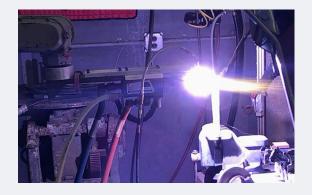
### DeWAL<sup>®</sup> Plasma X<sup>™</sup> Spray Trials



# Stainless steel test coupons were used within the following conditions:

- Cleaned with ethanol
- Taped with three strips of 1" wide tape (10 11 mils thick)
- Grit blasted with 80 mesh aluminum oxide at 58 60 PSI
- Test strips were stationary during the whole run and then placed into a plasma spray environment for preheating and coating.

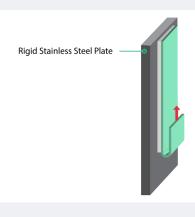


Controls	Preheat Conditions	Coating Conditions
Angle of Test Coupon	90°	90°
Distance from Test Coupon	3 - 5 inches	3 - 5 inches
<sup>†</sup> Gun Speed	700 mm/sec	700 mm/sec
<sup>+</sup> Gun Conditions	550 A & 65 V – 37.5 kW	550 A & 65 V – 37.5 kW
Primary Fuel	Argon @ 95 PSI	Argon @ 95 PSI
Secondary Fuel	Hydrogen @ 50 PSI	Hydrogen @ 50 PSI
Coating Material	-	Ceramic - Yttrium Stabilized Zirconia (YSZ)
Feed Rate	-	4 lb/hr

Note: An average of two preheat passes was completed. Coating conditions deposits .0005" (.0127mm) of coating per pass and an average of five passes was completed. <sup>1</sup>9MB used for test conditions

#### Adhesion to Steel (180° Peel ASTM D1000):

There are numerous manipulatable variables in this application. We opted to choose the variables listed above to push the products to their failure limits.





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## DeWAL<sup>®</sup> Plasma X<sup>™</sup> **Spray Trials**





**Average Adhesion to SS & Overall Thickness** 

DeWAL<sup>®</sup> Plasma X<sup>™</sup> tape (DW PXG) displayed excellent adhesion when compared to several competitive products, matching or outperforming their performance.

Preliminary data used for DW PXG.

### **Post Coating to Failure, Tape Removal:**



Taped coupons post coating



DW PXG

Comp X

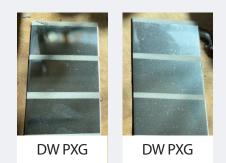
Coupons after tape removal

### **Multi-Lot Trialing:**



DW PXG

DW PXG



Two separate lots of DeWAL Plasma X tape were trialed head-to-head at a 5" distance from the gun under the same conditions above.



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