



DELTA "T" SYSTEMS, INC.

858 WEST 13TH COURT

RIVIERA BEACH, FLORIDA 33404 U.S.A.

www.deltatsystems.com

Moisture Eliminators



**97% Effective at Removing Salt Spray and Water
from Engine Room Intake Air**

Function and Operation -The Delta "T" Systems moisture eliminator is an impingement type separator designed for vertical installation and horizontal airflow. The individual profiles are specially curved and shaped to turn the airflow as it passes over the profile surface. As the entrained liquid droplets have a higher mass than the air, the liquid cannot make the turn as easily as the gas flow, and inertia forces the droplets against the surface of the profile. The liquid forms a film that is pushed along the profile into an area of low pressure located behind the hook. The liquid film is allowed to coalesce into larger droplets and then drains out via gravity at 90° relative to the airflow. The specially curved shape of the Delta "T" Systems moisture eliminator provides a low drag coefficient that allows higher velocities without excessive pressure drop. At higher velocities, smaller drops are removed due to increased inertial forces, and higher efficiencies are achieved.

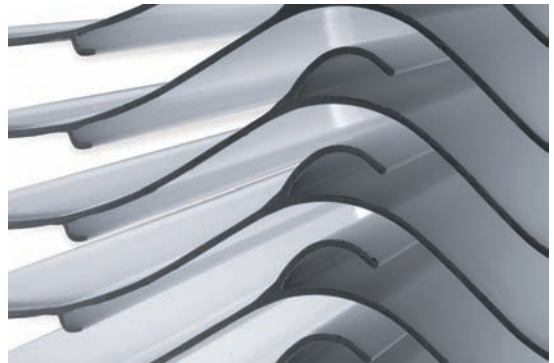
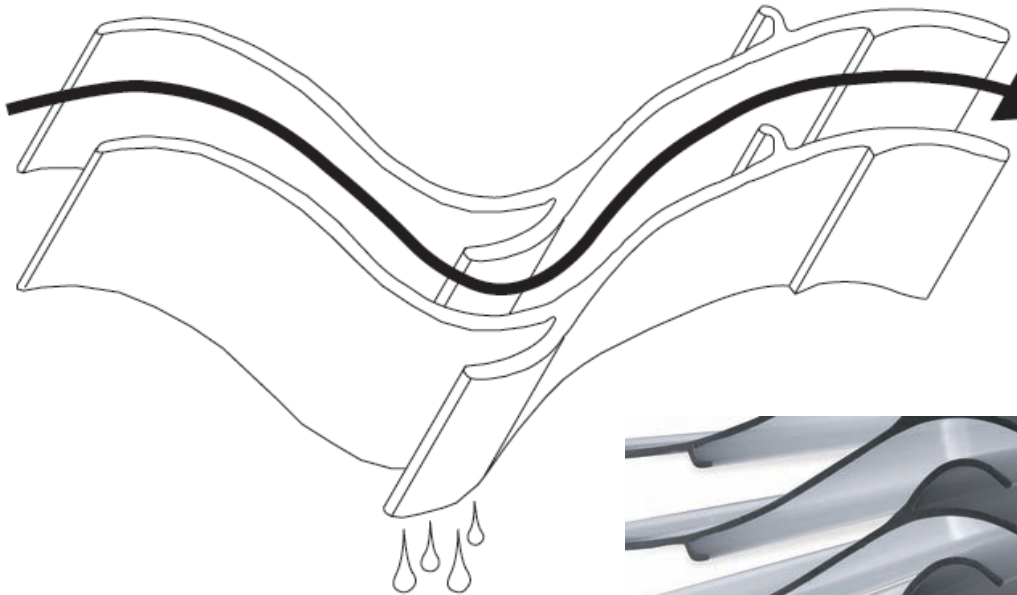
Type and Materials - Profiles are available in Polypropylene (white or black), PVC, Aluminum

