



Knife Steel Selection & Performance

Premium Quality Steel

We offer a wide selection of fine made knives for cutting nearly any type of wooden material. Our knives are made to exceed industry standard and provide trouble free long run performance even under heavy feed rates. We stock and sell tens of thousands of knives per year and our large sales volume allows us to offer unbeatable prices. Knives are true high grade A.I.S.I. mill run steels that are salt bath hardened and triple draw stress relieved for greater consistency. Knives are precision ground and corrugated on advanced CNC creep feed crush grinders for perfect bar to bar consistency.

Standard grades offered are:

D2-HCHC - High Carbon & High Chrome: Our D2 (AISI) knives offer the best value for many moulding producers and planer mills. D2 offers the lowest price per bar because it has a Rockwell C hardness (HRC) of 58. It is easy to grind and resists nicks in knotty soft woods. D2 contains 12% chromium to resist chemical erosion when cutting wet cedar or redwood. Great for softwoods and shorter runs in hardwoods.

V2-HSS™ - High Speed Steel: V2 is our newest exotic breed of HSS with extra Vanadium for long life. V2 offers the same wear life and performance as M2-HSS, but at a 25% lower cost. By increasing the levels of Vanadium to replace more expensive Molybdenum we have developed a blend of steel with excellent tool life and the lowest price of any HSS on the market. V2 has a 63 HRC and is easy to profile shape. Great for most long runs in soft or hardwoods.

M2-HSS - High Speed Steel: Our true grade M2-HSS (AISI) steel offers 25% longer run times than D2-HCHC grade. Our Premium M2-HSS offers high levels of Tungsten (6% W), Molybdenum (5.5% Mo), and Vanadium (2.2%V). M2-HSS is hardened to 63 Rc for better wear resistance in harder woods. Great for long runs in most soft and hardwoods.

BN-HSS - Black Nitride High Speed Steel: BN-HSS is our premium HSS with case hardened (carbon nitride) and black oxide to resist pitch build up. BN-HSS offers up to 100% tool life increases over standard HSS, without being harder to profile shape. BN-HSS features a long wearing cutting edge .010" deep that is more than 72 Rockwell C hardness. Much like Opti™ Knife. Great for long runs and stubborn hardwoods.

M3+ HSS- High Speed Steel: M3+ HSS offers up to 100% longer tool life over M2-HSS. This super alloy steel is great for long runs or on tough hardwoods. M3+ HSS contains high levels of Vanadium, Tungsten, Molly, and Chromium for extended wear life. Treated to 66 Rc hardness which is one of the hardest HSS offered. **M3+ HSS is replacing V3-HSS.**

V2-HSS+RW™ -Coated V2-HSS: For the ultimate value and long tool life you have to try our RW coated knives. By applying the hard long wearing diamond dust chrome coating to the face of V2-HSS you can increase wear life 100% at a small additional cost. Our RW coating offers a 72 Rc hardness to the cutting edge which increases wear life without increasing your grinding time. The RW coating is a proprietary electroplating process that adds .001" thick chip resistant coating. This line of steel is great for most hardwoods and can triple tool life in wet woods that contain tannic acids (oak, cedar, redwood).

Endurance ER+ Coating - Our new "Endurance" super run (ER+ Grade) moulder steel is the best option for extended production time and tool life. An excellent choice for cutting problem hardwoods and for super long production runs. Tool life is increased up to 800% over normal High Speed Steel without the inconvenience associated with using carbide knives. This proprietary knife coating process uses the latest technology developed in Europe for metal working tools. An ion sputtering magnetron chamber applies a P.V.D. (Physical Vapor Deposit); 6 layer film of Titanium, Ceramic crystals, and other elements to the knife surface to form an extremely hard and heat resistant cutting edge. The hardness of the coating is greater than 3500 HV – about twice as hard as C2 grade carbide, but because the coating is so thin, normal vitrified or CBN grinding wheels can be used to profile sharpen the knives. Great for short runs (500 to 1000 feet) cutting MDF, Teak, Ipe and even Angire. Grinds like steel and wears like carbide. NOTE: To avoid removing the wear resistant coating, a wood block should be used to deburr the profiled knives instead of an abrasive slip stone.

Carbide - We offer many grades of carbide that wear more than 1,000% longer than M2-HSS
– See **page 8** for more details.

* RW Diamond Coat (72 Rc) HSS to double tool life.

* Black Nitride / Carbonize (72 Rc) M2 or V2 to double life.

* Flash Hard Chrome Coat (72 Rc) D2 or HSS to cut Wet Cedar & Redwood.

