### KAWASAKI STEEL TECHNICAL REPORT

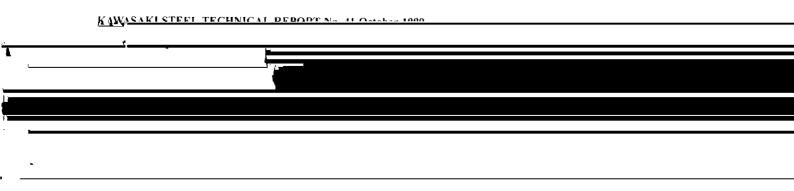
No.41 (October 1999) Advances in Iron and Steel Technologies, Commemorating the 30th Anniversary of Technical Research Laboratories

# **Recent Activities in Research of Electrical Steels**

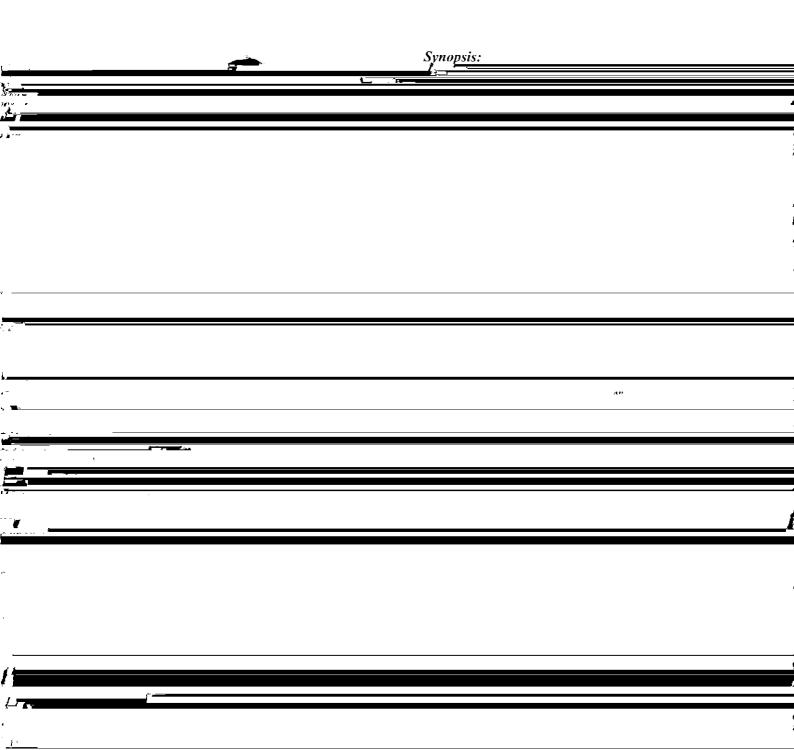
# Michiro Komatsubara

#### Synopsis :

The integrated manufacture of electrical steels in Mizushima Works since 1995 has bestowed upon electrical steel research much development, because the research department has been obliged to rightly reply to many difficult questions as to conditions in operating several new process lines. Especially, the efforts to the progress of electrical steel research have been made on quantative estimation for adequate values of materials such as components, precipitates, crystal structures, textures, surface



# **Recent Activities in Research of Electrical Steels**\*



## 2.1 Research on Desolution-Fine Precipitation Techniques for Inhibitors

The principal points of this technology are causing the inhibitor to desolute in the steel during stab reheating, and then precipitate finely during working in the hot rolling process



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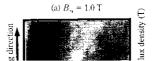
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icon steel by the tandem mill, high speed decarburization annealing equipment, and the adoption of rotary hearth continuous furnaces in all the final annealing furnaces. Accompanying this kind of technical innovation, great progress was also made in research on the cold rolling property in particular for performing decarbur



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#### 3.2 Control of Texture

sheets and other methods have been proposed, these have not reached the stage of adoption, and as in

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