AVIATION WEEK NETWORK

ASK THE EXPERT

Upgrade Your Ozone Converter to Control VOCs with BASF UpCore™ MRO Service

William Hizny
Application Engineer
at BASF

BASF has announced a new MRO service option for air carriers operating A320 and A330/A340 aircrafts equipped with BASF Deoxo™ ozone converters. The program is called UpCore™ and it replaces the existing ozone catalyst core with an OEM-factory-new ozone/VOC catalyst core, adding volatile organic compounds control to the converter. This sustainable upgrade requires no engineering resources or part recertification from the airline operators. Aviation Week chatted with William Hizny, Application Engineer at BASF. Here's what he had to say about their sustainable MRO service.

Q: How do people experience VOCs in the cabin air?

Hizny: When you think of the aircraft cabin experience, a major complaint from passengers and crew is odor in the cabin. It is what people remember when they leave the cabin and immediately recall when their friends or family ask, "How was your flight?"

Not all odors originate within the cabin, such as from the galley or the passenger sitting next to you with their shoes off. Many originate outside the cabin. For example, ground operations remain a challenging potential source for VOCs in cabin air. Say your plane is tenth in line on the tarmac at Chicago O'Hare, you've spooled up the engines and shut down the APU but now your aircraft is ingesting the jet engine exhaust fumes, and the VOCs they contain, from the other nine idling aircraft ahead of you. If there is only an ozone converter installed, the passengers and crew are soon a captive audience to an uncomfortable life or work experience they will not soon forget.

Q: Is it more than just comfort? Are there any financial impacts related to unexpected odors in the cabin?

Hizny: Yes! Airlines are suffering from increased delays and in-flight diversions due to cabin odor issues and fume events. These delays cost airlines money, damage customer and crew relations and often result in dramatic and negative media coverage that hurt the airlines' image. Typically delays and diversions can cost anywhere from $10,000 to $150,000 per event.

Q: What does the "UpCore™" MRO service offer the air carrier community?

Hizny: UpCore™ offers air carriers operating A320 and A330/A340 platform aircraft another option to acquire a means to combat unscheduled outages and improve their cabin air environment in a cost-effective manner by replacing the catalyst core in their existing BASF ozone converter with an OEM-factory-new ozone/VOC catalyst

core while retaining the full use of the metal converter housing, which saves raw material resources.

At BASF, we create chemistry for a sustainable future. This is what we do. UpCore™ is a great example of our sustainable solutions for customers, and we are very proud of it.

Q: So is UpCore™ new technology?

Hizny: Ozone/VOC converter technology has been around for over 15 years. UpCore™ is about lowering the barriers for air carriers to adopt commercially proven technology. It is less costly to implement than purchasing a factory-new ozone/VOC converter. It requires no new certification or engineering, is easy to maintain, and addresses a big issue – cabin air quality.

Q: Are there really no certification expenses for the technology upgrade?

Hizny: The BASF Deoxo™ ozone converter and the BASF Deoxo™ ozone/VOC converter share the same form factor and are certified by Airbus. The UpCore™ MRO service bridges these parts, effectively turning the former into the latter. So, there are no additional engineering steps, STC's, DER's, PMA, etc. required.

After UpCore™, the converter carries the ozone/VOC converter part number and a unique serial number for traceability. We also attach a supplemental nameplate to the converter uniquely identifying it as having undergone the UpCore™ MRO process. This makes visual identification fast and simple.

Q: What if an airplane does not currently have a BASF Deoxo™ ozone converter installed, but rather another brand, is UpCore still an option for that plane?

Hizny: The airplane needs to have a BASF Deoxo™ ozone converter to be eligible for UpCore™.

Q: What turnaround time should I expect for the UpCore™ MRO process?

Hizny: As both the OEM and MRO service provider for the converter, BASF can accomplish the UpCore™ MRO service during scheduled maintenance phase checks at our Part-145-Certified Repair Station in Huntsville, AL. We target a 10-day turnaround.

Q: What if I am still not completely sold on UpCore™?

Hizny: I would just say this: UpCore™ offers an air carrier operating A320 or A330/A340 platform aircrafts a means to differentiate themselves in a marketplace that is highly competitive to attract and to retain both customers and employees. We see it as an attractive investment in both their operations and their employees. UpCore™ effectively pays for itself even if only one flight delay is avoided. We like to think it can reap even greater returns in flight experience.

Q: Where can I find more technical information about UpCore™?

Hizny: The BASF UpCore™ MRO service is described in detail in the approved Airbus Vendor Service Bulletin for A320 aircraft (VSB) #20499-21-001 and in the approved Airbus Vendor Service Bulletin for A330/340 aircraft (VSB) #44142-21-001

Please contact our BASF Authorized Distributor, Airbus Satair, to discuss implementation of VSB#20499-21-001 and/or VSB#44142-21-001 and any questions you may have regarding the upgrade of A320 and A330/A340 aircrafts currently equipped with BASF ozone converters, either by the purchase of OEM factory-new units or the use of the UpCore™ MRO service.

For More Information, please visit:

- Aircraft Cabin Air Quality Solutions
- UpCore™
- UpCore™ Vendor Service Bulletin
- Contact Distribution