

KAWASAKI STEEL TECHNICAL REPORT

An Accurate 3-D Morphology Recovery Using Binocular Parallax and Its Application to Morphological Analysis of Metal Powders*

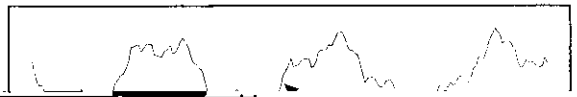
Synopsis:

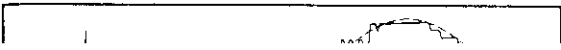
A new three-dimensional morphology reconstruction method

under an electron microscope by the method in de



3 Examination by Numerical Simulation





high degree of reduction. When the correlation coefficient distribution within the sample is 1.0000

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expansion and reduction of the gray level pattern within during the search for correspondence between the two

the search area. With this technique, the small area on the tilted image is gradually changed from a small to large size relative to the small area on the reference

images.

The results of the numeric simulation reveal for the case shown in Fig. 5 that the small-area size on the tilt-

the milligram size on the filter frame. However, technique by binocular analysis. However, problems

1. The following information is for the purpose of the investigation. It is not to be used for any other purpose.

image and the morphological profile are displayed on a



reliability¹¹⁾ by combining the general judgment of human vision with the local vision of the computer by digital image processing.

The extraction of surfaces is necessary for determin-

oxidizing of water-atomized iron powders; therefore, the



the gray level change rate within an area in the match-
ing process by binocular parallel according to the app-

level of accuracy suitable for practical applica-