



Designation: A 897/A 897M – 023

Standard Specification for Austempered Ductile Iron Castings¹

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1. Scope

1.1 This specification covers ductile iron castings that are subsequently heat treated by an austempering process as defined in 8 10.1.

1.2 The application of the austempering heat treatment extends the range of properties achievable in ductile iron castings.

1.3 No precise quantitative relationship can be stated between the properties of the iron in various locations of the same casting or between the properties of castings and those of a test specimen cast from the same iron (see Appendix X1). However, austempering heat treatment will tend to diminish any differences in mechanical properties.

1.4 The production of castings, machining (if required), and the austempering heat treatments may be performed by different manufacturers, as covered in Section 13. 15. The purchaser should establish by contract agreement, at the time of ordering, the responsibility of the various parties for meeting the specification requirements.

1.5 The values stated in either inch-pound or SI units are to be regarded separately as standard. Within the text, the SI units are shown in brackets []. The values stated in each system are not exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with the specification.

¹ This specification is under the jurisdiction of ASTM Committee A04 on Iron Castings and is the direct responsibility of Subcommittee A04.02 on Malleable and Ductile Iron Castings.

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