

# Spherical Graphite Cast Iron Semi-Solid casting method

Method for producing fine and uniform  
Ductile cast iron

## Overview

In recent years, the development of lightweight and strong spherical graphite cast iron (ductile cast iron) has been promoted from the viewpoint of CO2 emission reduction and fuel efficiency reduction for automotive parts. In addition, efforts have been made to make ductile cast iron with highly productive die casting from the viewpoint of manufacturing cost reduction. In conventional die casting, heat treatment is necessary to suppress the generation of chill. In addition, the number of spheroidal graphite cast iron produced was small, and the mechanical properties such as strength and elongation were not sufficiently obtained.

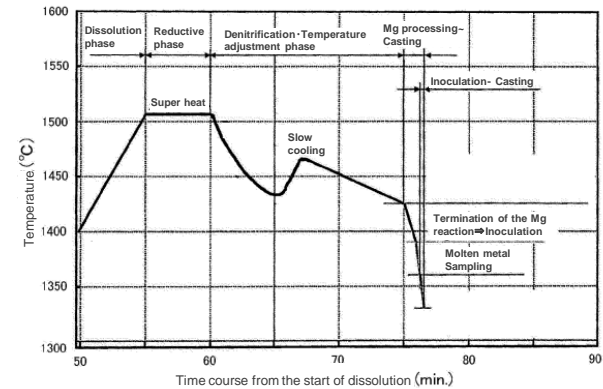
The ductile cast iron in which the spheroidal graphite is further refined and made uniform in the as-cast state without heat treatment can be obtained by combining a technique for suppressing chilling by free nitrogen with a semi-solidification casting technique.

## Product Application

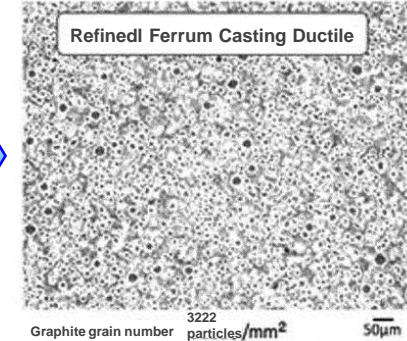
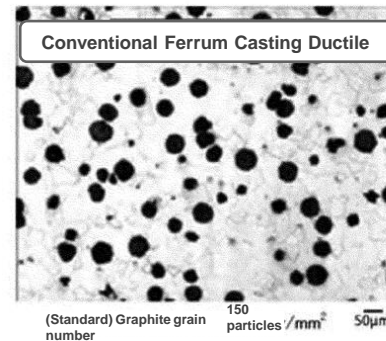
- Automobile
- Industrial equipment

## IP Data

IP No. : JP7220428  
Inventor : ITAMURA Masayuki, ITOFUJI Haruki, ADACHI Mitsuru  
Admin No. : T16-106



## Features • Outstandings



More than 20 times the number  
of graphite grains confirmed

## Contact