



For product information contact:

Pretreatments, Aluminum, and Paint Support Technologies:

John Kochilla
WW Cleaners, Strippers, Pretreatments/ Paint Support Technologies Product Manager
 803.326.3439 (Office)
 216.4966266 (Mobile)
john.kochilla@atotech.com

All other:

Mary C. Traficante
Automotive Industry Manager, Americas
 803.817.3585 (Office)
mary.traficante@atotech.com

1. Environmentally Sound - General Metal Finishing Processes:

1.1. Metal pretreatment and aluminum post treatments

1.1.1. Steels

1.1.1.1. Biologically augmented low temperature, extended lifetime, non nonyl phenol cleaners – **Uniclean Bio®**, **UniPrep®**

1.1.2. Aluminum treatments including passivation and pre-paint

1.1.2.1. Non cyanide zincates – **TriBond® II**, **AlumSeal® 650**

1.1.2.2. Non hexavalent post treatments,

1.1.2.2.1. Trivalent chrome based post treatments – **Interlox® 338 (ZrCr)**

1.1.2.2.2. Non chrome based post treatments – **UniPrep® PP (borate ester)**, **Interlox® 5704(ZrMn)**, **Interlox 5705(ZrMg)**

1.1.3. Desmutt

1.1.3.1. Reduced NO_x non HF **Alumetch®**

1.1.4. Rubber bonding for steel and aluminum

1.1.4.1. **Interlox®** series, and **Uniprep®** series products

1.2. Paint support products

1.2.1. Paint strippers – **Master Remover**, **Rostrip®**

1.2.2. Biologically augmented paint detackification processes **KLEER AID®**

1.3. Decorative plating products

1.3.1. Electrolytic trivalent chromium electroplating processes for decorative applications **TRICHROME® plus**, **TRICHROME® smoke**

1.4. Functional electronics products

1.4.1. Lead free solders and alloys – **Stannopure®**

1.5. Wear resistant coatings (also see 1.7, tribological coatings)

1.5.1. Iron phosphorous electroplating for aluminum **Ferroplate®**

1.5.2. Lead and Cd free electroless nickel plating **Nichem® 11**

1.6. Corrosion resistant coatings

1.6.1. Non cyanide electrolytic zinc, **Protolux®** alkaline processes, **Zylite®** acid processes, and alkaline zinc alloy **Protedur®** processes with zinc crystallographic structure and **TruPlate®** mechanical zinc and zinc alloy processes.

1.6.2. Cadmium alternatives:

1.6.2.1. Highly conductive non cyanide electrolytic tin zinc alloy – **Reflectalloy® SnZn** (mildly acidic), and **TruPlate** mechanical tin zinc.

1.6.2.2. Corrosion resistant electrolytic non cyanide alkaline, 12-16% Ni, γ phase zinc nickel processes:

1.6.2.2.1. **Reflectalloy® ZnA** (bright (600) oriented γ phase ZnNi for barrel or rack),

1.6.2.2.2. **Reflectalloy® HD** (ductile (110) oriented γ phase ZnNi for rack),

1.6.2.2.3. **Reflectalloy® TF** ((110) oriented and subsequent organic layers).

1.6.2.2.4. **ZiNNi® Acid** Non ammonia acidic γ phase ZnNi for corrosion resistance

1.6.3. Post plating processes

1.6.3.1. Trivalent chrome passivation processes – **Ecotri®**, **Tridur®** processes, cobalt free **Rodip® ZnX**

1.6.3.2. Inorganic seals – **Rogard®** processes

1.6.3.3. Organic seals – **Corrosil®** processes

1.6.3.4. Organometallic seals – **Sealer 300W**

1.7. Tribological coatings

1.7.1. For torque tension, mandrel endurance, and anti galling –

1.7.1.1. **Rogard® Lube** dry film processes,

1.7.1.2. **Corrosil®** integral seals and lubricants,

1.7.1.3. **Tridur® Enhancer** for inverted lubrication

1.7.2. Electroless nickel processes:

1.7.2.1. Composite PTFE Ni_xP_y cold flow resistant (tested to 20°K) - **Niflor®**

1.8. Energy and materials saving processes

1.8.1. **Dynachrome®** automated contained hexavalent chrome plating module.

