

Aircraft OEM

Surface Treatment Technologies



Chemetall offers a fully integrated, innovative, and optimized portfolio of products and technologies for aircraft OEM's. These solutions arise from our comprehensive understanding of the materials and requirements for specific Aerospace applications.

In addition to our globally active and locally based technical support, you can rely on our vast experience with commercial and military aviation. Collaborate with us to increase your process efficiency.

Our products and solutions provide:

- ⊕ Comprehensive material compatibility confirmed by third party validation.
- ⊕ Major approvals and conformance.
- ⊕ Environmentally responsible solutions.

BASF
We create chemistry

Chemetall
expect more[⊕]

Surface Treatment Technologies

| | Description | Application | Approvals and Conformances |
|--------------------------------------|---|------------------|--|
| AQUEOUS CLEANERS | | | |
| Ardrox® 6333A | Popular spray cleaner. Low foaming, silicated and multi-metal safe. For removal of oil, grease, and soft carbon deposits. | Spray | Airbus, ASTM F-945, Boeing D6-17487 and various BAC's, Honeywell, McDonnell Douglas, MTU, NATO, Piper, US DOD, and more. |
| Ardrox 6376 | Highly silicated, mildly alkaline cleaner. Multi-metal safe. | Immersion | Airbus, ASTM F-945, MTU, and more. |
| Ardrox 6378A | Highly effective cleaner. Borate- and NPE-free. Low toxicity and highly biodegradable. For removal of oil, grease, and soft carbon deposits. | Spray, immersion | Airbus, ASTM F-945, Boeing D6-17487, Rolls Royce, Snecma, and more. |
| Oakite® 90 | Heavy-duty electrolytic cleaner for steel prior to electroplating. Also used as a reverse current cleaner for copper and copper plated steel. | Immersion | AgustaWestland, Bell Helicopter, Boeing BAC 5749, Hughes Helicopters, McDonnell Douglas, and more. |
| Rustripper® | Heavy-duty, alkaline cleaner, rust remover, descaler of ferrous parts. | Immersion | Allied Signal, Boeing BAC 5625, Hughes Helicopters, Honeywell, and McDonnell Douglas. |
| PRETREATMENT | | | |
| Ardrox 1250 | Mildly acidic, thickened product designed to remove light soils and oxides from aluminum aircraft surfaces. | Spray | Boeing BAC 5663, 5719, D6-1816, and AMS 1640. |
| Ardrox 1781, Ardrox 1781 Blue | Liquid, phosphorous-free, silane-based product that enhances the performance of subsequently-applied organic coatings. | Spray, brush | BMS 10-128 Type 1 Class A, Grade A, AMS 3095, MIL-PRF-32239, and CMS-CT 401. |
| Ardrox 295GD | Concentrated acidic multi-component product for the etching and deoxidizing of aluminum alloys after cleaning or etching. Free of chromates. Replaces sulfuric-chromic processes. | Immersion | Airbus and Bombardier. |
| Ardrox 6490 | Silicate and borate-free aqueous based liquid concentrate comprising a blend of builders, solvents, sequestrants, corrosion inhibitors and biodegradable surfactants. Removes oil, marker pen and ink prints as well as soft carbon deposits from aluminum, titanium, and stainless steel alloys. | Immersion | Airbus. |
| Ardrox 6491 | Silicate and borate-free spray cleaner to be used as a pre-cleaner in case of heavy contaminations. | Spray | Airbus. |
| Deoxidizer LNC | Non-chromated, acidic material for removing oxides, smut, scale, and discoloration from aluminum and its alloys. Use before conversion coating, anodizing, or any other operation that requires low surface contamination. Use after alkaline etching. | Spray, immersion | Airbus, Bell Helicopter, Boeing BAC 5765, Honda, Hughes Helicopters, and Lockheed. |
| Oakite 160 | Alkaline material for cleaning and rapid etching of aluminum in one step. Easy rinsing. | Immersion | Airbus, Boeing BAC 5786, Honda, Hughes Helicopters, and Saab. |
| Pace B-82 | Specially formulated cleaner for aircraft skins prior to conversion coating and painting. | Spray | BAC 5744. |

Not all products are available in every region. Full list of approvals available on request.



