

What is High Speed Steel (HSS)?

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High speed steel (HSS), is a type of steel that is used in high speed applications, such as drill bits and power saw blades. HSS is a replacement for carbon steel tools, specifically bits and blades. The development of High Speed Steel (HSS) has a number of advantages over carbon and thus is considered a more popular choice for such applications.

Several very important factors allow High Speed Steel (HSS) to work. The first is the type of metals used. Together, they can provide a heat resistance that can keep the metal hard even under extreme temperatures. High temperature treatment further helps the steel remain hard under extremely high temperatures.

High speed steel is an alloy that combines several metals. Combinations often include tungsten, chromium, molybdenum, cobalt and others. Tungsten is the most common type of steel currently used in these products. However, there are many different types and designations of high speed steel, each having its own special combination. Some may use very little tungsten.

The heat treatment that high speed steel undergoes is a product of modern advancements of technology. Usually, a laser or electron beam is used to treat the steel at high temperatures.