

# OPTIFINE™

## 1. Chemistry

Alloy	3:1
Ti%	2.5 – 3.5
B%	0.7 – 1.2
Fe%	0.30 max
Si%	0.30 max
Others %	0.14
Al	Balance

Sample to be taken from mid coil.

## 2. Form and Dimensions

Coil weight – 180kg +/- 10% or as agreed with customer up to 450kg.

Rod Diameter	9.7mm +/- 0.3mm.
Width	240mm
Internal Diameter	365mm
Outside Diameter	740mm
Coil Weight	180 - 190 kg
Colour Code	Blue with White Stripe

## 3. Grain Refinement efficiency

Grain refinement efficiency of Optifine grain refiner rod is confirmed by our own MQP Opticast test in the laboratory after wire production. All other test methods are not capable of verifying the efficiency specifications of Optifine, this is only possible using the Opticast method.

Furthermore, we use Opticast to verify the potency in actual casthouse production situations so that the expected reduction in addition rate can be achieved. All other test methods cannot produce reliable results with the accuracy of Opticast.

## 4. Microstructure

Based on 1cm<sup>2</sup> sample from the mid coil.

TiAl<sub>3</sub> - 90% < 50µm

TiB<sub>2</sub> - 95% of particles <2µm  
The total length of TiB<sub>2</sub> agglomerates should not exceed 25µm

Oxides - The total length of oxides should not exceed 500µm

Others - Carbides and other non-metallic inclusions are not acceptable

## 5. Marks and Packaging

3 coils per pallet, waterproof wrapped and strapped. Each coil shall be identified by means of a label showing:

- Alloy type
- Coil weight
- An identification number
- Suppliers name

## 6. Supplier and Trade Name

Optifine is produced exclusively for MQP and the trade name is solely owned by MQP.

MQP is the only company that has the rights to market and sell Optifine.

## 7. Claims

In the event of customer finding that their sample does not meet this specification then any problems will be solved by discussion with the claimant.