and FRP. In applications where high strength, low maintenance, low smoke and toxicity is required DTSI profiles are available using a MIL-SPEC Modified Acrylic Resin compound. These profiles are extremely durable and provide a corrosion free high strength composite moisture eliminator. Housings are available in PVC, Aluminum, and Modified Acrylic Resin and are designed for the specific application. The profile packs can be used as a single stage for optimum pressure drop characteristics with good particle separation (10-20 Micron range) or in multiple stage systems using a coalescing material to optimize the particle separation (1 - 10 Micron range). It is our objective to design each system for maximum particle separation, minimum pressure drop, opening size, and weight for a minimal cost. We will work with you to provide as much, or as little, engineering assistance as you might require. Marine system design is "boiler plate" for Delta "T" Systems. With the thousands of proven applications completed, we have a system or a product to fulfill your needs and budget.



Delta "T" Systems

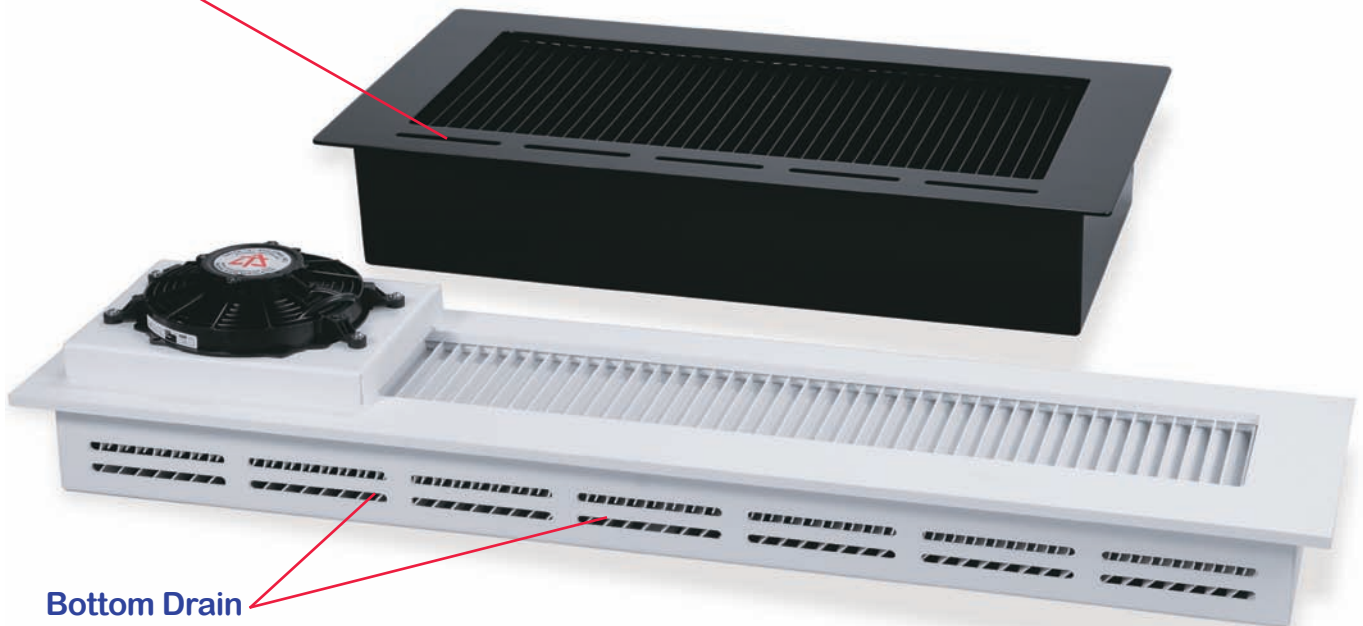
HOOK & VANE INTERNAL PROFILE



Bring AIR into your engine room...

