The 40th Anniversary Event of the Foundation of JSNDI

NONDESTRUCTIVE TESTING & STRESS-STRAIN MEASUREMENT, FENDT '92

Volume I
Nondestructive Testing

October 12-14, 1992

Tokyo, Japan

Edited by

T. KISHI

S. TAKAHASHI

THE JAPANESE SOCIETY FOR NON-DESTRUCTIVE INSPECTION
(JSNDI)

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the Foundation of JSNDI

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(NDT&SSM, FENDT'92)

Proceedings of
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RECENT ADVANCES IN NONDESTRUCTIVE EVALUATION IN JAPAN

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ABSTRACT

Nondestructive Evaluation(NDE) of materials is becoming more and more important in view of the following purposes:

1. speeding up development of new materials
2. cutting production cost of materials
3. obtaining good quality control of final products
4. increasing safety assurance and improving lifetime prediction of materials and structures through in-situ application
5. achieving efficient failure analysis of materials returned from customers

This paper introduces NDE-related organizations in Japan,their operations,and reviews recent advanced research and development activities in this field. Some examples of the advanced research and development studies are listed in the references.

INTRODUCTION

Nondestructive evaluation(NDE) of materials is becoming more and more important at all the stages from new material development, material production to material use,in view of its various useful roles.
This paper reviews the purposes of NDE and introduces NDE-related organizations in Japan and their operations, and recent research and development activities presented in the meetings of JSNDI (Japanese Society for Nondestructive Ispection) during the last 3 years. Some examples of advanced research and development studies are listed in the references.

PURPOSES OF NDE

NDE is very important in view of the following purposes:

1)Speeding up development of new materials.

During development of new materials,NDE helps material researchers find quickly and properly the cause of defects and undesirable

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