

# **Guidelines for Handling Molten Aluminum Third Edition**

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## Foreword

The initial *Guidelines* were first issued in 1980, revised in 1982 and a second edition issued in 1990 as new information came to light. However, practices and equipment for melting and casting aluminum are continually being modified or changed for a variety of reasons. In addition, new information is being generated in reporting programs and research efforts implemented by The Aluminum Association.

Major improvements have been made in protective clothing and equipment for workers. New coatings for direct chill (DC) casting operations have been evaluated for prevention of explosions resulting from bleed-outs necessitated by the disappearance of the long-used Tarsset Standard. Based on incident reports received by the Association, new guidelines for receiving and inspecting scrap and for casting and charging sow have been developed and promulgated. In particular, contamination of purchased scrap has been shown to be a major concern in view of the ever-increasing recycling of aluminum.

This third edition of *Guidelines for Handling Molten Aluminum* was prepared with technical input and review by industry representatives with considerable expertise in all aspects of handling molten aluminum. Basic information has been retained, but considerable change has been made to the organization and presentation of the subject matter. The sections have been updated and considerably expanded to incorporate the new information available since publication of the second edition.



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# I. Introduction