

## Technical Memo: Recommended Spray Parameters for DuraShield 110

The lab has completed extensive testing of samples sprayed with DuraShield 110 to determine recommended minimum pressure and temperature for shop/field spray application. Once the minimum pressure and temperature were established, flow rates for each module/tip combination were established for the recommended pressure range at the minimum spray temperature. Below are the recommendations for the specified spray equipment.

- **Spray Machine: Graco Reactor 2 H-XP3**
  - The results of this testing apply to this machine. Other hydraulically powered, temperature-controlled spray machines capable of producing the pressures and temperatures prescribed in the recommendations may qualify.
  - Feed pumps must be capable of supplying the machine at a minimum of two times the highest anticipated component flow rate.
  - Cylinders must be sized at a 1:1 ratio, by volume. Testing was completed with #80 Polyol and #80 Iso cylinders. Smaller and larger cylinder combinations may be used if they can produce spray pressures within the recommended range.
- **Spray Gun: Graco Fusion Gun**
  - Testing was completed using module/tip combinations from both the Fusion Air-Purge (AP) and the Fusion Mechanical-Purge (MP) impingement-mix spray guns.
  - The results of this testing only apply to the Fusion Gun with the specified module/tip combinations listed below.
  - All other impingement-mix guns must be tested for recommended minimum spray pressure/temperature prior to approval.
  - \*Recommended module/tip combinations:

Graco Fusion Gun	Spray Pattern	Module	Tip	Flow Rate Range gpm**
Air-Purge	Flat	AF2929	838	1.2 – 1.4
	Flat	AF5252	848	1.9 – 2.3
	Round (wide)	AW2828	None	1.0 – 1.2
	Round (wide)	AW3333	None	1.3 – 1.5
	Round (wide)	AW3939	None	1.9 – 2.3
Mechanical-Purge	Flat	XF3535	838	1.1 – 1.5
	Flat	XF4747	838	1.5 – 1.8
	Flat	XF4747	848	1.7 – 2.2

\*Please contact your LifeLast Technical Service Representative for the recommended Graco Fusion gun and module tip combinations that would be best suited for your facility.

\*\*Approximate flow rates; flow rates will vary with temperature, pressure and hose length, etc.

- **Machine Feed Temperature**
  - **Minimum temperature: 100° F**
  - **Maximum temperature: 160° F**
- **Spray Temperature**
  - **Minimum temperature: 140° F (all temperature settings)**
  - **Maximum temperature: 160° F (all temperature settings)**
- **Spray Pressure**
  - **Minimum spray pressure: 1,700 psi (pressure at the machine)**
  - **Maximum spray pressure: 2,500 psi (pressure at the machine)**
  - Testing was completed with 50' of 3/8" x 3/8" spray line and 10' of 1/4" x 1/4" whip lines.
  - Longer lengths of spray lines or hose configurations may result in increased pressure loss from the machine to the gun. It is recommended that gauges be placed at the gun (even if only temporary) to determine the pressure loss for each setup. If the pressure loss is greater than 150 psi, machine pressures will need to be increased accordingly.

### Manufacturing & Sales Company

LifeLast  
3813 Helios Way  
Suite 190  
Pflugerville, TX 78660  
USA

### Contact Us

T: +1 512.628.2112  
F: +1 512.628.2113  
E: info@lifelast.com  
I: lifelast.com  
sealforlife.com

