## CarestreamNDT



## The HPX-1 CR System Built for NDT



The HPX-1 is the only system on the market today engineered and built specifically for Non-Destructive Testing.

The following presentation highlights the rigorous dust test performed on an HPX-1 system.



### The Dust Test Setup.



# •A new HPX-1 was installed in a fabricated dust-test enclosure



- 280 grams of Silica dust (particle size 0-180µm) was systematically injected into the chamber
- Each of the 100 injections measured 2.8 grams to ensure proper dispersion
- This is DOUBLE the requirement of MIL STD 810-4 Test Method 510.4 Procedure III – Settled Dust!



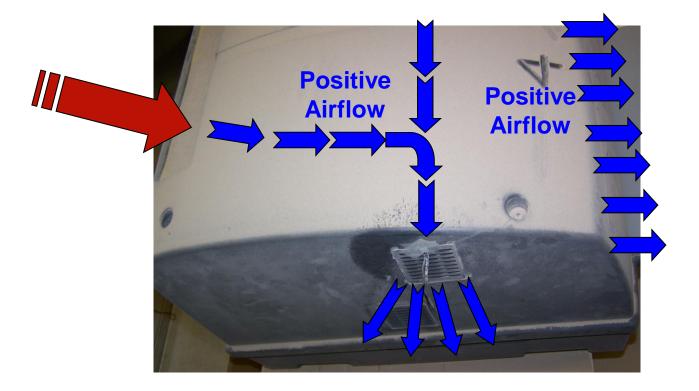
#### **Before**

#### After





Multiple positive pressure fans and dust filters inside the HPX-1 keep dust, debris and contaminated air out of the system. *Even in the worse environments!* 



#### **Exterior After**

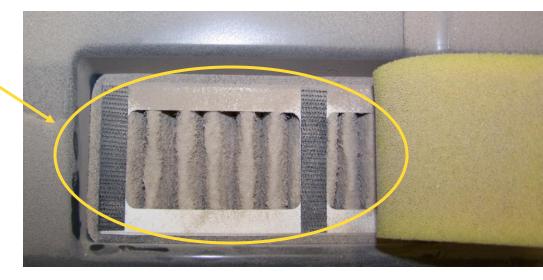
- At the end of the test the unit was completely covered in dust
- Multiple positive pressure fans and filters kept the dust, debris and contaminated air out of the system



#### **Exterior After**

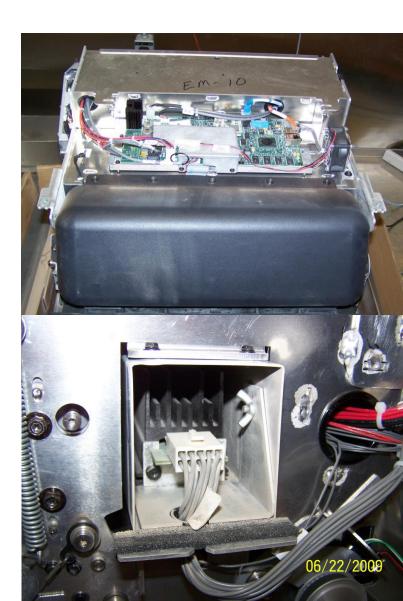
- •Two independent levels of filtration provide twice the protection
- External filters effectively capture airborne contaminants before they were able to infiltrate the unit



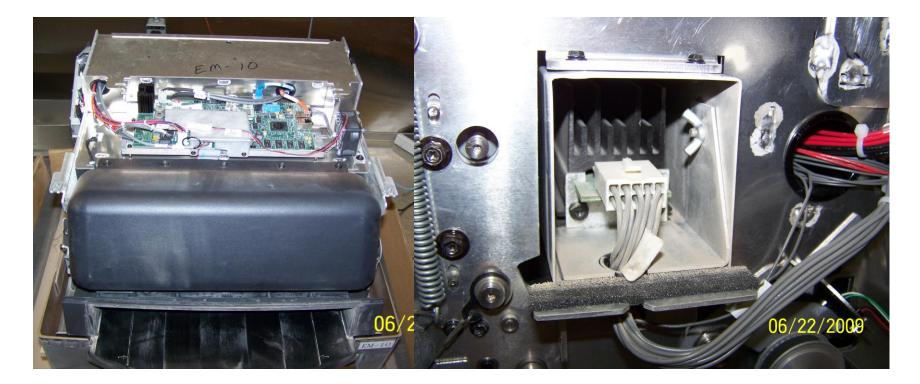


# After the test the unit was dismantled, **THE RESULTS WERE AMAZING**

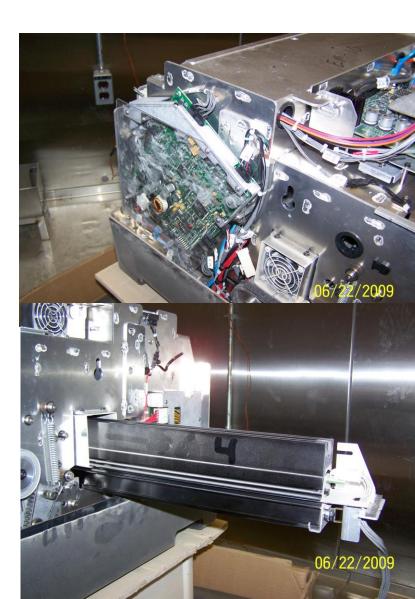
- •The unit was disassembled after the test and thoroughly inspected for particle ingress
- Minimal contamination was found all below acceptable levels for proper operation



# The unit had minimal dust intrusion, well below acceptable levels for proper operation.



- Internal circuit boards and various mechanical assemblies were inspected
- No evidence of significant contamination that could affect the performance of the unit was found



 The cassette loading tray, handling mechanisms and erase housing also showed minimum levels of contamination

Well below acceptable levels for proper operation.



- Feed tray (top)
- Cooling fan assembly (bottom)

The unit had minimal dust intrusion below acceptable levels for proper operation.



#### Interior After •The critical collector was clean following the test

The unit had minimal dust intrusion below acceptable levels for proper operation.



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- 2. Minimal amounts of dust infiltrated the unit, well below acceptable limits for proper operation
- **3.** Critical areas of the HPX-1 were not affected
- 4. Customers finally have a CR unit that will stand up to working in harsh environments similar to these

## **CarestreamNDT**

Powerful. Flexible. Reliable. Portable. Easy. DIGITAL.