NOT WATER

Face Drain



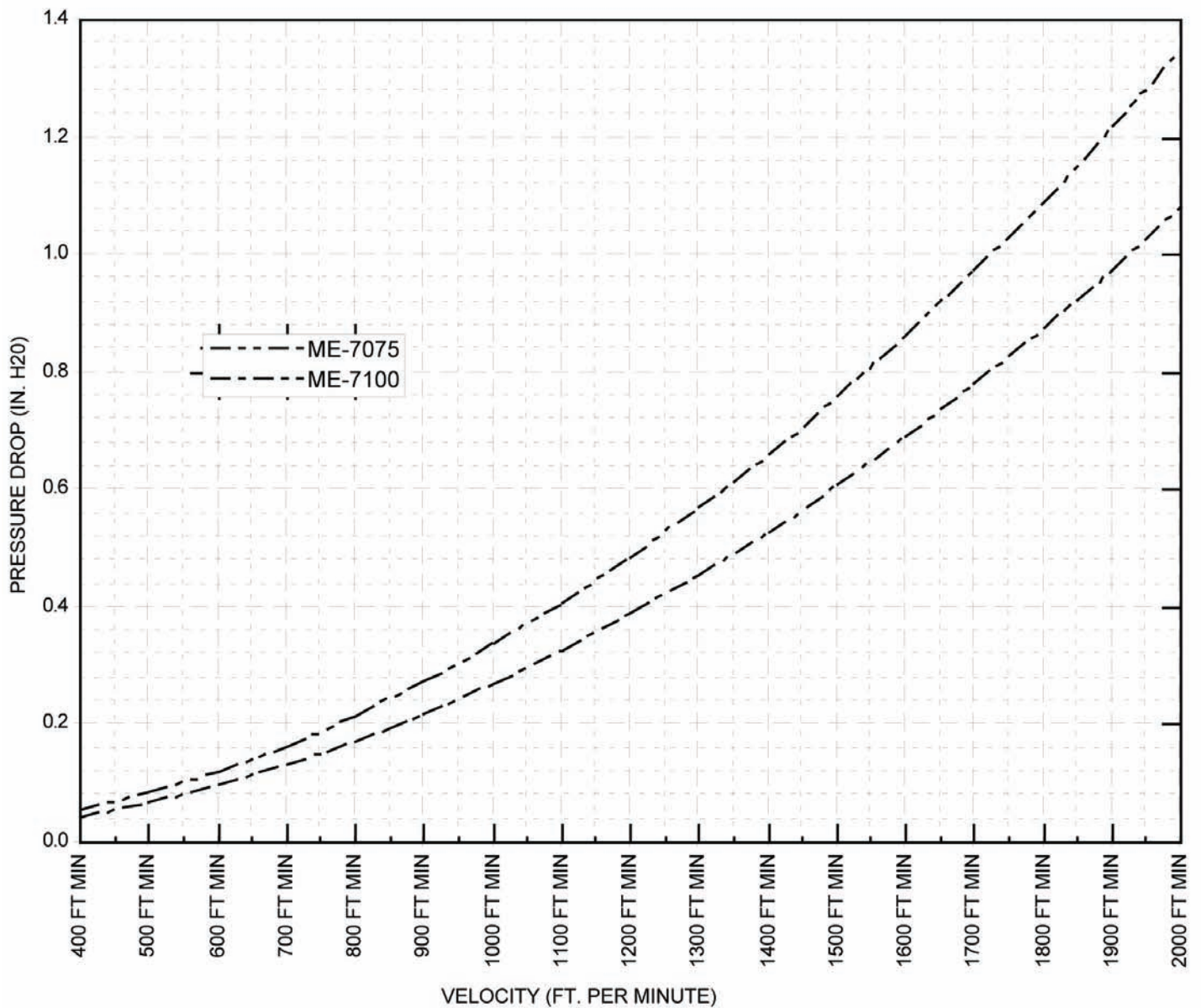
Bottom Drain



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Moisture Eliminator

Performance Pressure Drop VS. Velocity

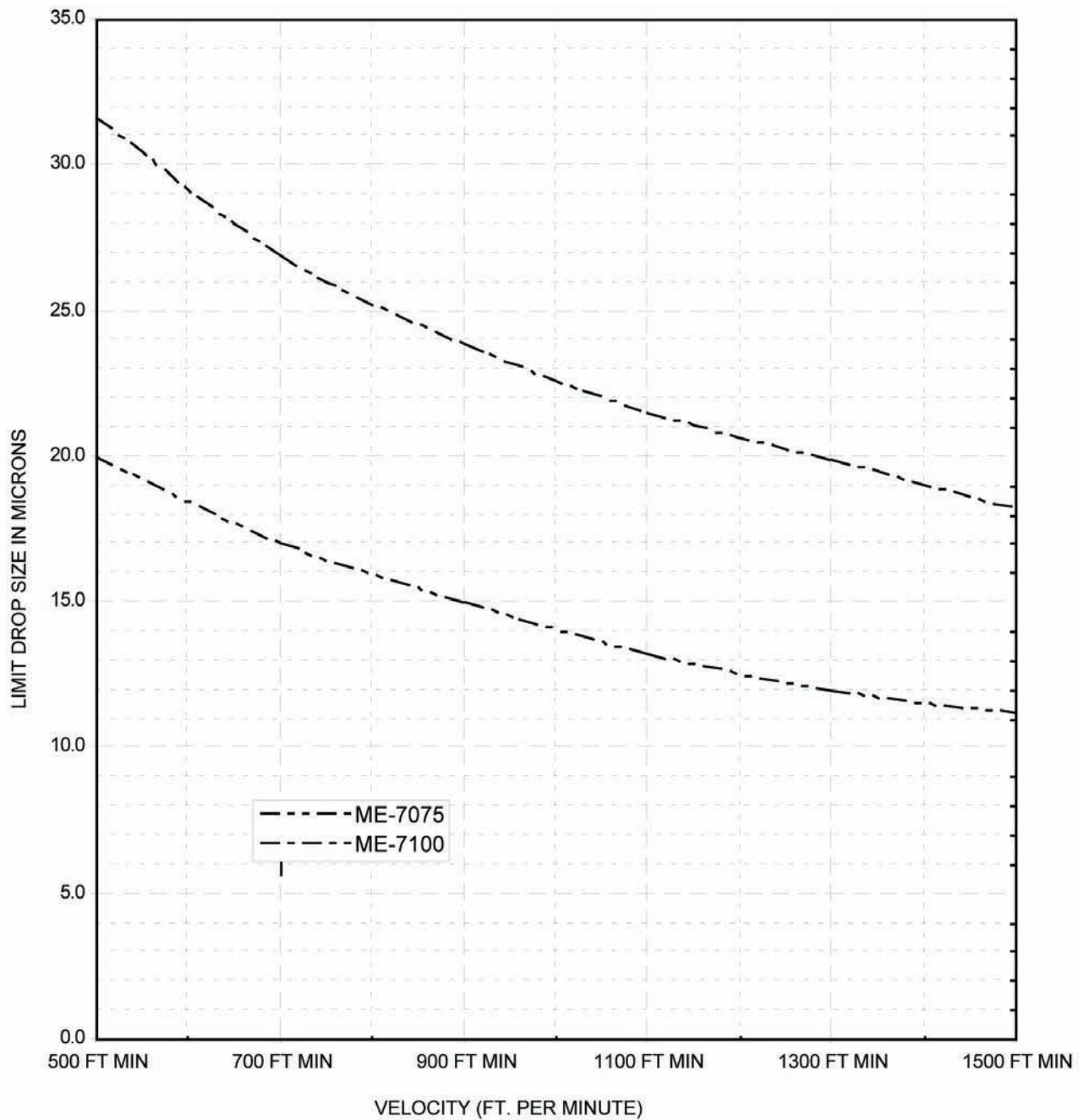




