

KAWASAKI STEEL TECHNICAL REPORT

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Development of 590 MPa Grade Galvannealed Sheet Steels with Dual Phase Structure

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Synopsis :

Kawasaki Steel has developed TS 590 MPa grade galvannealed sheet steels to reduce automobile's weight and to improve anti-collision property of automotive bodies.

Although the steels were heat-treated in the heat cycle of a continuous galvntMo addition of 0.15% in con steels showed total elongation of 30%, apparent decrease in yield ratio a weldability. Excellent surface quality of the coated steels was assured by wettability by molten zinc during galvanizing, because no surface segregation occurred on the steel surface during recrystallization annealing. Powdering of the galvannealed coatings was sufficient for automobile exterior paint content in steel, which did not retard galvannealing reaction, productivity in continuous galvanizing lines.

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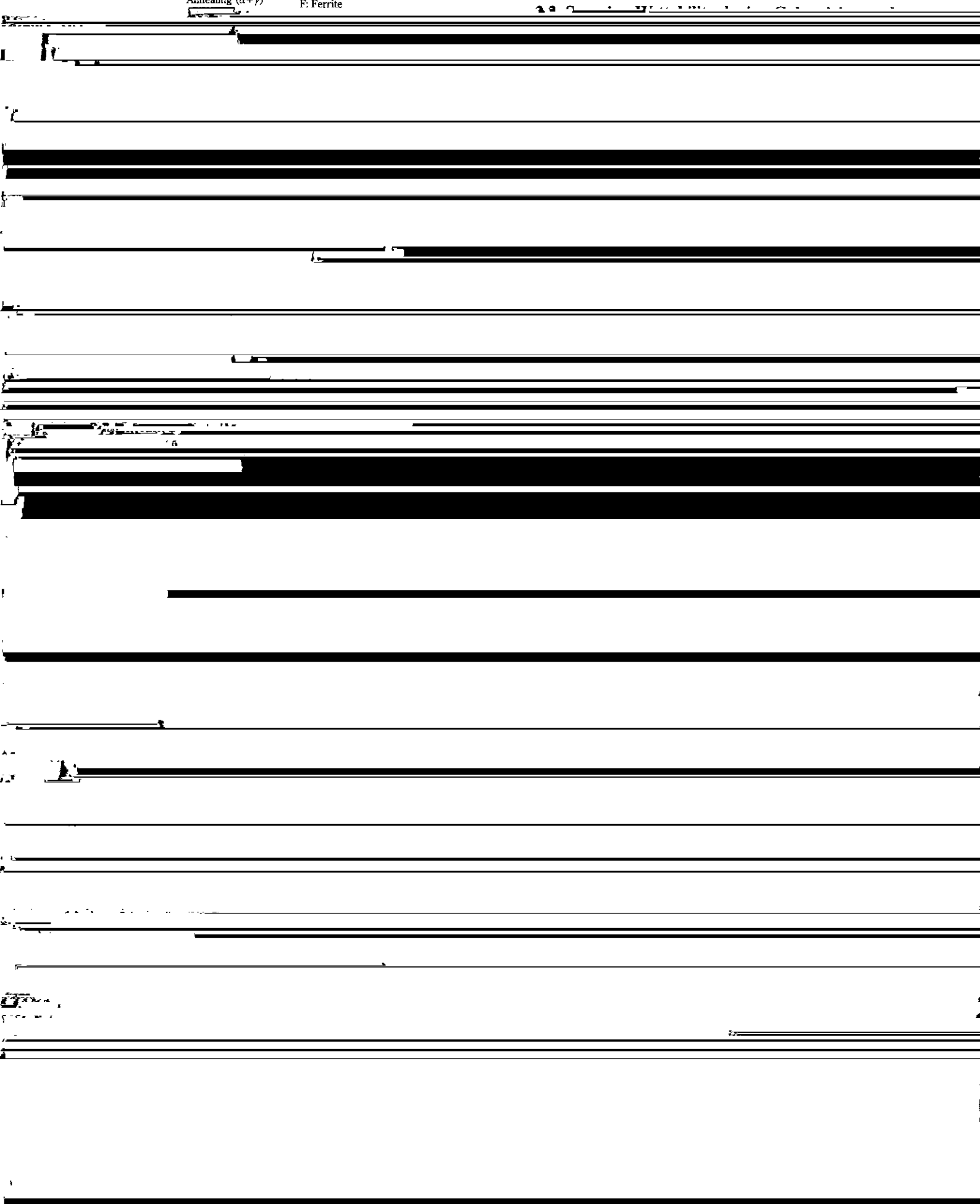
The body can be viewed from the next page.

# Development of 590 MPa Grade Galvannealed Sheet Steels with Dual Phase Structure\*

Summary

Annealing ( $\alpha+\gamma$ )

F. Ferrite



80  
70

12

Weld current

Light

Sticking

113.4.0000

[Redacted]

[Redacted]

[Redacted]

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ing property deteriorates at higher galvannealing tem-

Conventional steel	Developed steel
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