

KAWASAKI STEEL GIHO

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KS-2 K-M

Report on Construction of Sonno Apartment Houses KS-2 Type, K-M Type

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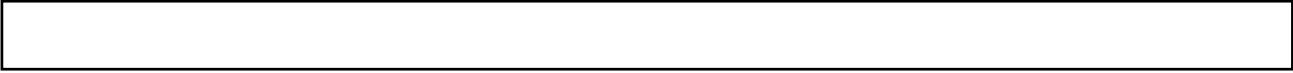
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K-S K-S KS-1 KS-1  
KS-2 KS-2 KS-1 KS-1  
K-M  
K-S PC  
PC KS-2 K-M  
KS-1

Synopsis :

Under the superintendence of Kawasaki Steel Corporation, the construction of five Sonno Apartment Houses (multi-storied and prefabricated) was commenced in July 1969 and was completed in June 1971. The construction methods employed in building the said apartment houses were jointly developed by the four companies: Kawasaki Steel Corporation, Shimizu Construction Co., Mitsusbishi Jisho Co. and Kajima Construction Co. What made up the core of the adopted methods was K-S Construction Method which was codeveloped by Kawasaki and Shimizu and which combines H-shape steels with large-size precast concrete boards. K-S method has two types: KS-1 and KS-2. KS-2 type is a method developed through the improvements of KS-1 type and has various advantages such as shorter construction period and less labor requirement at the building site, as compared with KS-1 type. K-M Construction Method is another method which was jointly developed by Kawasaki and Mitsubishi, but is basically the same as KS-2 type, excepting that K-M method makes use of medium-size precast concrete boards which are more easily available. This report explains how two of the apartments were constructed, one by means of KS-2 method and the other by K-M method, while comparing them with KS-1 method.



関片了、丁市起片、LCS 2 部、LZ M 部

Report on Construction of Sonno Apartment Houses  
--KS-2 Type, K-M Type--

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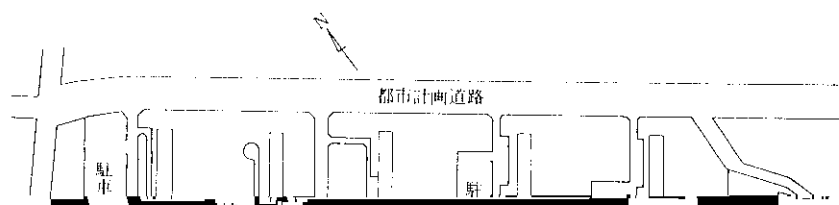
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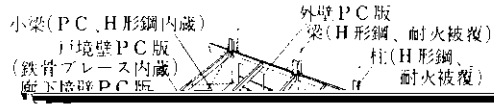
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都市計画道路

