

**KAWASAKI STEEL TECHNICAL REPORT**

No.36 ( July 1987 )

*Overseas Engineering Operations*

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**Large Scale Maritime Structures Using Steel Pipe Piles**

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**Synopsis :**

Since the construction of Philippine Sinter Plant (1974-1977) including the largest jetty structure in the Philippines to facilitate 250 000 D.W.T. ore carrier, Kawasaki Steel has

Philippine Sinter Plant\*  
\* (1974-1977)



**Synopsis:**

*Since the construction of Philippine Sinter Plant (1974-1977) including the largest jetty structure in the Philippines to facilitate 250 000 D.W.T. ore carrier, Kawasaki Steel has developed various port and harbor*

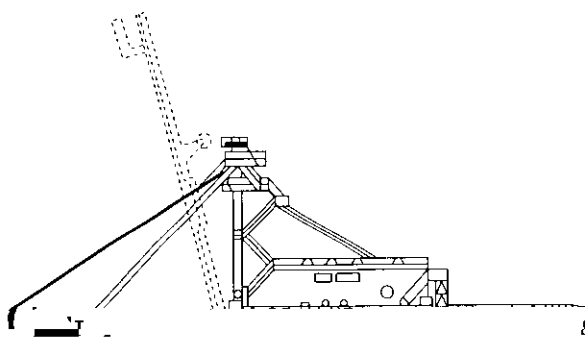


Table 1 Quantity of major material

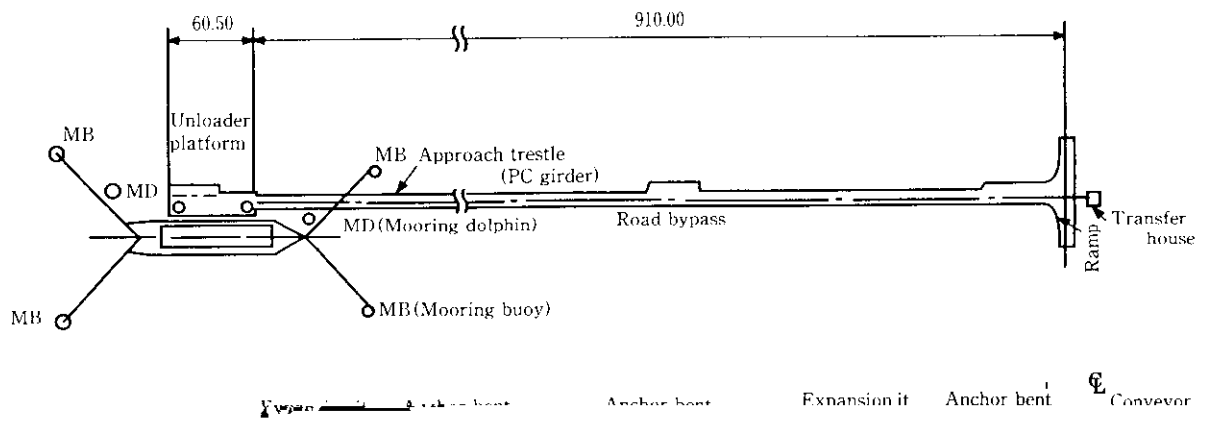
Item	Description	Quantity	Remarks
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Reinforcement bar

(t)  
L.R

2 150

11 600



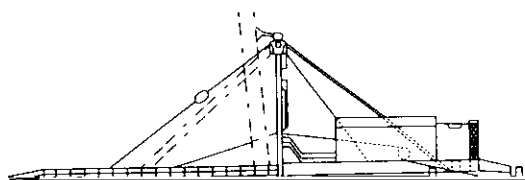
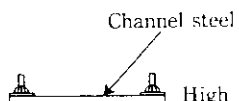
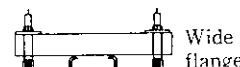




Table 2 Operation records of floating pile driving equipment

Dimension	(mm)	O.D. 1200 × 15 t	O.D. 500 × 12 t	KSP VL
	(mm)	O.D. 800 × 13 t	O.D. 600 × 12 t O.D. 800 × 12 t	
Length	(m)	21.0-33.0	22.0-40.5	21.5 23.5
Quantity	(pcs.)	380	145	897
Calender days	(d)	71	21	63
Operational days	(d)	45	14	33
Non-operational days (due to bad weather)	(d)	26	7	30
	(d)	21	4	11
	(d)	6	2	10

Table 4 Comparison of supporting system

Hanger type(1)	Hanger type(2)	Bracket type	Prefabricated bracket
 <p>Channel steel High</p>	 <p>Wide flange</p>		 <p>Binding bolt</p>