



HS 2343ESR-S

LARGE-SIZE HIGH-POLISHED PLASTIC MOLD STEEL

Introduction

As large-size (thickness range 400-750mm) and high-polished plastic mold steel, HS 2343ESR-S has high purity and good structure uniformity through unique smelting and heat treatment process. The steel has good polishing performance, good cold and hot fatigue resistance and corrosion resistance, cold and hot processing performance, hardenability, as well as high thermal strength, oxidation resistance, high toughness and wear resistance at medium temperature.

Chemical properties

Steel Grade	C	Si	Mn	P	S	Cr	Mo	V
HS 2343ESR-S	0.34-0.40	0.90-1.20	0.30-0.50	≤0.014	≤0.002	4.90-5.20	1.20-1.40	0.30-0.50

Application

- Plastic molds with a thickness of more than 400mm;
- Auto lamp mold, automobile bumper and dashboard mold, etc.

Features

- Electroslag remelting, high temperature diffusion annealing and ultra-fine heat treatment are applied, and make good structure uniformity and finely dispersed carbides;
- Good heat and cold fatigue resistance and corrosion resistance, good cold and hot processing performance, high toughness and wear resistance;
- High purity control brings high polishability;
- High isotropy, aspect ratio ≥ 0.85 ;
- Annealing hardness $\leq 200\text{HB}$, quenching hardness 50-60HRC, tempering hardness 46-48HRC.