



HS S350

HIGH-QUALITY HOT WORKING DIE STEEL

Introduction

HS S350 steel is improved Cr-Mo-V hot work die steel. The special composition design makes it have high high-temperature strength and thermal fatigue resistance. The overall performance is better than traditional H13 steel. It is widely used in die casting molds, hot extrusion dies, hot punching dies, hot forging dies, etc.

Chemical properties

| Steel Grade | C | Si | Mn | Cr | P | S | V | Mo |
|-------------|-----------|-----------|-----------|-----------|--------|--------|-----------|-----------|
| HS S350 | 0.35~0.40 | 0.10~0.30 | 0.40~0.60 | 4.90~5.40 | ≤0.015 | ≤0.002 | 0.40~0.65 | 1.80~1.90 |

Application

- Suitable for medium and large molds of die-casting, hot forming, hot forging, hot extruding with aluminum/magnesium material.

Features

- Hardness after heat treatment is comparable to that of SUPER H13 steel, while the toughness and polishing performance are more than twice of H13.
- High temper softening resistance, thermal fatigue resistance, thermal melting loss resistance., etc.
- High impact toughness and high isotropy.

Recommend Heat Treatment

| Heating Temperature/°C | | Cooling Way | Hardness (HRC) | Tempering Temperature/°C | Tempering Numbers | Hardness (HRC) |
|------------------------|--------------|--------------------------------|----------------|--------------------------|-------------------|----------------|
| Preheating | Last Heating | | | | | |
| 800~840 | 1010~1040 | Oil quenching/ / gas quenching | 54~58 | 560-600 | ≥3 | 47~53 |