

Whether you are manufacturing pins, punches, thread rolling dies, die inserts, heading dies, knives, fineblanking or other cold forming tools; Griggs Steel has the high performance materials that you need.

Griggs has been providing High Speed Steel to the cutting tool and forming tool industries for over 60 years.

M2 possesses an admirable combination of wear resistance, toughness and compressive strength. This combination of properties makes it superior to many high alloyed cold work steels.

M2 is medium-alloyed and has good machinability. By virtue of these well-balanced properties M2 has come into very wide use for cutting and forming tools.

M4 is a super high speed steel with very high carbon and vanadium content for exceptional abrasion resistance. The high carbon content enables M4 to be hardened in excess of 65 HRC. However, the high hardness and high vanadium carbide content make M4 more difficult to grind after heat treatment compared to M2 and other high speed steels.

M4 high speed steel typical applications include form tools, spade drills, pins, dies, punches and broach inserts.

North America's Source for High Speed Steel

We stock a complete range of materials that offer a variety of combinations of wear resistance and toughness to meet your demanding needs.

HighSpeedSteel.com

Our PM grades offer:

- ⇒ improved toughness
- ⇒ improved grindability
- ⇒ higher fatigue strength
- ⇒ improved reliability in EDM applications

PM M4 high speed steel is an extremely versatile high speed steel which provides a unique combination of high wear resistance with high impact toughness. A large volume of vanadium carbides provides the high wear resistance. The high impact toughness is the result of the fine grain size, small carbides, and superior cleanliness of powder metallurgy (PM).

PM M4 excels in cold work tooling applications, where it provides better toughness and wear resistance than high-carbon, high-chromium die steels such as D2 and D3.

PM A11 is a versatile air-hardening tool and die steel which provides extremely high wear resistance in combination with relatively high impact toughness. A very large volume of hard vanadium carbides provides the high wear resistance. The good impact toughness is the result of the fine grain size, small carbides, and superior cleanliness of the powder metallurgy (PM) microstructure.

PM A11 offers substantially better wear resistance than the high-carbon, high chromium die steels such as D2 and D7.

PM 23 is a high alloy high speed steel. PM 23's homogeneous structure enhances such properties as dimensional stability and shape stability during heat treatment, as well as improving grindability and toughness. Toughness is good even for large dimensions.

PM 23's method of manufacture and composition means that it can provide high hardness and good wear resistance.

