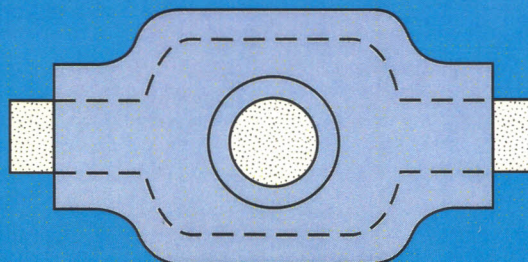
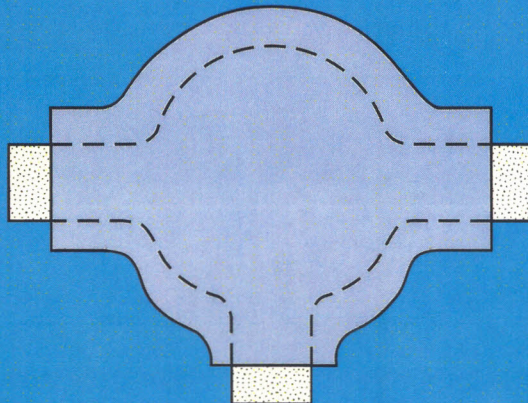
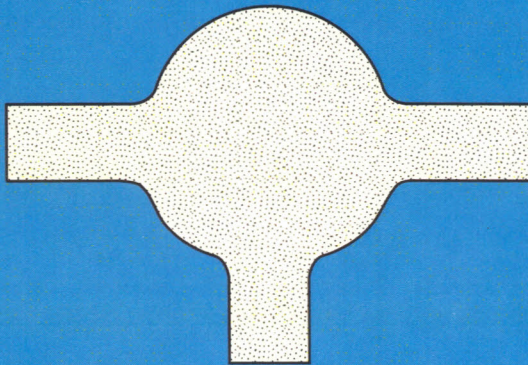


AMERICAN FOUNDRY SOCIETY CAST METALS INSTITUTE



CAST METALS TECHNOLOGY SERIES

FUNDAMENTAL CORE TECHNOLOGY



PREFACE

This programmed learning course, prepared by the Cast Metals Institute and the American Foundry Society, is designed to aid those beginning a career in metal casting. The principles are basic and can be used by experienced foundry personnel as a refresher or a reference. The material can be read by and individual or used to instruct and test groups of beginners.

This course covers the basic principles of core technology with emphasis on the advantages, disadvantages and control practices for the different types of processes. The text is divided into these sections:

- General
- Sands for Coremaking
- Binder Techniques
- Baking
- Core Dryers
- CO₂ Sodium Silicate Process
- Self-setting Silicate
- Fluid-Sand
- Alkaline (A Process)
- Cement-Sand
- Sodium-Silicate with Oil Additives
- Cold-Setting Oil Systems
- Furan Systems
- Manufacturing Techniques
- Hot-Box Core Process
- Cold-Box Techniques
- Core-Blowing Units
- Core Wash
- Appendix A Casting Defects Attributed to Cores
- Appendix B Control of Core Sands
- Tests

For more information on this topic, the reader is referred to AFS' Special Publications department.