駐車

射

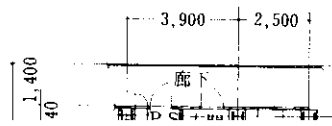


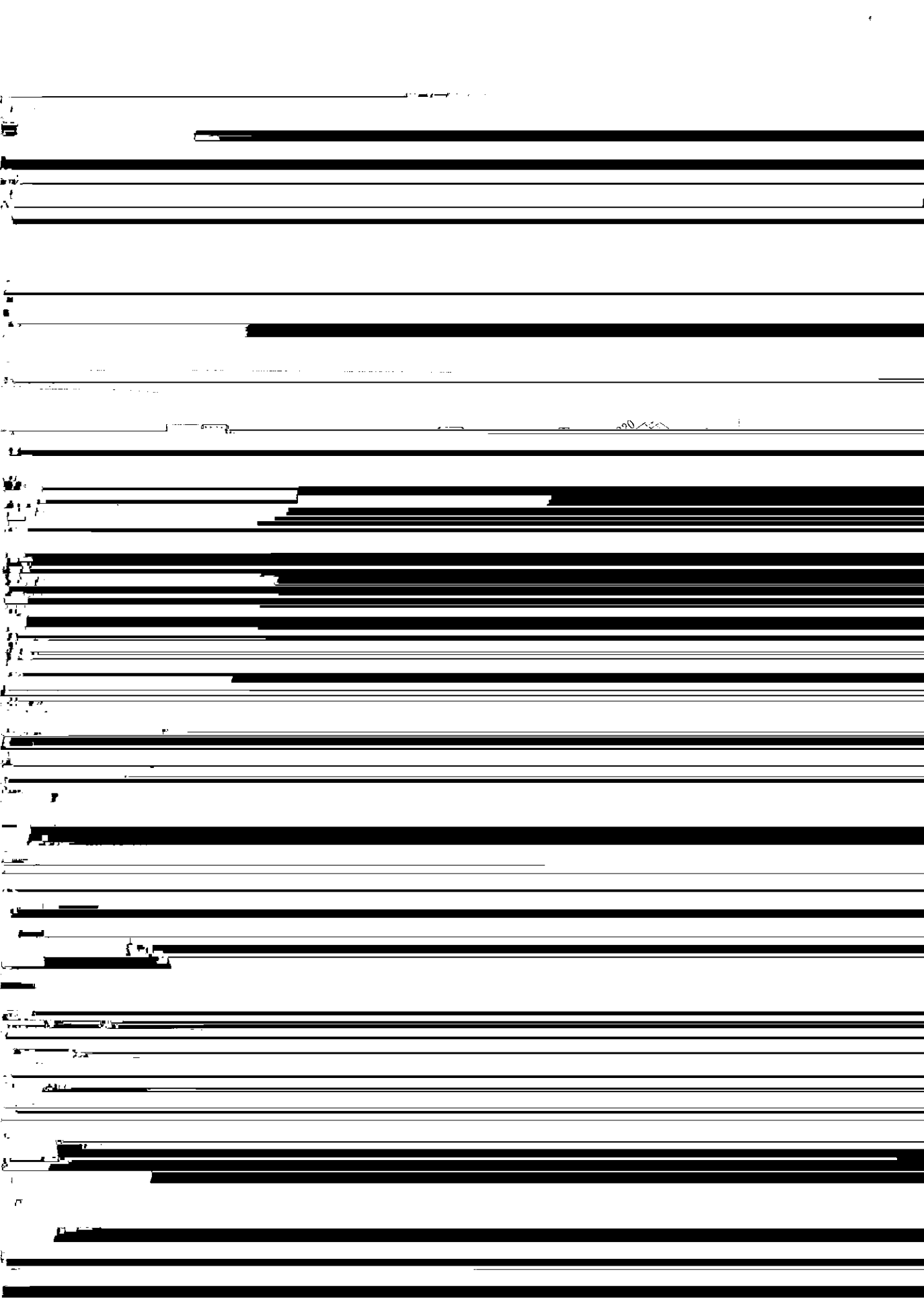


田中 正 氏 著

鉄鋼の熱処理

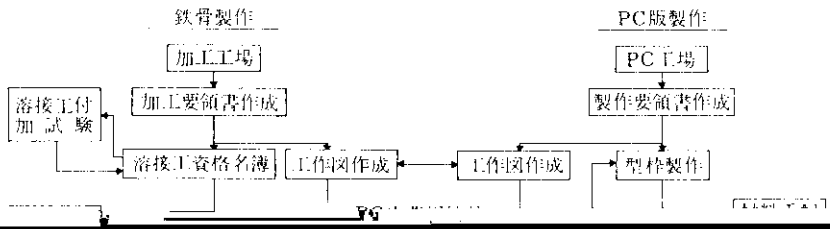
梁(H形鋼、耐火被覆)  
外壁面(P.C版)  
小梁(PC、H形鋼内藤)











#### 4-2 仮設計画

を設置し、仕上げ・設備材の揚重施設とした。クレーンの性能を表3に示す。

D、E棟の仮設計画は、図9に示す。D棟では土

佐渡島の築設は、廊下とエレベータと鉄骨階間

行式120W型(4t×30m)のタワークレーン1基で鉄骨、PC版の積下し、建方を行なった。E棟

縦の通路とし、ベランダ、廊下部を横の通路として利用し、仮設の足場はコア部と妻面にのみ配置

ンを2基用いた。建物北側にはロングリフト2基

表3 クレーン機種

表 5 E棟躯体工事工程表







影響を受ける。E棟のガウジング率が小さいの  
 は、溶接の不良率が高いためである。これは、

かれる位置に、排水管を持つ既製の防水パンを設  
 置し、排水管の開口部を防水パンの排水口で防

中央部から左右にふり分けて建方を行なったこと  
 がその一因であると考えられる。

### (3) 作業能率

表8に溶接の作業能率を示す。表8からわかる  
 ように、E棟の方が能率が悪い。これは全溶接長  
 に比較して、溶接箇所数が多いため溶接の段取り  
 (ルートギップの調整, エンドタブ, 裏当て金の  
 取付け)に時間がさかれたからである。

### 4.5 仕上げおよび設備工事

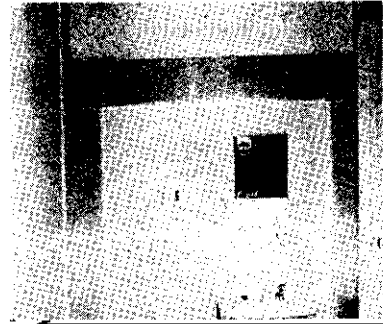


表 9 耐火被覆材仕用

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表 10 現場作業能率

工事種別	棟名 単位	KS-1型	D棟(KS-2型)	E棟(K-M型)	在来工法
杭打基礎工事	人/m <sup>2</sup>	0.067	0.096	0.037	0.198
	人/戸	5.90	3.24	5.45	11.88