



Anti-Bearding FloMax[®] Air Atomizing Nozzles

Resist material build-up around orifices

Benefits

- Ideal for use in slurry and/or high particulate spraying applications
- New, patented air cap design resists material build-up near nozzle orifices to prevent performance problems
 - Significantly extends maintenance intervals
 - Users report nozzles are in service up to 5 times longer before maintenance is needed
- Anti-Bearding FloMax nozzles provide all the benefits of standard FloMax nozzles
 - Unique atomization process produces smaller drops using less air than competitive nozzles
 - These small drops provide fast, efficient evaporation without wetting
 - More surface area per gallon for a complete reaction and unsurpassed performance
 - Uniform drop size distribution for precise, tight control of drop size
 - High turndown ratio for maximum operating flexibility
 - Fewer nozzles required for cooling
 - Quick and easy maintenance – no special tools required
- Standard FloMax nozzles can be easily upgraded – just change out the air cap to enjoy the benefits of the anti-bearding design

Specifications

Flow rate ranges:

FM5A-AB-55: 0.7 to 7.0 gpm (2.6 to 26.5 l/min)

FM10A-AB-55: 1.3 to 13.0 gpm (4.9 to 49.2 l/min)

FM25A-AB-55: 10.0 to 30.0 gpm (37.8 to 114 l/min)

Materials: 316 stainless steel, reaction-bonded silicon carbide, HASTELLOY[®] C. Other materials available upon request

Spray angle: 55°

Standard and custom spray injectors are available in a wide range of materials and configurations

Compatible with AutoJet[®] Gas Conditioning System for a fully automated, turnkey system

A Bit About Bearding:

In many air atomizing applications, a low-pressure zone is created by the high-velocity fluid stream exiting from the nozzle orifices. This zone draws a few fine droplets back to the air cap. The droplets dry, build-up in layers and often block liquid and air orifices. This phenomenon is called bearding and is a leading cause of distorted spray distribution and clogging.

Typical Applications

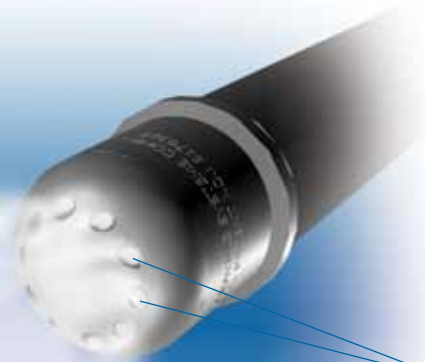


Gas conditioning with high concentration of dust particulates
Cement kilns
Slurry spray applications

Anti-Bearding FloMax® Air Atomizing Nozzles

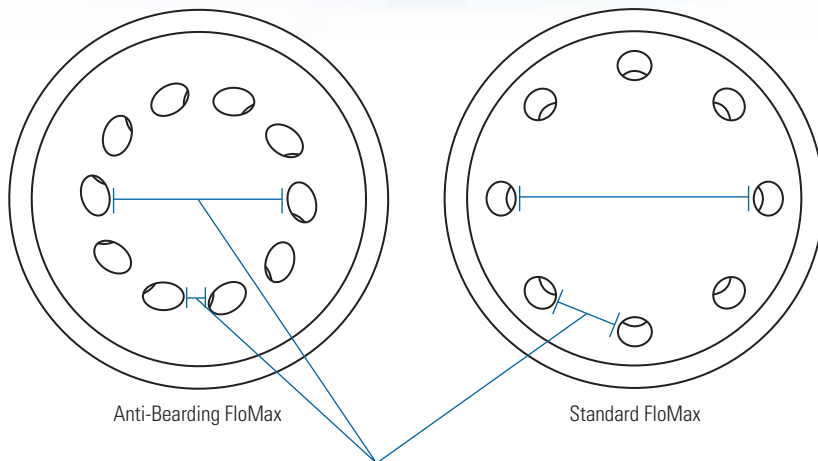
Operating Principle

The Air Cap Design



Anti-Bearding FloMax nozzles have minimal surface area on the air cap and between nozzle orifices. When drops drift back during spraying, very few can adhere to the air cap since there is little surface area between the sprays. This design minimizes the potential for build-up.

Anti-Bearding FloMax nozzles feature 10 orifices at compound angles. These orifices produce a very full spray when leaving the air cap. The spray pulls in as it travels and provides a 55° spray angle.



This illustration shows the air cap design differences between the Anti-Bearding FloMax and the standard FloMax nozzles. The Anti-Bearding FloMax has more orifices positioned at compound angles and minimal surface area. The standard FloMax nozzle has more surface area on the air cap and between orifices where drops can drift back, adhere to the surface and interfere with performance.

The areas where low-pressure zones are typically created in air atomizing nozzles – the center of the air cap and between orifices – have been minimized on the Anti-Bearding FloMax nozzle.

Performance Data

Complete dimensional and performance data is available upon request. Please call 1-800-95-SPRAY or contact your local representative.

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