1.8.2. **Dynaglide®** automated contained zinc and zinc alloy plating/painting module.

1.8.3. **EDEN®** electrodialysis for electroless nickel material conservation module.

1.8.4. **Tricotect®** ion exchange process for material conservation of trivalent passivates.

1.8.5. **Nikotect®** purification system for material conservation in nickel plating.

1.8.6. **ZypHex®** purification system for material conservation in acid zinc plating processes

1.8.7. **UniClean Bio®** low temperature cleaners

1.8.8. **Fuel cell** reactor products

1.8.9. Electrodeposited **photovoltaic** materials

2. Environmentally Sound Electronics

Chemistries:

2.1. Surface treatment

2.1.1. Alternative oxide for bonding innerlayers – **Bondfilm®**, **Secure HTG®**

2.1.2. Resist adhesion promoters – **Ferroetch®**, **Cupraetch® AE**

2.2. Final Finish

2.2.1. Electroless Nickel/Immersion Gold – **Aurotech®**

2.2.2. Universal finish – **PD-Tech-PC** (Nickel/Palladium Gold) for gold and aluminum wire bonding.

2.3. Copper Plating

2.3.1. DC and pulse plating - **Cuprapulse**, **Cupracid TP**

2.3.2. Electroless copper – **Printoganth® PV**, **Printoganth® P**



Featured Products (Interlox 338)



Pretreatment Technology | Product Profile

Interlox 338

Trivalent Passivate for Aluminum Alloys

Interlox 338

is a liquid passivate and prepaint treatment based upon trivalent chromium. Applied by immersion or spray application, it produces a uniform conversion coating on wrought and cast aluminum alloy surfaces. The process is easy to control with long solution life that delivers consistent performance. It represents the latest in environmental compliance that benefits from a low temperature, energy efficient operation.

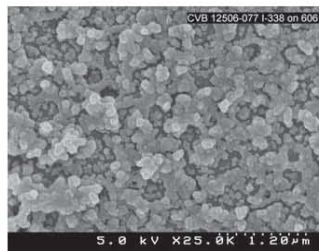
Interlox 338

coatings provide excellent corrosion resistance with superior paint and coating adhesion. Performance is comparable to conventional conversion coatings providing an ideal alternative to hexavalent chromium processes.



Features

- >> Hexavalent chromium-free
- >> Produces a clear, slightly iridescent film on aluminum alloys
- >> Excellent corrosion resistance
- >> Excellent adhesion with conventional wet paints and powder coatings
- >> Exhibits low electrical resistance, critical for any electronic application
- >> ELV, WEEE, and RoHS compliant



Atotech USA Inc. • 1750 Overview Drive • Rock Hill, SC 29730-2000
Tel.:(+1) 8 03-817-35 00 • Fax:(+1) 8 03-816-35 51 • www.atotechusa.com

Featured Product (Master Remover 4000)



Paint Support Technology | Product Overview

Master Remover 4000

Paint Removal Process

Master Remover 4000 is a dual-phase paint removal process utilizing bioremediation and filtration to significantly extend bath life. Applied by spray or immersion, this methylene chloride-free formula is capable of breaking the bond between metal and paint, leaving a clean stripped substrate that can be re-painted and/or re-worked.

Master Remover 4000 paint removal process exhibits fast stripping rates and extended life under high loading capacity and closed loop environments. Stripping performance is comparable to conventional methylene chloride paint removal processes, and is proven to be effective for stripping wet and powder paints.



A global automotive OEM trusted Master Remover on this historic component, which now resides fully restored in a prestigious museum



Features

- >> Long-life, dual-phase process
- >> Effective for stripping wet and powder paint from steel, cast iron, noble metals, super alloys, magnesium alloys and most copper alloys
- >> Fast stripping rate by spray and immersion applications
- >> **Methylene chloride-free**
- >> High loading capacity



Atotech USA Inc. • 1750 Overview Drive • Rock Hill, SC 29730-2000
Tel: (+1) 803-817-3500 • Fax: (+1) 803-817-3551 • www.atotechusa.com

(C) