

*The Cutting Edge **M**astered*

High Performance Coatings

- PowerT (TiN)
- PowerC (TiCN)
- PowerA (AlTiN)
- PowerZ (ZrN)
- PowerN (nACo)
- PowerNR (nACRo)
- PowerDLC
(Diamond Like Carbon)
- PowerRD
(Real Diamond)



Mastercut Premier Coating Options

With Mastercut's advanced coating technologies, your tool life will increase up to 10 times. Experience improved finishes with increased speed and feed rates by 30-200%. Mastercut offers a full range of coatings, see below. Call for a quote today!



PowerT (Titanium Nitride, TiN)

Color: Gold
Vickers Hardness: approximately 2,300 Vickers
General purpose, entry level over uncoated carbide



PowerC (Titanium Carbon Nitride, TiCN)

Color: ranges from slight violet to brown-gray
Vickers Hardness: approximately 3,000 Vickers
Used on ferrous, non-ferrous and non-magnetic stainless steel
Good abrasion resistance, low heat resistance, for applications requiring low RPMs and high thrust



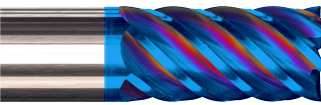
PowerA (Aluminum Titanium Nitride, AlTiN)

Color: Dark Gray
Vickers Hardness: approximately 3,600 Vickers
Nickel Alloys, Stainless Steel, Hardened Steels, Tool Steels, Cast Iron
An excellent broad spectrum grade. May be run in dry or minimum quantity lubrication applications, where heat can be a problem. Also handles light chip loads very well



PowerZ (Zirconium Nitride, ZrN)

Color: dull Gold
Vickers Hardness: approximately 2,800 Vickers
Outstanding on aluminum, including high silica aluminum. Can also be used on cast iron, stainless steels, titanium



PowerN (nACo) nano-composite (nc-AlTiN)/(a-Si³N⁴)

Color: Varying hues of blue and red
Vickers Hardness: approximately 4,500 Vickers
Outstanding performance in superalloys, hard material machining, and high heat applications.



PowerNR (nACRo) nano-composite (nc-AlCrN/a-Si³N⁴)

Color: gray
Vickers Hardness: 4,000 Vickers
Outstanding in high heat applications, better resistance to shock and chipping than nACo, for tough, aggressive cutting applications.



PowerDLC (Diamond Like Carbon)

Color: variable gray to black
Vickers Hardness: approximately 4,000 Vickers
Non-ferrous metals, high silicone aluminum, copper, plastic, graphite, fiberglass or reinforced plastics
Can be applied to any carbide substrate



PowerRD (Real Diamond)

Color: variable gray to black
Vickers Hardness: approximately 8,000 Vickers
Non-ferrous, metals, aluminum, graphite, green ceramics, and composites
Requires 6% cobalt carbide for application

