
Foreward

In the foreward to Volume 1 it was explained that the special format of this work, which includes many examples from actual operation and extensive illustrations, was chosen in order to pass experience on to other professionals and also to give motivation to work with the demanding material at hand.

In contrast to Volume 1, which focused on problems due to external influences, this second volume is centered around problem-oriented inspections of engine part behavior under operating loads from their function. This include fretting wear and rubbing, containment of rotor fragments, and the causes and effects of fires and explosions.

This volume is a continuation of Volume 1. However, it has been attempted to make this volume understandable on its own.

The author did not assume that these works would be read in succession, but rather that they should serve as reference works, and they are layed out accordingly. Therefore, the text explaining the diagrams is intended to contain as much information as possible and describe important effects. It is intentional that explanations and references are repeated in both the diagram descriptions and the continuous text. For example, in engine overhaul manuals, as well, there are similarly repeated statements concerning the reparability of various blade stages.

The indicated reference works were not selected under the viewpoint of the primary literature. Unless the cited text is a periodical, indications as to further information on specific fields can be found in the primary literature.

I thank my wife Dr. Daniela Rossmann for her years of patient understanding and support, and also for her many helpful recommendations concerning design. This book would never have been possible without her support.

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Axel Rossmann

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