



## HS DVN / HS DVN-Nb

### HIGH-QUALITY HOT WORKING DIE STEEL

#### Introduction

As high-performance Cr-Mo-V hot work die steel, HS DVN / HS DVN-Nb steel has high high-temperature strength and thermal fatigue resistance, is widely used in casting dies, hot extrusion dies, hot punching dies, hot forging dies, etc.

#### Chemical properties

Steel Grade	C	Si	Mn	P	S	Cr	Mo	V	Nb
HS DVN	0.35~0.4	0.10~0.3	0.30~0.5	<0.010	<0.003	4.80~5.20	2.20~2.60	0.40~0.70	-
HS DVN-Nb	0.35~0.40	0.10~0.3	0.30~0.5	<0.010	<0.003	4.80~5.20	2.20~2.60	0.40~0.70	0.06~0.15

#### Application

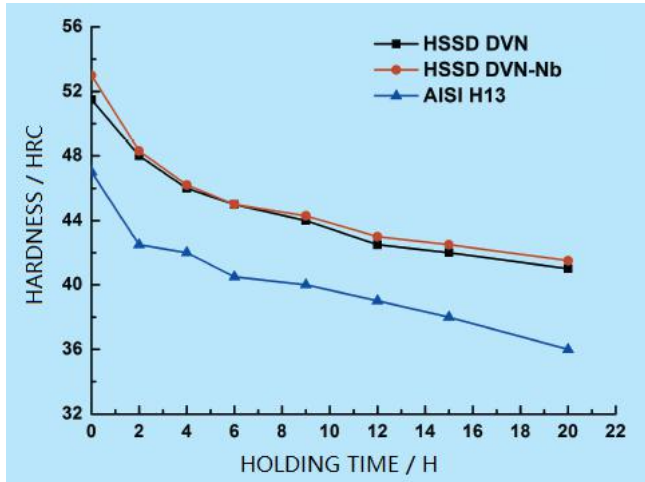
- To be widely used for casting dies, hot extruding dies, hot stamping dies, high-strength plastic dies, etc.

#### Features

- High impact toughness and high isotropy.
- High performance of temper softening resistance, thermal fatigue resistance, thermal melting loss resistance.
- High high-temperature strength, tensile strength in 650°C≥1100Mpa.



- Good hardenability.
- Good dimensional stability after heat treatment.



### Recommended Heat Treatment

Heating Temperature/°C			Cooling Way	Hardness ( HRC )	Tempering Temperature/°C	Tempering Numbers	Hardness ( HRC )
First Preheating	Second Preheating	Last Heating					
500~600	820~860	1010~1030	Oil Cooling	53~55	560~620	≥3	46~50