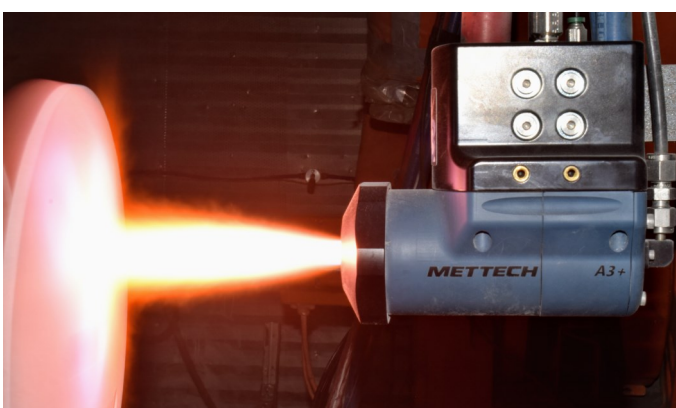




Surface Coating Solutions and Services

Who are we?

Northwest Mettech Corp. is a world-class manufacturer of plasma spray equipment. Our customers coat everything from jet engine parts to pulp and paper equipment. Our Surrey, BC location includes a fully equipped robotic plasma spray cell, able to apply most plasma spray coatings for industry.



What is plasma spray ?

Plasma spray is a coating method ideal to produce a wide variety of coatings from a few tens of microns to several millimeters thick. A plasma jet is generated by passing a DC current through a stream of gas. As the plasma jet exits the plasma spray gun, a powdered material (metal, ceramic, or other) is injected into the plasma stream. The particles melt in the plasma stream, and are accelerated towards a target surface. Droplets finally impact the part to be coated, where they solidify, forming the desired coating. Due to the high heat of the plasma even high melting point materials can be sprayed.

What coatings can be applied?

A wide variety of coatings can be applied to combat wear or corrosion problems, or add thermal or electrical insulation. Some sample coatings include:

Coating	Description
Tungsten Carbide -Cobalt	Hard tungsten carbide particles imbedded in a cobalt (or other) metal matrix resist abrasive wear, hard surface wear, as well as erosion and fretting.
Chrome Carbide - Nickel Chrome	For similar applications to Tungsten Carbide Cobalt, but at elevated temperatures.
Aluminium Oxide	Ceramic coating for wear resistance, electrical insulation and chemical protection. Also can be combined with Titanium Oxide for increased toughness or Zirconium Oxide for resistance to molten metal erosion in galvanizing or aluminizing.
Nickel Aluminium	Used as a bond coat for ceramics coatings, as well as independently to build up worn parts, to resist fretting at various temperatures, or to prevent erosion or oxidation at high temperatures.
Chrome Oxide	One of the hardest ceramic coatings for wear and chemical resistance.

**For more information
please contact:**

David Feldhaus — Sales
david.feldhaus@mettech.com
Tel: 604.987.1668 x 221

Northwest Mettech Corp.
www.mettech.com

