

## FS450

## 2343MOD

### ◆ 主要特性

- 良好的纯净度
- 优秀的韧性及等向性
- 优秀的抗热疲劳性 (热龟裂)
- 优秀的热强度
- 良好的机加工性能

### Main Characteristics

High cleanliness  
Excellent toughness and isotropy  
Excellent thermal fatigue resistance (heat checking resistance)  
Excellent hot strength  
Good machinability

### ◆ 主要应用

大型铝合金压铸模具；结构复杂的铝合金压铸模具（离合器壳体、变速箱壳体）；高寿命的热挤压模具

### Main Applications

Large aluminum alloy die casting dies; aluminum alloy die casting dies with complex geometry (clutch housing, gearbox housing); hot extrusion dies with long service life

### ◆ 化学成分 Chemical Composition %

| C    | Si   | Cr   | Mo   | V    | P     | S     |
|------|------|------|------|------|-------|-------|
| 0.38 | 0.20 | 5.10 | 1.90 | 0.60 | 0.007 | 0.001 |

### ◆ 冶炼方法 Melting Method

电弧炉+LF+VD+保护气氛电渣或满足用户需要。

EAF+LF+VD+ Inert-gas protective ESR or according to customer requirement.

### ◆ 纯净度 Purity

ASTM E45 非金属夹杂物A、B、C、D≤1.0级或满足用户需要。

Non-metallic inclusions in accordance with ASTM E45 - Type A, B, C, D each ≤Class 1.0, or according to customer requirement.

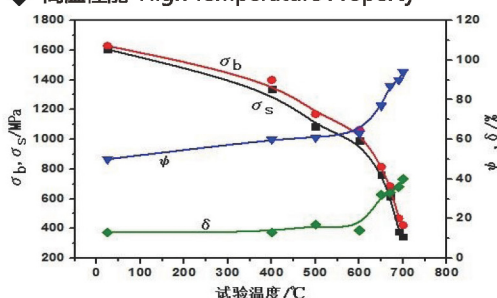
### ◆ 显微组织 Microstructure

NADCA#207-2022 显微组织达到合格级别。Conforming to the requirement of NADCA#207-2022.

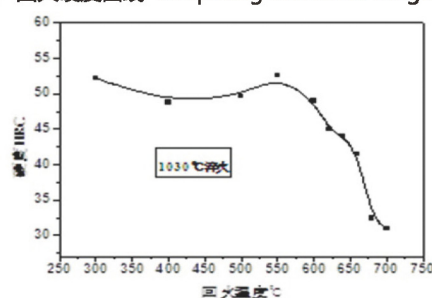
### ◆ 机械性能 Mechanical Property

| 屈服强度<br>Yield Strength<br>MPa | 抗拉强度<br>Tensile Strength<br>MPa | 伸长率<br>Elongation<br>% | 断面收缩率<br>Reduction of Area<br>% | 冲击吸收能量(V型缺口)<br>Impact Absorption<br>Energy J (V-Notch) | 600°C抗拉强度<br>600°C Tensile Strength<br>MPa |
|-------------------------------|---------------------------------|------------------------|---------------------------------|---------------------------------------------------------|--------------------------------------------|
| ≥1480                         | ≥1610                           | ≥12                    | ≥50                             | ≥19                                                     | ≥1150                                      |

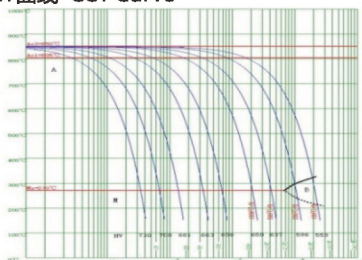
### ◆ 高温性能 High Temperature Property



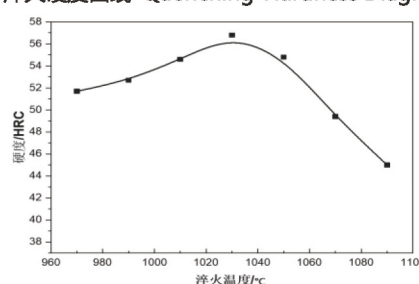
### ◆ 回火硬度曲线 Tempering-Hardness Diagram



### ◆ CCT曲线 CCT Curve



### ◆ 淬火硬度曲线 Quenching-Hardness Diagram



### ◆ 产品规格 Product Dimension

扁钢：最大厚度800mm,最大宽度1400mm；圆钢：最大直径800mm；或满足用户需要。

Flats: Maximum thickness 800mm, and maximum width 1400mm; Rounds: Maximum diameter 800mm;

Or according to customer requirement.