

H11 Steel is a hot work tool steel. H11 is equivalent with JIS SKD6, GB 4Cr5MoSiV and DIN [1.2343](#) Tool Steel. H11 Tool Steel consists of chromium, molybdenum and vanadium and is known for its high hardenability and great toughness.

H11 tool steel than H13 tool steel only less Reduced the Vanadium composition. H13 steel have 0.6-1.2% Vanadium, H11 steel Vanadium composition only have 0.3-0.6%.

The molybdenum and vanadium act as strengthening agents while the chromium content helps the H-11 tool steel to withstand softening when used at high temperatures. It also combines shock and abrasion resistance, has good red hardness, can resist rapid cooling and withstand premature heat checking. The H11 tool steel has good machinability, good weldability and good ductility and it can be formed by conventional means. So H11 tool steel applications is very range in hot forged mold, hot work tool.

Related Specifications ASTM A681-1999

Chemical composition

C(%)	0.32~ 0.45	Si(%)	0.80~ 1.20	Mn(%)	0.20~ 0.50
P(%)	≤0.030	S(%)	≤0.030	Cr(%)	4.75~ 5.50
Mo(%)	1.10~ 1.75	V(%)	0.30~ 0.60		

Form of Supply

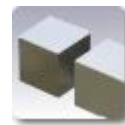
H11 tool steel, we can supply the round bar, flat bar, plate and square block. round bar can be sawn to your required lengths as one offs or multiple cut pieces. Steel plate and sheet rectangular pieces can be sawn from flat bar ,sheet or plate to your specific sizes. Ground tool steel bar can be supplied, providing a quality precision finished bar to tight tolerances.



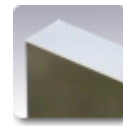
Round



sheet



Square



Plate

Applications

H11 Tool Steel is used in hot forging dies, hot forging die inserts, hot gripper dies, hot nut tools, hot header dies, brass forging and pressing dies, hot forging aluminum base dies, aluminum casting and extrusion dies, zinc die casting dies, extrusion mandrels, plastic molds, cores, die holder blocks, hot press dies, hot work punches, etc.

Regular size and Tolerance

1) Hot Rolled round bar

Diameter (mm)	Diameter Tolerance (mm)	Diameter (mm)	Diameter Tolerance (mm)
6.4~15.8	-0.038 ~0.038	181~<206.2	0~1.6
15.8~<77.6	0~0.10	206.2~<257	0~2.4
77.6~<103	0~0.15	257~<307.7	0~3.2
103~<181	0~0.78	≥307.7	0~4.7

2) Hot Rolled steel plate

Thickness (mm)	Thickness Tolerance (mm)	Thickness (mm)	Thickness Tolerance (mm)
≤25.4	-0.41~0.79	>127~152	-1.60~2.39
>25.4~76	-0.79~1.19	>178~254	-1.98~3.18
>76~127	-1.19~1.60	>254~305	-2.39~3.96

Others have not specified size, pls contact our experienced sales team.

Processing

H11 Tool Steel round bar and flat sections can be cut to your required sizes. H11 steel ground bar can also be supplied, providing a high quality tool steel precision ground tool steel bar to your required tolerances. H11 Tool Steel is also available as Ground Flat Stock / Gauge Plate, in standard and nonstandard sizes.

Contact our experienced sales team to help you with your H11 tool steel questions and inquiry by [Email](mailto:jack@otaisteel.com) or Telephone. The questions and inquiry will be reply in 24 hours.

OTAI SPECIAL STEEL CO., LTD

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