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|-------------------------|---|-----------------|---|
| SOLVENT CLEANERS | | | |
| Ardrox 2325 | Polysulfide sealant remover for the cleaning of application equipment and tools, free from NMP and NEP. | Immersion | n/a |
| Ardrox 5414 | A blend of solvents and emulsifiers formulated for the removal of "stop-off" wax from plated metal parts. Use hot and rinse off with tap water. | Wipe, immersion | Rolls Royce and Pratt & Whitney. |
| Ardrox 5503 | General purpose, non-chlorinated degreaser. Fast evaporating. | Wipe, immersion | AgustaWestland, Airbus, Boeing BAC 5750, Goodrich, Honeywell, Safran, US DOD MIL-PRF-680 Type II, and more. |
| Ardrox 5515 | Quick drying and safe for use on ferrous and non-ferrous alloys. | Wipe, immersion | Boeing BAC 5750. |
| Ardrox 5529 | NESHAP-free. Formulated to clean paint spray guns and adhesive application equipment. | Wipe, immersion | Boeing BAC 5750, BSMS 31-001, and McDonnell Douglas. |
| Ardrox 5575 | Multi-purpose solvent cleaner, controlled volatility, no toluene, xylene, or any other aromatic derivatives. | Wipe, immersion | AgustaWestland, Boeing D6-17487, and BAC 5750. |

CORROSION PROTECTION

Take advantage of our broad portfolio of high performance corrosion protection technologies and solutions. Chemetall's Ardrox AV product line offers super penetrating, firm and soft film, heavy-duty, and even high-temperature resistant compounds for specific applications. For more information, please see our Corrosion Protection line card or visit our website.

METALWORKING FLUIDS

Improve the quality of your process with Tech Cool®, proving to be the cleanest running coolants in the metalworking industry! Enhance your productivity, extend your tool life, experience easy maintenance and chip handling! Reduce consumption! For more information, please see our Metalworking Fluids line cards or visit our website.

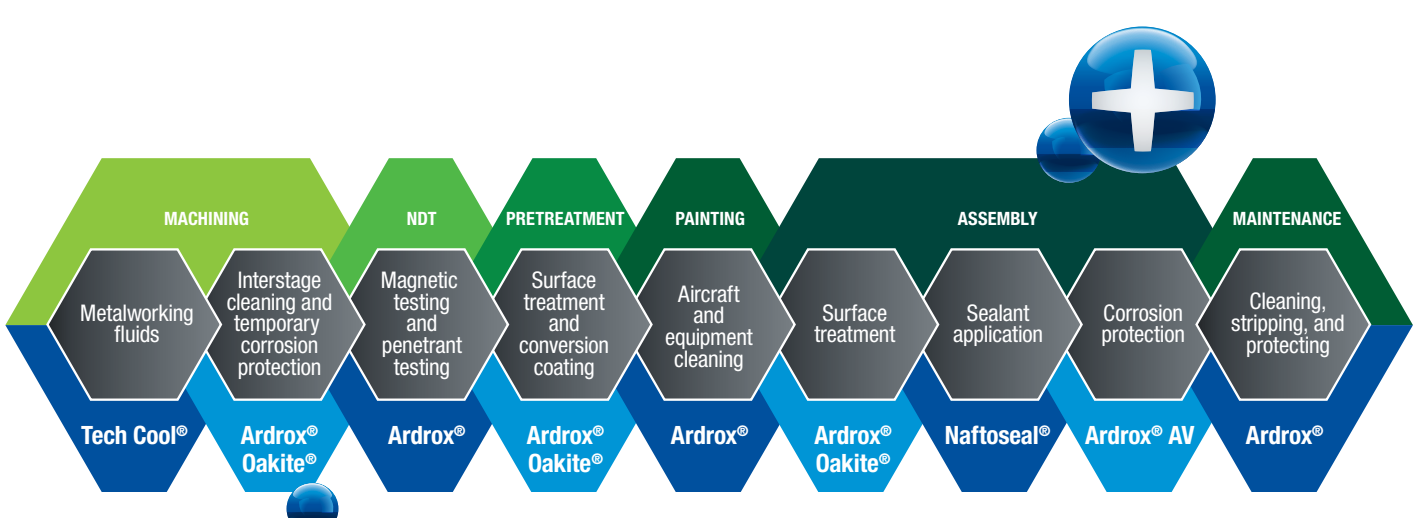
NON-DESTRUCTIVE TESTING

Chemetall offers a comprehensive portfolio of Non-Destructive Testing (NDT) products to fulfil the challenging requirements of global, civil, and military aviation standards, including AMS, Boeing, CEN ISO, General Electric, MIL, Pratt & Whitney, Rolls Royce, and more. For more information, please see our NDT line cards or visit our website.

