Features of New High-Strength Steel Materials "550 N/mm^2 Class" for Building Frames

[illegible] Steel Construction Materials Services Center

Abstract:

JFE Steel developed a new line of high-strength steel products with a lower limit tensile strength of 550 N/mm^2 for building frames using its advanced Super-OLAC (on line accelerated cooling)accelerated cooling technology. This product series currently consists of a steel plate, "HBL385," circular steel tube, "P-385," and square steel tube, "P Column G385." These products realize high strength and excellent earthquake resistance while maintaining the weldability of the conventional steel. The results of a test of members using the square tube confirmed that the cumulative ductility factor of 30, which is required in columns, can be sufficiently secured. A rolled H-shape steel, "HBL-H385," is also under development. A design trial was carried out to in[illegible]

1. Introduction

[illegible] Super

2. Features of Products

[illegible]

Table 1 [illegible] Table 2

2.1 Steel Plate "HBL385"

[illegible]

Figs. 1, 2, Table 3 [illegible]

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[illegible]

Super [illegible]

C

2.2 C c a Stee T be "P-385"

2.3 Sç a e Stee T be "P Co G385"

[illegible]

Fig. 4 [illegible]

Photo 1 [illegible]

[illegible]

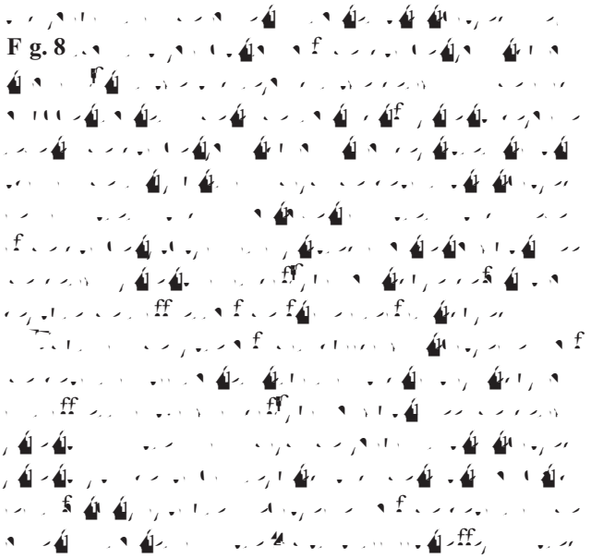

Fig. 8

4. Co c s o