

# Cooling & Water mist Data sheet

## Water mist spray

What is water mist? By introducing fine water spray into the air cooling stream we are able to considerably lower the temperature of the air and thus decrease the cooling cycle time of the product. Savings have been as high as 30% of cooling cycle, but remember when you save on cooling times you also save on heating as on most machines the heaters are partial on in the rear position.

General consensus is mixed as incorrect spray techniques can cause inconsistent flow or dripping that causes unsightly marks to appear on the product.

We have developed our system to give an ultra fine constant pressure spray with complete evaporation. By using industrial spray guns modified to spray water we can produce a fine mist of water over the product area guaranteed not to mark the surface.

Stabilization of the water pressure is achieved via a small balancing tank giving a constant but adjustable flow. The water is filtered to 500 Microns. The gun is operated by a piston that shuts off the water at the tip of the nozzle, preventing dripping. The system is controllable with both a delay on timer and a cycle timer through an air valve. The required amount of spray guns depends on the product area

Typical requirements:

Aperture width	Aperture depth	Gun quantity
800mm	600mm	1 off
1000mm	1000mm	2 off
1500mm	1200mm	2 – 4 off
2000mm	1200mm	4 – 6 off
2000mm	2000mm	6 – 8 off
2500mm	2000mm	6 – 8 off

Example of a modified spray gun



Example of a four gun system in operation



As you can see the water has dispersed and evaporated before making contact with the product.

### Air Fan Cooling

Decreasing the amount of time to cool a product can save substantial money and increase output considerably. Many older machines have inefficient single phase fans. Air flow technology has come along in leaps and bounds, modern high flow low pressure fans can move huge volumes of air with greatly reduced power consumption and noise levels.

The modern fans are fitted with a directional mounted ducting to give precise control of the air flow.

Typical requirements:

Aperture width	Aperture depth	Fan quantity
800mm	600mm	2 off
1000mm	1000mm	2 off
1500mm	1200mm	2 – 4 off
2000mm	1200mm	4 – 6 off
2000mm	2000mm	6 – 8 off
2500mm	2000mm	6 – 8 off

We design and build at our factory to the highest standards and can accommodate any request or modification you require.