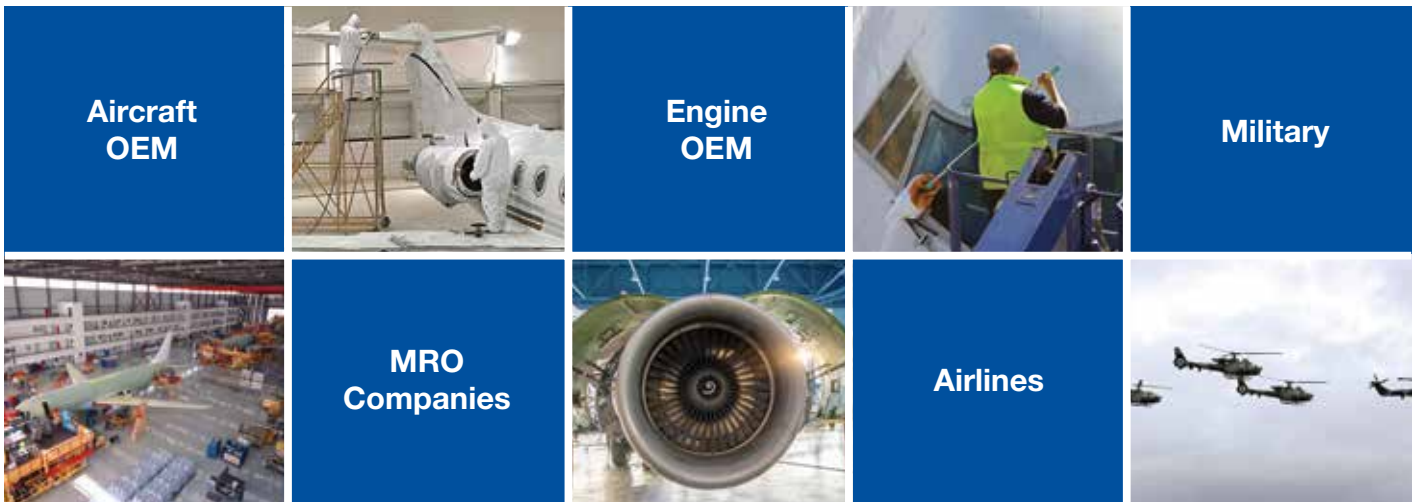
SEALANTS

Naftoseal® polysulphide sealants are easy to use, multi-purpose sealants used for all aircraft applications such as fuel tank, fuselage, floor panels, and aerodynamic smoothing. Adhesion promoters, tool and equipment cleaning and mixing devices round out our portfolio. For more information, please see our Sealant line card or visit our website.

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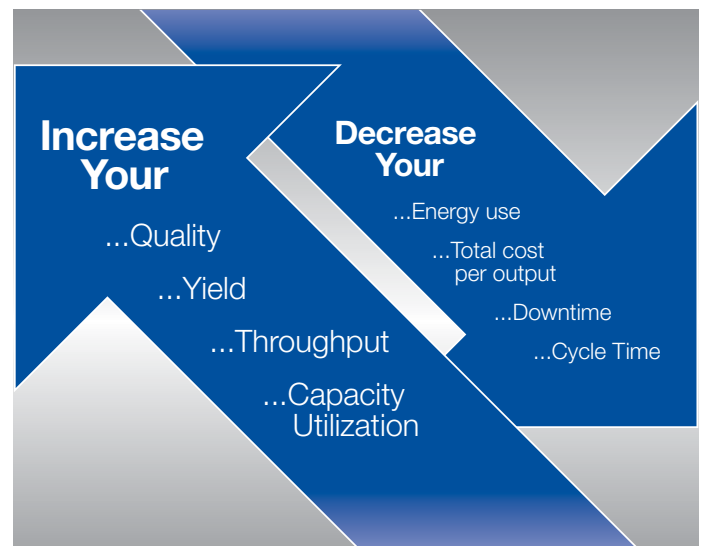
Our focus is you, our aerospace customer.



Cut it. Clean it. Coat it. Control it. Conserve it.® with us!

We are the Surface Treatment global business unit of the Coatings division of BASF, operating under the Chemetall brand, a leading supplier of applied surface treatments and services for metal, plastic, and glass substrates in a vast range of industries and end markets.

Our global specialists are locally available. Our experts provide focused, passionate, and accountable support. You can expect the highest quality from our integrated portfolio of innovative products. Our labs are fast and accurate. We will collaborate with you to increase the efficiency of your process performance.



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