

A full Automatic Analysis System of Modified Glow Discharge Spectroscopy

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Synopsis :

To satisfy the needs of a faster analysis in an increasingly complex production process and to achieve higher efficiency of the analysis, a full automatic analysis system of modified GDS was developed. The automatic analysis system is a dual microcomputer system consisting of a process control computer and a data processing computer. The process control computer controls power supplies, a gas controller, an auto-sampler and an auto cleaner. Output data from PMT are stored on a floppy disk on the process control computer. After the measurement, data are transferred to the data processing computer and outputted to the plotter and/or printer. It takes only several minutes for processing one sample. Using this full automatic analysis system, up to about fifty specimens can be measured sequentially. With the established full-automatic analysis system, it was made possible to feed back accurate information to the production process.

グロー放電分光システムの自動化*

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A Full Automatic Analysis System of

Metallic Elements by Glow Discharge Spectrometry

(2) 二重線、三重線の分離が困難な場合がある。

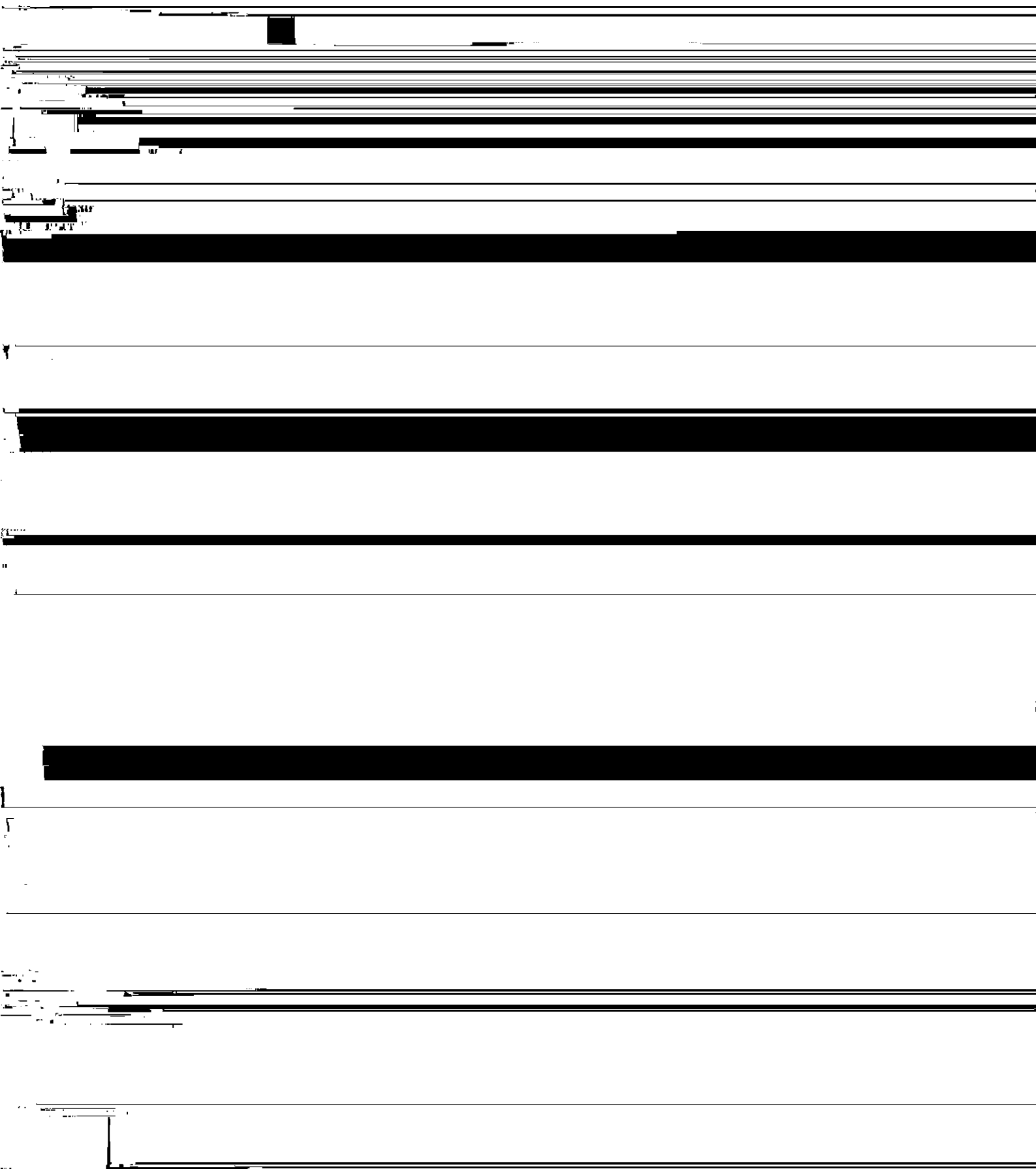
2 改良型 GDS の特徴

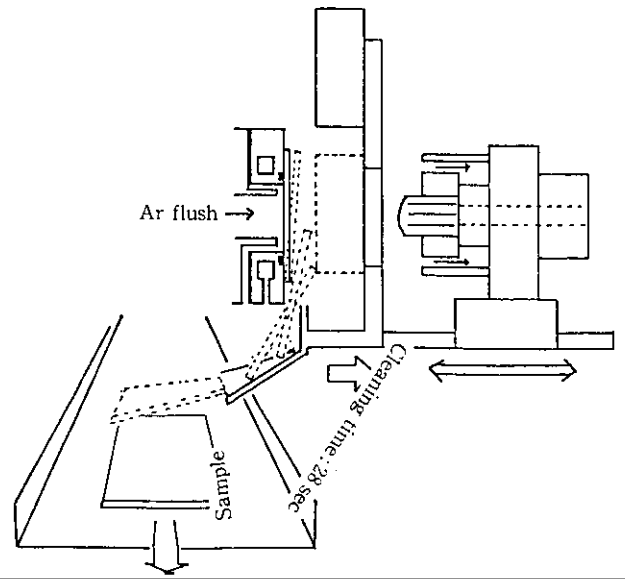
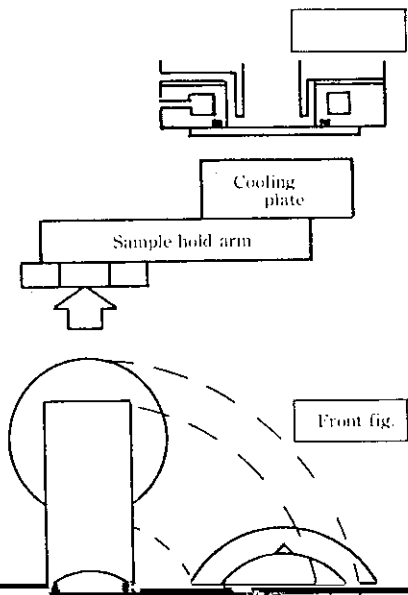
り、高度な解析が難しい。

Vacuum unit

Ar gas

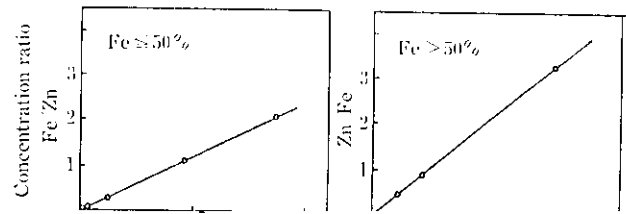
DMIT





中に Cr が富化していること、また Si が酸化膜と地鉄の界面にも偏析していることが確認できる。本法によれば、SIMS で 1 時間を要する測定が 2 分以内と短時間であり、迅速な表面分析手法としての有用性を示すものである。

6.2 めっき鋼板の定量分析²¹⁾



Fe/Zn

Zn/Fe

