

- [Home Home](#)
- [About this portal](#)
- [Latest updates](#)

  

[Save](#)

[Resource detail](#)

[Citations](#)

## ASTM A395-80 Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for use at Elevated Temperatures

[View on Information Provider website](#)

Abbreviation

ASTM A395-80

Valid from

26/09/1980

---

Information provider

IHS Markit

Author

American Society of Testing and Materials

Information type

ASTM Standard

Format

PDF & Hard copy

---

Cited By

[This resource is cited by 1 document \(show Citations\)](#)

---

Description

This specification covers standard requirements for ductile iron castings for pressure-retaining parts for use at elevated temperatures. Castings are classified by grades based on mechanical property requirements.

These iron castings shall meet the specified values of tensile strength, yield strength, elongation and hardness. Chemical analysis shall be performed wherein the casting shall conform to the required chemical composition for carbon, silicon, and phosphorous. The material shall meet the required tensile properties, hardness, and microstructure.

The iron casting shall undergo pressure test after machining. The thickness of any repaired section in relation to the size of the plug used shall be indicated.

The minimum radius of repaired sections of cylinders or cones in relation to the size of plug used shall not exceed the prescribed limit. Other defective areas may also be repaired by plugging provided the minimum ligament between plugs in adjacent areas shall not be less than twice the distance from the nearest plug.

Three Y-blocks shall be utilized as test coupons. The material shall undergo the following test methods: tension test, chemical analysis, yield strength test, and hardness test.

For assistance with locating previous versions, please contact the information provider.

[View on Information Provider website](#)

This resource is cited by:

## ASTM A395-80 Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for use at Elevated Temperatures

This document is CITED BY:

- [AS/NZS 4331.2:1995](#)

ASTM A395-80 is cited by AS/NZS 4331.2:1995 (R2016) Metallic flanges - Cast iron flanges

Back

## ASTM A395-80 Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for use at Elevated Temperatures

Show what documents this resource is CITED BY

Show what documents this resource CITES

### Description

This specification covers standard requirements for ductile iron castings for pressure-retaining parts for use at elevated temperatures. Castings are classified by grades based on mechanical property requirements.

These iron castings shall meet the specified values of tensile strength, yield strength, elongation and hardness. Chemical analysis shall be performed wherein the casting shall conform to the required chemical composition for carbon, silicon, and phosphorous. The material shall meet the required tensile properties, hardness, and microstructure.

The iron casting shall undergo pressure test after machining. The thickness of any repaired section in relation to the size of the plug used shall be indicated.

The minimum radius of repaired sections of cylinders or cones in relation to the size of plug used shall not exceed the prescribed limit. Other defective areas may also be repaired by plugging provided the minimum ligament between plugs in adjacent areas shall not be less than twice the distance from the nearest plug.

Three Y-blocks shall be utilized as test coupons. The material shall undergo the following test methods: tension test, chemical analysis, yield strength test, and hardness test.

[View on Information Provider website](#)

[ASTM A395-80 Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for use at Elevated Temperatures](#)

### Description

This specification covers standard requirements for ductile iron castings for pressure-retaining parts for use at elevated temperatures. Castings are classified by grades based on mechanical property requirements.

These iron castings shall meet the specified values of tensile strength, yield strength, elongation and hardness. Chemical analysis shall be performed wherein the casting shall conform to the required chemical composition for carbon, silicon, and phosphorous. The material shall meet the required tensile properties, hardness, and microstructure.

The iron casting shall undergo pressure test after machining. The thickness of any repaired section in relation to the size of the plug used shall be indicated.

The minimum radius of repaired sections of cylinders or cones in relation to the size of plug used shall not exceed the prescribed limit. Other defective areas may also be repaired by plugging provided the minimum ligament between plugs in adjacent areas shall not be less than twice the distance from the nearest plug.

Three Y-blocks shall be utilized as test coupons. The material shall undergo the following test methods: tension test, chemical analysis, yield strength test, and hardness test.

[View on Information Provider website](#)

This resource does not cite any other resources.

# ASTM A395-80 Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for use at Elevated Temperatures

This resource does not CITE any other resources.

Back

Close

## Table of Contents

Print [Save](#) Email

[Feedback](#)


- [Contact us](#)
- [Privacy policy](#)
- [Disclaimer](#)
- [Copyright](#)


[Feedback](#)