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Performance Limit Drop Size

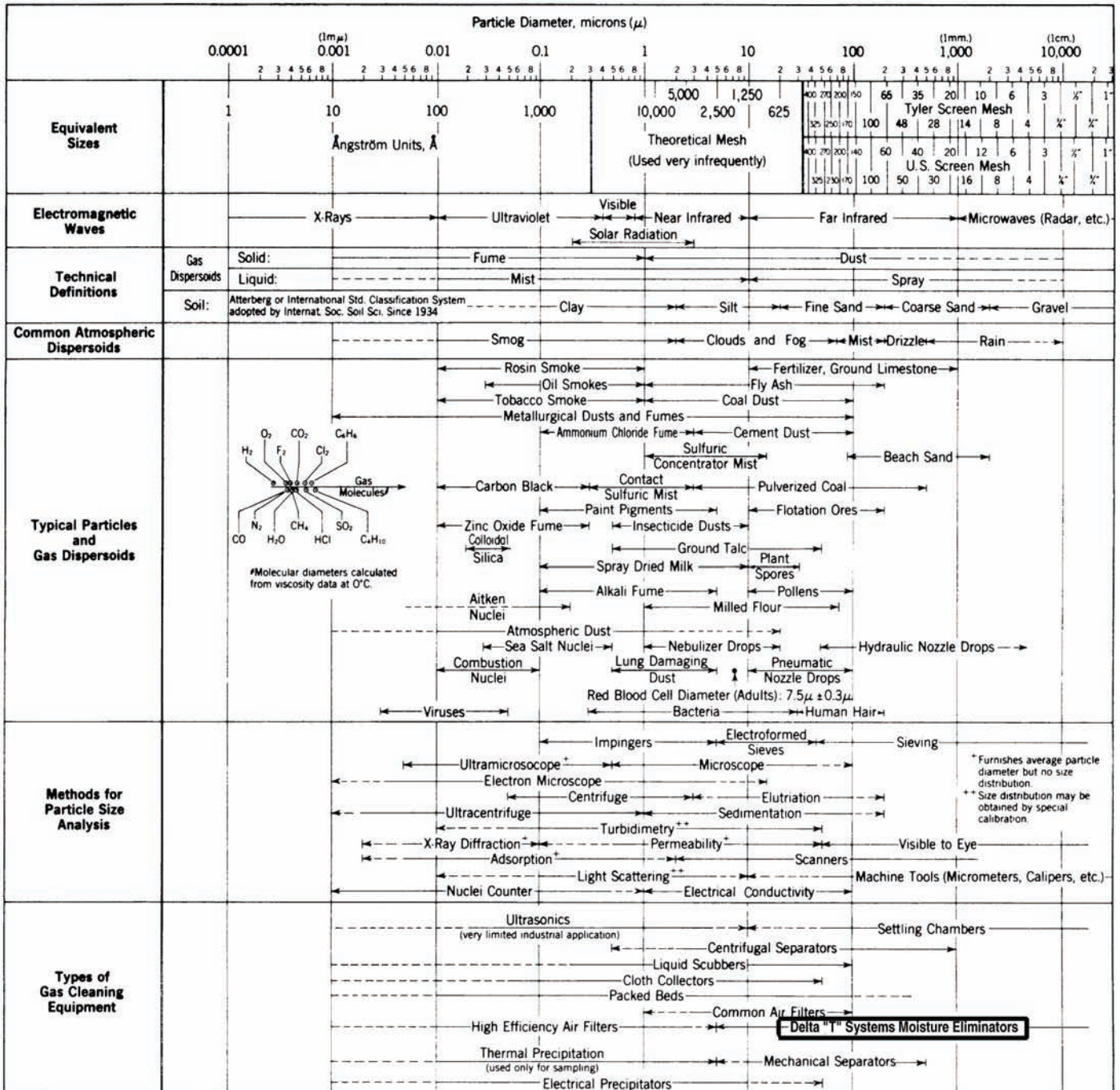




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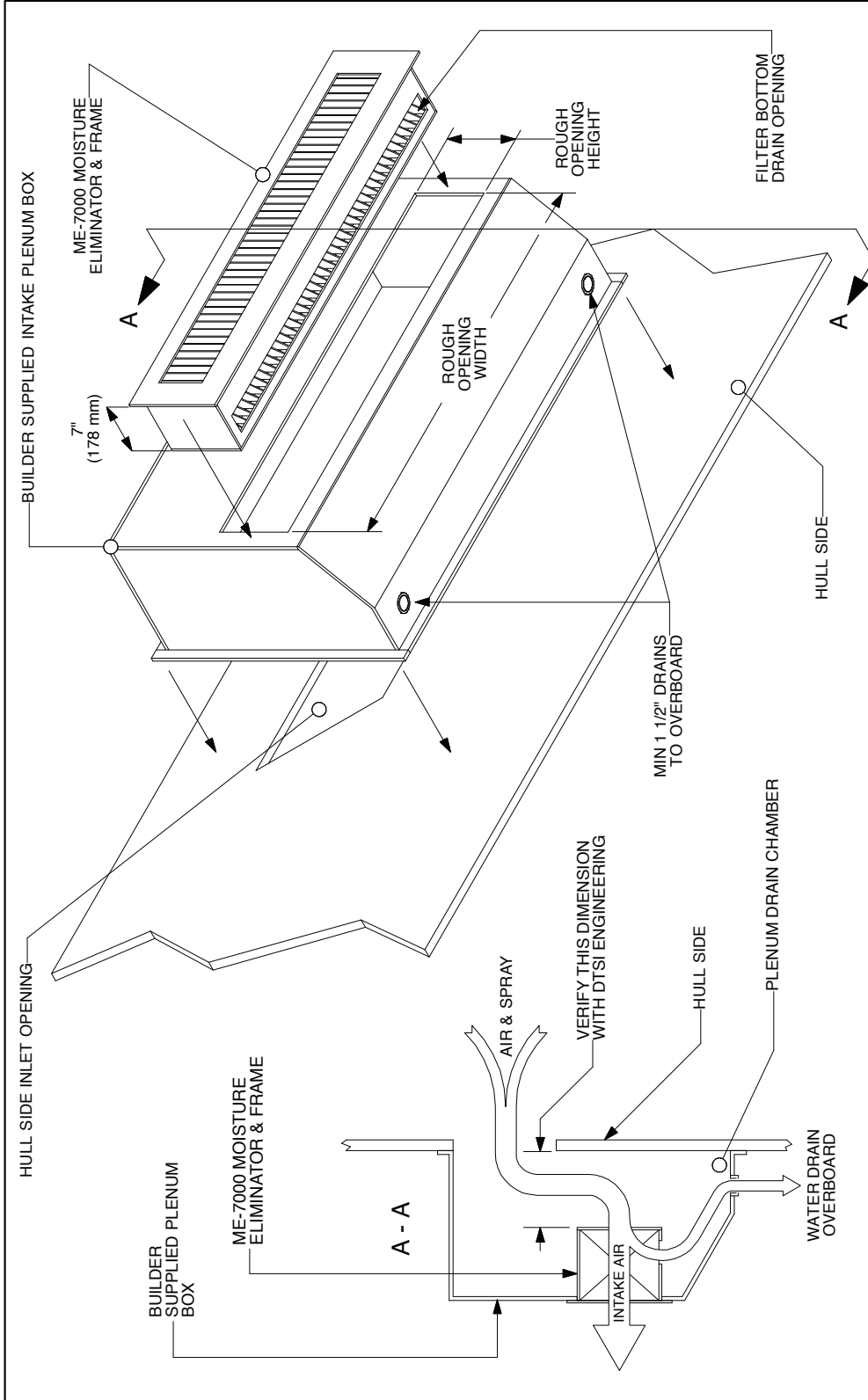
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Performance Characteristics of Particles





Delta "T" Systems



NO SCALE

IMPORTANT: ALWAYS COMPLETE AN APPLICATION WORKSHEET AND FORWARD TO DTSI ENGINEERING TO OBTAIN PROPER INLET OPENING CROSS SECTION, FILTER SIZE AND PRESSURE DROP.

TYPICAL HULL SIDE INSTALLATION ME-7000 SERIES MOISTURE ELIMINATOR WITH INSIDE BOTTOM DRAIN FRAME		PROJECT NO.:	
		DATE:	11/05/03
		DWG NO.:	8905
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