

How it Works – Multi-Cooler

SIMPSON
A Norican Technology

Pre-Mixing Eliminates Variations in Return Sand through Continuous Back-Blending

Continuous Back-Blending eliminates any “First-in / First-out” effect and assures complete homogeneity of return sand. Sand from multiple molds is intensively pre-mixed to eliminate the variation in return sand prior to final mixing.

Pre-Conditioning Makes You More Competitive

The mixer group can operate at optimal performance and efficiency when shakeout sand is continuously cooled, pre-mixed and the moisture is increased and stabilized within a narrow tolerance before final mixing.

- 1** A sophisticated control system measures the temperature of the exhaust air and the conductivity of the retained sand to add precisely the required amount of water. This achieves the desired cooling and residual moisture content.
- 2** Counter-rotating mixing tool sets mechanically fluidize the retained sand so that cooling air, provided by the inlet blower, and water can be in intimate contact with the sand; thus providing for efficient and effective cooling.
- 3** Based on sensors monitoring motor load, the control system adjusts the discharge door opening to maintain a constant volume of sand in the cooler at all times.
- 4** Optional bentonite clay dosing before discharge of sand from the cooler allows for preactivation of additives.



-2%

“Within the first month of installing the Multi-Coolers®, scrap dropped from 7% to 5%. The scrap savings paid off the coolers in a year.” – **Production Manager**