# ISO1083/JS/HBW210 Ductile Cast Iron Casting Material

## Introduction

ISO1083/JS/HBW210 is a spheroidal graphite cast iron specified in ISO 1083. Its ferritic matrix is strengthened by solid solution. Family-level uses include brackets, housings and transmission components.

## Manufacturing Process

Sand Casting
Shell Molding Casting
Lost Foam Casting

## Equivalent Materials

Not Available

## Reference Standards

| Standard | Standard Title | Edition | Specification |
|---|---|---|---|
| ISO 1083 | Spheroidal graphite cast irons — Classification | 2018 | ISO1083/JS/HBW210 |

## Physical Properties

Not Available

## Chemical Composition

Not Available

## Heat Treatment

### ISO 1083–2018

Not Available

## Mechanical Properties

### Primary Mechanical Properties

### ISO 1083 — 2018

Informative

| Property | Value |
|---|---|
| Brinell Hardness | 195–225 HBW |
| Tensile Strength | 600 MPa |
| Yield Strength (Rp0.2) | 470 MPa |

Hardness requirements apply only where agreed.

Annex E is informative and applies only when agreed between manufacturer and purchaser at acceptance of the order.

Informative reference value

not an acceptance requirement

Tensile Strength; Yield Strength (Rp0.2): When only hardness is required, the other properties in Table E.2 (Rm and Rp0.2) are for information.

Tensile Strength; Yield Strength (Rp0.2): When hardness is required in addition to tensile properties, these values provide an introductory step to the procedure in E.3.

## Welding Conditions

Not Available

## Applications

Ductile iron ISO1083/JS/HBW210 belongs to the spheroidal graphite iron casting family. Within this material family, foundries produce pump casings, bearing housings, valve bodies and cover plates for machinery. Industrial equipment, agricultural machinery and construction vehicles use components from the ductile-iron casting family.

CASTING QUALITY

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# Casting Quality Industrial

As a professional manufacturer in China, We Casting Quality focus on Metal Parts OEM industry, and provide solutions and services in Metal Casting field as following:

Sand Casting

Investment Casting, Lost Wax process

Shell Casting

Lost Form Casting

Permanent Mold Casting

CNC Machining

CAD Design

Tools/Mold Design

## Material Supplied

Cast Iron Castings (Grey Iron, Malleable Iron, Ductile Iron)

Carbon Steel and Alloy Steel Castings

Stainless Steel and Duplex Stainless Steel Castings

Aluminum Castings

Bronze and Brass Castings

Titanium and Cobalt Alloy Castings

## What We Can Do

**Design Ability**

Our engineers will help you to improve the designs based on casting technology, then The simulation software will be processed to verify the casting pouring system. Pro/E, Solidworks, AutoCAD and ProCast are available in Casting Quality Industrial.

**Saving Cost**

Some manufacture processes may lead high cost. We will analyses the designs and advise the suitable methods to our customers. The best solution will be adopted.

**Quality Control**

From the raw material selecting to bulk production processing, all procedures will follow PPAP program if necessary. The certificates will be provided including chemistry, hardness, mechanical property or NDT testing.

**Production Capacity**

The max iron/steel castings can reach 30tons in weight, meanwhile the minus casting is around 1gram only.

We also have prototyping and 3D scanning ability for sample plan.

**Logistic Service**

The products will be delivered directly to customer’s workshop, which will save plenty of work for clients.

**Contact with Us Immediately:**

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