

NATIONAL DEFENSE RESEARCH COMMITTEE

of .

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT

WAR METALLURGY DIVISION

Final Report

on

EFFECT OF SHOT BLASTING ON THE MECHANICAL PROPERTIES OF STEEL (NA-115):
PART I

by

R. L. MATTSON AND J. O. ALMEN
RESEARCH LABORATORIES DIVISION, GENERAL MOTORS CORPORATION

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To: Dr. James B. Conant, Chairman
National Defense Research Committee of the
Office of Scientific Research and Development

From: War Metallurgy Division (Div. 18), NDRC

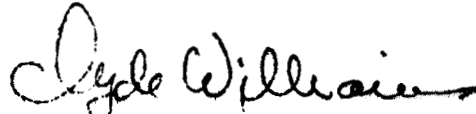
Subject: Final Report on "Effect of Shot Blasting on the Mechanical
Properties of Steel (WA-115): Part I".

The attached final report submitted by J. O. Almen, Technical Representative on NDRC Research Project NRC-40, has been approved by representatives of the War Metallurgy Committee in charge of the work.

This report presents the results of experimental shot peening of machine parts and laboratory specimens to study the effect of shot peening on fatigue durability, impact, dimensions, ballistic limit of armor plate, and stress corrosion cracking.

I recommend acceptance of this report as a satisfactory final report on a phase of the work under Contract O.E.Sr-1123 with the Research Laboratories Division of General Motors Corporation.

Respectfully submitted,



Clyde Williams, Chief
War Metallurgy Division, NDRC

Enclosure

PREFACE

This report is pertinent to the problems designated by the Office of the Coordinator of Research and Development, Navy Department, as NA-115, and to the project designated by the War Metallurgy Committee as NRC-40.

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