

# HS A4

#### IMPACT-RESISTANT COLD WORK DIE STEEL

# Introduction

As modified cold work die steel, HS A4 is improved high-toughness impact-resistant cold work die steel. It has fine and uniform ledeburite carbides, high toughness and impact resistance, and is not easy to crack when used for molds with complex shapes. The steel is a new generation of high-strength, high-impact cold-work die steel.

# **Chemical Properties**

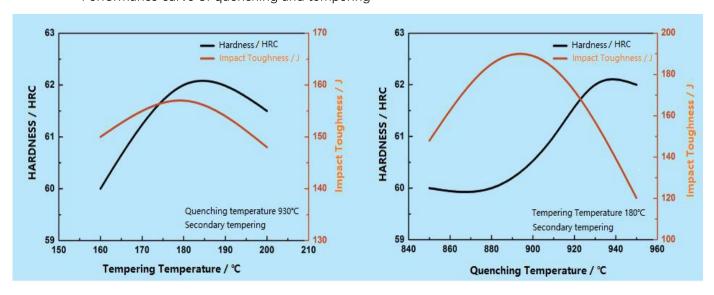
Steel Grade		С	Si	Mn	Cr	Мо	V	Ni
	HS A4	0.65~0.90	0.70~1.00	0.70~1.10	2.20~3.50	0.20~0.50	0.15~0.35	0.30~0.60

### **Application**

Cold stamping dies (home appliance punching die, gasket punching die, all kinds of connecting rod reed die, etc.), cold extruding dies (clutch, gear, flange plate and guide tube etc.), cold heading dies (cavity and punch pin, etc.), cold shear blade for plate.

#### Features

- Heat treatment hardness is equivalent as that of D2 steel, and the toughness is more than 3 times of that of D2, while the wear-resistance is slightly lower than that of D2 steel.
- Long service life under high stress impact
- Cutting processing performance is better than that of D2 steel
- Deformation of heat treatment
- Performance curve of quenching and tempering





# Recommend Heat Treatment

	QUENCH	ING	TEMPERING			
Heating To	emperature/℃	Cooling	Hardness	Tempering	Tempering	Hardness
Preheating	Last Heating	Way	(HRC)	Temperature /°C	Numbers	(HRC)
500~600	850~950	Oil Cooling	60~65	160~200	2	60~63