

The New Paradigm in Cleaning Ductwork

Conventional Method

To understand the new, the conventional must be understood first:

- High power vacuum to provide negative draw
- Brushes, whips and other agitation devices to loosen the debris
- Numerous access openings are cut to accommodate agitation devices

New Paradigm – High Tech Approach

The new paradigm:

- Relies on high-volume compressed air* to propel *specially designed aerodynamic nozzles* up to 100 feet inside the ductwork.
- The nozzle acts like an “air knife” and cuts away debris from the entire inside surface area of the ductwork (round or rectangular).
- The power of the compressed air then transports the debris downstream – in the same direction the vacuum system is pulling.
- Less vacuum power is required, as transport velocity is provided by compressed air
- Significantly less access openings are required.

*Minimum of 180 cubic feet per minute/CFM and 110 pounds per square inches/PSI

Comparison of Conventional vs. New Paradigm

	<u>Conventional Systems</u>	<u>High-Tech Approach</u>
Access Required	every 10 to 15'	up to 100' cleaning zones
Cleaning Capability	round brushes in rectangular ducts (?)	various nozzle types provides 100% contact with surfaces
Containment of Debris	frequent removal of contaminant laden devices	far less frequent removal of devices, small nozzles
Duct size transitions	need to re-access, change device	no need to re-access, design of nozzles handles transitions
Bends, 90° turns	add'l access required	no additional access required
Vacuum collector	larger/heavier collector, less maneuverability	downsized vacuum collector speeds project, esp. on ships