



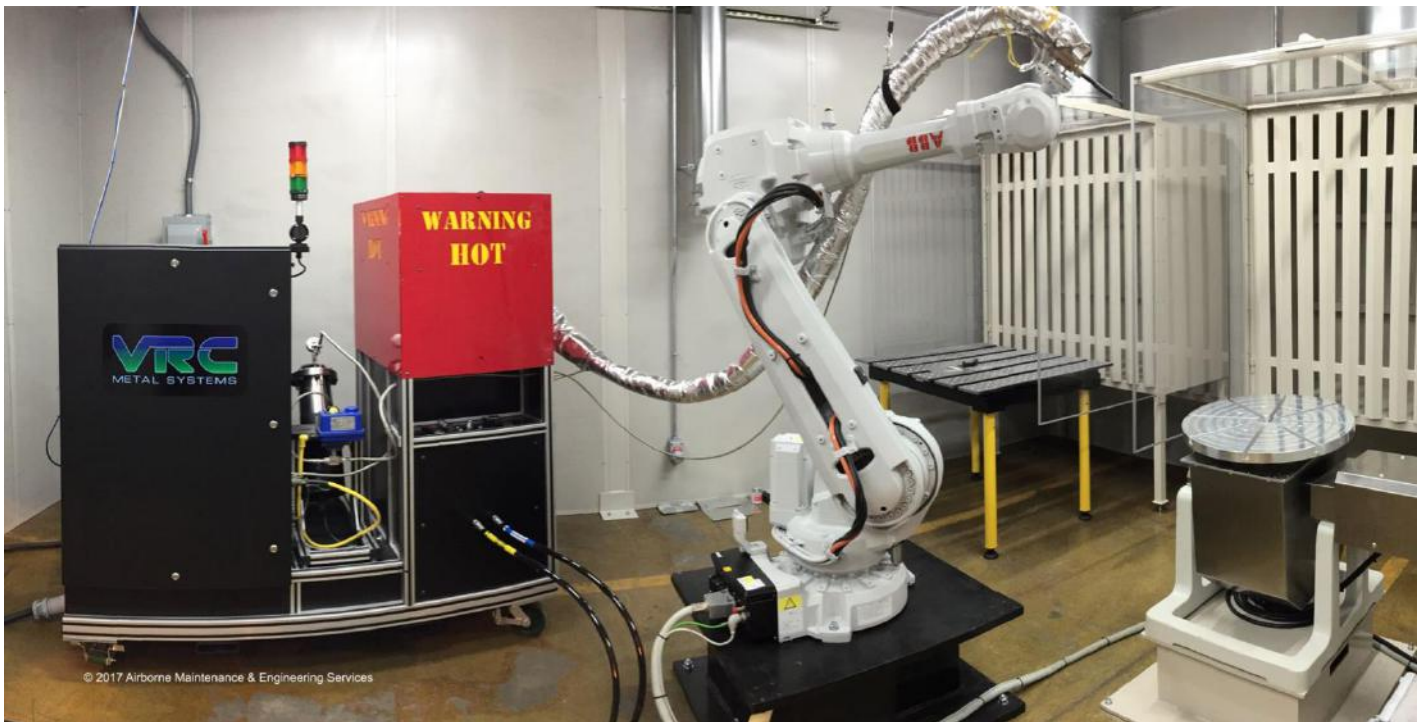
# VRC Cold Spray System

# VRC GEN III™ PORTERBLE HIGH PRESSURE COLD SPRAY SYSTEM INTRODUCTION

The turnkey high-pressure cold spray systems provides coatings of the highest quality with portability that differentiates us from our competition. The system deposits metals on almost any cold sprayable material and furthermore, we can apply high pressures and temperatures either by robot or patented hand-held applicator. The Gen III cold spray system is the only high-pressure, portable, and hand-held capable system in the world and also the only high-pressure system that can reach into diameters as small as a coffee cup. It is capable of spraying near bulk properties achieving density over 99% without damaging substrate and repairs most types of damage from 0.002 to 1 inch (0.05mm to 20mm). The system can also extend its reach with the removable heater and powder feeder. The VRC GEN III features automatic pressure control as well as touch screen controls. VRC's supersonic cold spray equipment enables innovative solutions for repair, additive manufacturing and coatings for many industries including aerospace, energy, shipping, mining, and oil & gas.

## TECHNICAL DATA

<b>Materials</b>	Magnesium, Aluminium alloys, Copper alloys, Nickel alloys, Steels and Stainless Steels, Titanium, Niobium, Tantalum, Zirconium, etc.
<b>Electrical</b>	480 VAC, 3 Phase Gen III: 50 Amps    Gen III Max: 100 Amps
<b>Minimum Powder Feed Rate</b>	1.3 cm <sup>3</sup> /min
<b>Maximum Powder Feed Rate</b>	9.3 cm <sup>3</sup> /min



Cold Spray Robotics Integration

## TECHNICAL DATA

<b>Deposition Rate</b>	(Minimum 100g/min) Magnesium: 10g/min Aluminium: 20g/min Titanium: 25g/min Steel: 35g/min Nickel: 40g/min Tantalum: 80g/min
<b>Gas Supply</b>	Air Nitrogen Helium
<b>Gas Supply Input Pressure</b>	3000 psi Maximum
<b>Gas Supply System Pressure</b>	1000 psi Maximum
<b>Temperature</b>	750 °C Maximum (Gun)
<b>Maximum Heater Power</b>	Gen III: 15 kW Gen III Max: 45 kW
<b>Dimension (L x W x H)</b>	72 x 32 x 66 inch (182.9 x 81.3 x 167.6 cm)
<b>Weight</b>	582.9 kg (1285 lbs)



### HP Cold Spray Handheld Capability

*For application specific guidance on proper spraying procedures and parameters, please contact us at [tech.support@durametal-alloy.com](mailto:tech.support@durametal-alloy.com)*