### MICROSTRUCTURES AND MECHANICAL PROPERTIES OF STAINLESS STEEL ARC SPRAY COATINGS PREPARED BY ARC WIRE AND WELD WIRE

### **REUNGRUTHAI DAENGMOOL**

MASTER OF SCIENCE IN MATERIELS

> MAY 2006 ISBN 974-9892-65-8

# MICROSTRUCTURES AND MECHANICAL PROPERTIES OF STAINLESS STEEL ARC SPRAY COATINGS PREPARED BY ARC WIRE AND WELD WIRE

#### **REUNGRUTHAI DAENGMOOL**

A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN MATERIALS

MAY 2006 ISBN 974-9892-65-8

## MICROSTRUCTURES AND MECHANICAL PROPERTIES OF STAINLESS STEEL ARC SPRAY COATINGS PREPARED BY ARC WIRE AND WELD WIRE

REUNGRUTHAI DAENGMOOL

THIS THESIS HAS BEEN APPROVED TO BE A PARTTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN MATERIALS

**EXAMINING COMMITTEE** 

...CHAIRPERSON Asst. Prof. Dr. Sittichai Wirojanupatump Dr. Sukanda Jiansirisomboon .. MEMBER Dr. Suparerk Aukkaravittayapun

4 MAY 2005

© Copyright by Chiang Mai University

#### ACKNOWLEDGEMENTS

The author would like to express her sincere thanks and appreciation to her supervisor Asst. Prof. Dr. Sittichai Wirojanupatump, for his kind advice, assistance and encouragement.

The author would like to express her sincere thanks to Dr. Sukanda Jiansirisomboon for her advice and helpful suggestion for this thesis.

The author would like to acknowledge Thermal Spray Research Laboratory, CMU for partial financial support.

The author greatefully acknowledges the members of Thermal Spray Research Laboratory, CMU for their assistance. Special thank goes to Mr. Worapot Sirirak for his help in sample preparation.

The author would like to thank the Department of Physics, Faculty of Science, Chiang Mai University for allowing my thesis and Graduated School, Chiang Mai University for partial financial support..

Finally, the author is profoundly greatful to her family for their tender love, care and support during study in M.S. program.

#### REUNGRUTHAI DAENGMOOL

iii