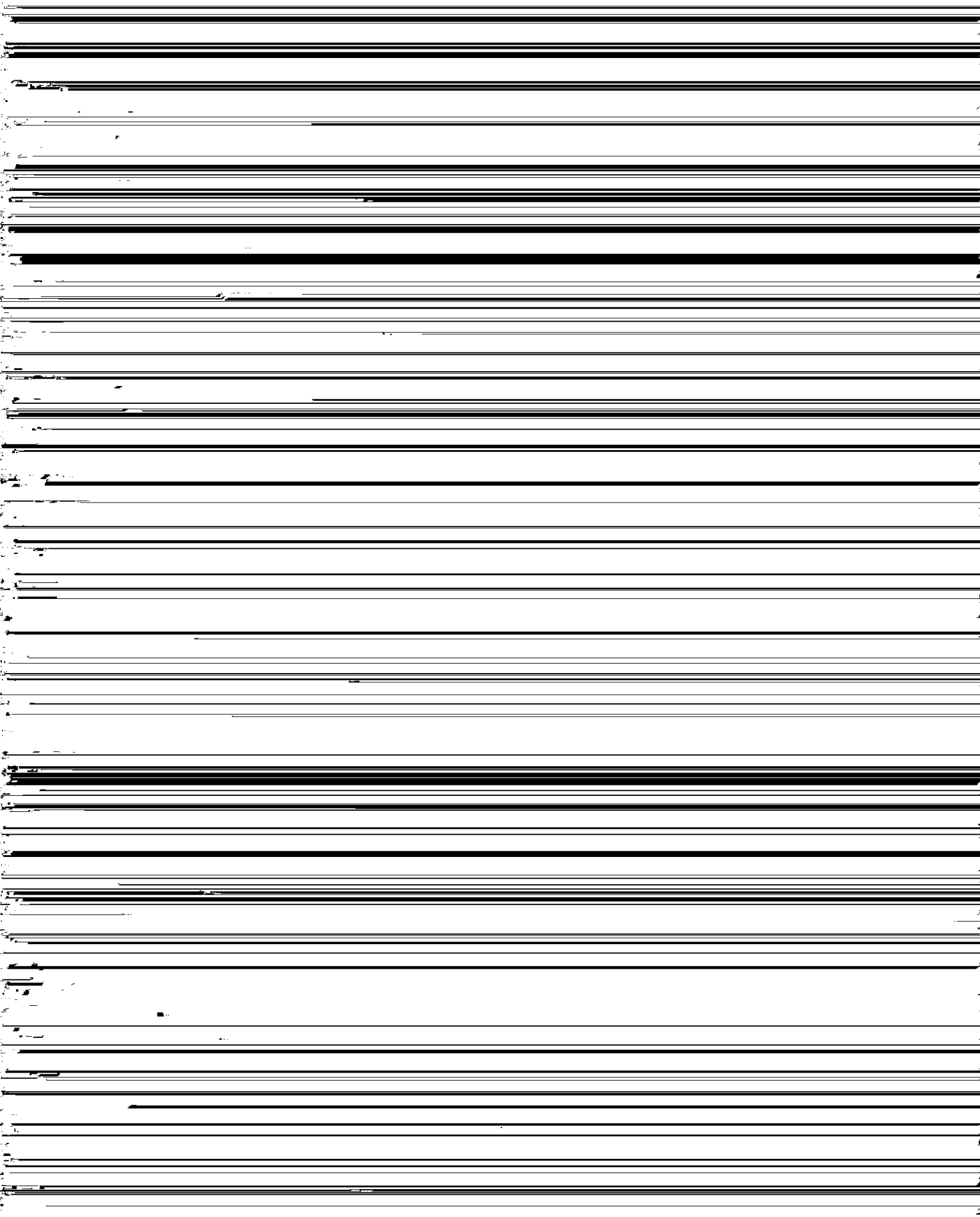
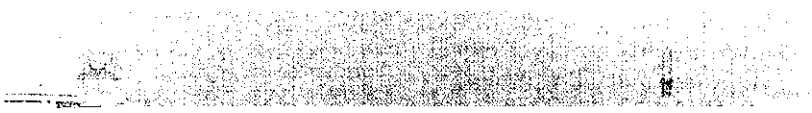
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The body can be viewed from the next page.

**Engineering and Construction
for Railway Projects in Southeast Asia***

Summary





ject is described. The features of a DC electric traction

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Table 1 Major work items and volume

Project	Work	Track work		Electrical work			Signal and telecom.	
		Track panel (m)	Railway switch (unit)	Substation (OHC) (set)	Substation (signal) (set)	Trolley wire (m)	Interlocking system (set)	Telecom. cable (m)
Jabotabek Central Line track elevation		19 600	9	3	2	20 300	1	10 500
Jabotabek Central Line signalling project		5 890	67			380	2	910

power lines.

A traction power line is composed of the following equipment:

(1) Trolley wire that comes into direct contact with the

detecting a train are installed at intervals of several hundred meters to 2 km as a track circuit. The rail joints at the two ends of a track circuit are electrically insulated. A feeding transformer is connected to one end and a

In addition to the above purposes, communication cir-
cuits are used for the remote examination and control

weather conditions of this tropical zone. In addition, the
following protective measures were taken to prevent

1. *Commencement of military operations (2) adorning*