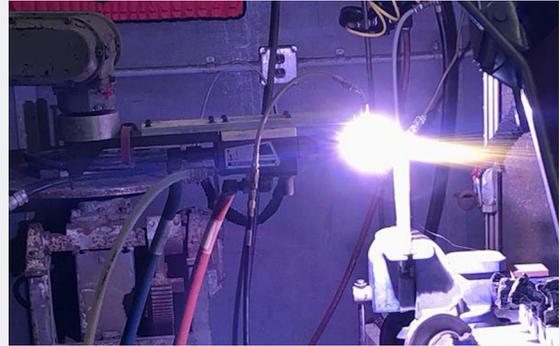


# DeWAL® Plasma X™ Spray Trials

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

- Cleaned with ethanol
- Taped with three strips of 1" wide tape (10 - 11mils 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.



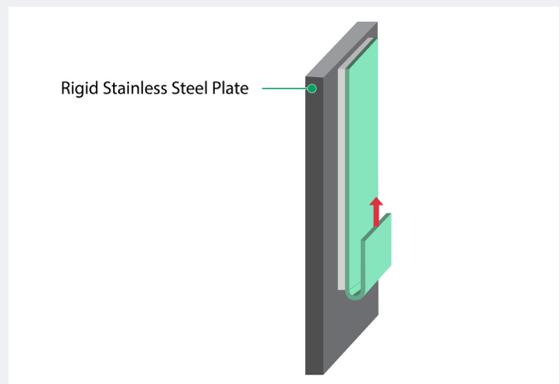
Controls	Preheat Conditions	Coating Conditions
Angle of Test Coupon	90°	90°
Distance from Test Coupon	3 - 5 inches	3 - 5 inches
†Gun Speed	700 mm/sec	700 mm/sec
†Gun Conditions	550 A & 65 V – 37.5 kW	550 A & 65 V – 37.5 kW
Primary Fuel	Argon @ 95 PSI	Argon @ 95 PSI
Secondary Fuel	Hydrogen @ 50 PSI	Hydrogen @ 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.

†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.



# DeWAL® Plasma X™ Spray Trials

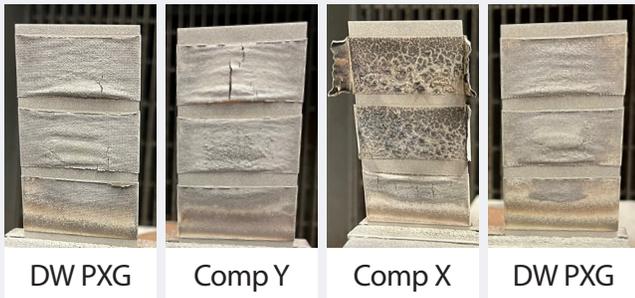
DeWAL® Plasma X™ tape (DW PXG) displayed excellent adhesion when compared to several competitive products, matching or outperforming their performance.

**Average Adhesion to SS & Overall Thickness**

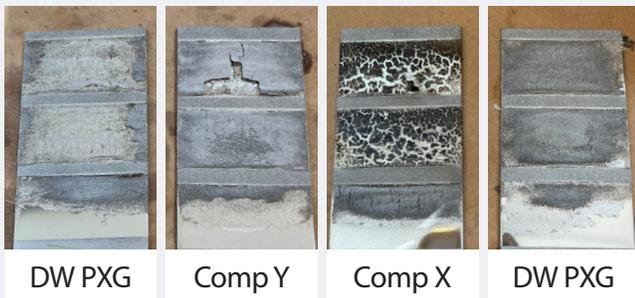


*Preliminary data used for DW PXG.*

### Post Coating to Failure, Tape Removal:

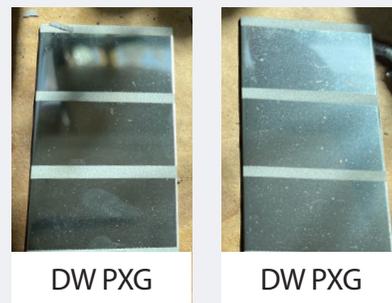
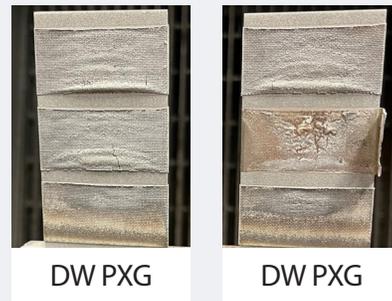


Taped coupons post coating



Coupons after tape removal

### Multi-Lot Trialing:



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.