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DUCT CLEANING

RemotAir's duct cleaning system learns from experience

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At the 30th annual National Air Duct Cleaners Association's conference and expo this year in Nashville, Tennessee, [RemotAir](#) by the Italian brand [Alisea](#) was an obvious standout among exhibitors for two reasons: artificial intelligence (AI).

RemotAir's AI system learns from experience and carries out predictive analysis on HVAC system hygiene and operating conditions. What's more is the system monitors for materials that can evolve to be hazardous to human health. The system then predicts, identifies and controls the buildup of those materials using special algorithms, researched and tested over five years by Alisea's air systems hygienists.

"It evaluates the cleanliness of the system by eight parameters. Two of them are by wi-fi camera," explains Matteo Prevedini, a RemotAir project engineer. "With those cameras you can see the surface in the duct and, with an optical evaluation, heat can say to you when there is dust on the surface and send a value estimated to you." The system estimates the amount of dust deposited (in g/sqm) on the duct system's interior surfaces and will send a warning notification when conditions reach the threshold indicated by standard NADCA ACR 2013 (0.75 g/m²). The same goes for monitoring the conditions of the air handling filters (via difference of pressure) and the conditions and the efficiency of the heat exchanger coils.

"This is indicated by the 'NADCA White Paper on Restoring Energy Efficiency Through HVAC Air Distribution System Cleaning,'" Prevedini explains. RemotAir is also equipped to monitor air quality, keep track of sanitation anomalies and maintenance processes to ensure work specifications have been carried out effectively. [Remotair.com](#).