

### Gunning Instructions Sparcon Low Cement Gun Mixes

**Sparcon** low cement gun mixes provide all of the benefits of low cement technology in products that are engineered specifically for dry gunning. These products are designed for dry gunning ONLY. Because these products use low cement binder technology, they should not to be gunned like conventional, high cement refractory products.

**Sparcon** low cement gun mixes are very user friendly and require equipment and procedures common to the refractory gunite industry. The following equipment, pressure and feed wheel speed recommendations should be followed.

#### Equipment

##### Guns

Double chamber guns such as the Allentown N-1, N-2, or N-3

Rotary guns such as the Reed Sova or Blastcrete model 020

##### Feed Bowl or Rotor (for rotary guns)

Reed Sova: use half height bowl with 18 to 21 holes

Blastcrete model 020: use half height rotor

*Note: DO NOT use full height bowls or rotors with rotary guns*

**Air Compressor:** 450 cfm minimum with 2" diameter bull hose to supply gun. (*Operating pressure: 120 psi*)

**Water Booster Pump:** Any pump capable of developing 150 – 200 psi pressure (*ex. – Teel model 2PC32*)

##### Nozzles and Gunite Hose

Double bubble, Hamme, Spirolet, or metal pipe (1.25 – 1.50" diameter 2.5 – 3.5' long)

*Use a 10" – 15" long hose extension between water ring and rubber nozzles. No extensions necessary when using 2.5' – 3.5' long metal pipe Use 1.25" diameter or 1.5" diameter gunite hose (1.5" dia. preferred)*

**Water rings:** 16 hole type or "fan" type with 0.004 to 0.015 " gap

**Water Valve:** 3/8" needle valve *Note: Do not use gate valves*

#### Pressures

Gun	Line *	Feed		Water
		pressure	tachometer	
Allentown N-1	45 - 50 psi	18 - 23 psi	25 - 35 rpm	150 - 200 psi
Allentown N-2	42 - 47 psi	15 - 20 psi	25 - 35 rpm	150 - 200 psi
Allentown N-3	40 - 45 psi	10 - 15 psi	25 - 35 rpm	150 - 200 psi
Reed Sova	32 - 37 psi	25 - 32 psi	----	150 - 200 psi
Blastcrete model 020	45 - 53 psi	----	slow - medium	150 - 200 psi

\* - line pressure listed for 100-150' of gunite hose. Add 5 – 20 psi for each additional 100' of hose

**Pre-dampening:** 1/3 to 2/3 quarts per 50 lbs of gun mix - mix in paddle type mixer for 4 minutes  
Pre-dampening is recommended with all guns as it will help material drop from top of gun to feed mechanism more easily.

**Comments:** To obtain best application and strengths, **Sparcon** products should not be gunned too wet. When these guidelines are followed, TYPICAL rebound losses should range from 10% to 20% for sidewalls and from 25% to 35% for thick linings overhead. Material and ambient temperatures should be 60°F to 80°F during installation.

For further information, call Spar Research and Development at (336) 882-7294.