




## OUR COATINGS

### Standard Coatings

Coating:	<p><b>Zplus</b></p> <p>Zplus provides higher hardness, lubricity, and abrasion resistance. While it's specifically engineered for aluminum applications, it is also an optimal coating for other non-ferrous materials. Zplus holds up well in abrasive materials and reduces the chance of built-up-edge in softer, gummy alloys.</p> 	<p><b>Aplus</b></p> <p>Aplus allows for high temperature resistance, decreased wear, and improved tool life. Proven to work in high speed machining and dry conditions, these benefits are seen in a wide range of ferrous materials, titanium materials, and exotic alloys.</p> 	<p><b>Tplus</b> <span style="background-color: red; color: white; padding: 2px;">New!</span></p> <p>Tplus is an ideal choice for increased wear resistance and longer tool life in rigid, vibration-free machine setups. Tplus excels in a wide variety of ferrous and difficult-to-machine materials including titanium, inconel, stainless steel and high hardness materials up to 65 Rc.</p> 	
	Oxidation Onset Temp:	1,110° F	2,012° F	2,192° F
	Microhardness (HV 0.05):	2243 (22 GPa)	4079 (40 GPa)	4487 (44 GPa)
	Coefficient of Friction:	0.40	0.45	0.35
	Coating Color:	light gold	black / grey	copper
	Materials:	Wrought Aluminum, Cast Aluminum, Graphite	Steel, Stainless Steel, Exotic Materials, Aluminum > 12% Si	Titanium, Inconel, Stainless Steel, Hardened Steels, Alloyed Steels

### Introducing the New Tplus Standard Coating!

Tplus is an excellent coating choice for use in a wide variety of difficult material families such as titanium, inconel, stainless steel, hardened steels, and other alloyed steels.

Unique features include:

- Higher hardness (44 GPa) for extended tool life
- Increased edge strength for use in difficult and abrasive materials
- Low coefficient of friction (0.35) for great performance in dry machining applications

To experience increased performance while using Tplus coated tooling, a rigid machine setup is highly recommended. When a rigid setup cannot be achieved, the Aplus coated tools are the preferred choice for added temperature resistance, decreased wear, and improved tool life.

**Our new Tplus coating produces excellent results in steels, high-temp alloys, and titanium.**