

# Ò ô Ú Ĩ ç² Z P™ Ĩ ; ĩ P w “ A q & ; «

## Overview and Application of Steel Materials for High-Rise Building

t<sup>a</sup>yyŠy ISHII Takumi JFE Ú ZyTæ~P™Z€æy ÚZ€» ϕ]Õ£~\$œœ»¶£  
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 Gÿy·Éy OHMORI Akio JFE μ½”çyμ½”çZ€ty°X~ ĩZ€æy ÚZ€» ϕ]Õ£~\$œœ»¶£

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Abstract:

JFE Steel has been producing plates, wide flange H-shapes and pipes by applying thermo-mechanical control process (TMCP) technology using the most advanced on-line accelerated cooling system in order to meet customers' needs while considering various design methods and construction technologies for high-rise buildings.

### 1. xaŠt

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#### 2.1 ôQóĩP

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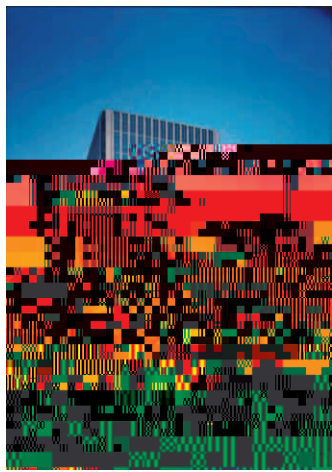
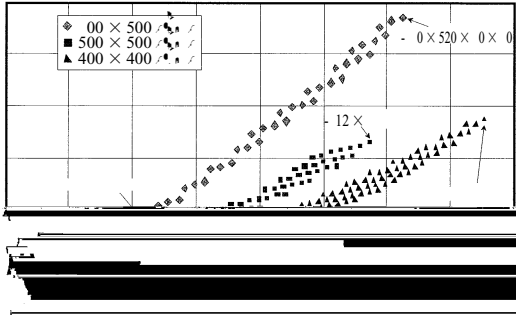


Photo 4 堂島アバンザ  
Photo 4 Dojima Avanza

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### 10 低降伏点鋼材の機械的性質

Table 10 Mechanical properties of low yield strength steel

| JIS | Grade | Mechanical Properties               |                                       |                |                       |                   |
|-----|-------|-------------------------------------|---------------------------------------|----------------|-----------------------|-------------------|
|     |       | Yield Strength (N/mm <sup>2</sup> ) | Tensile Strength (N/mm <sup>2</sup> ) | Elongation (%) | Reduction of Area (%) | Impact Energy (J) |
| S   | S100  | 120                                 | 200-300                               | ≥ 0            | ≥ 50                  | ≥ 2               |
|     | S225  | 205-245                             | 300-400                               | ≥ 0            | ≥ 40                  | ≥ 2               |
| SM  | SM100 | 120                                 | 200-300                               | ≥ 0            | ≥ 50                  | ≥ 2               |
|     | SM225 | 205-245                             | 300-400                               | ≥ 0            | ≥ 35                  | ≥ 2               |

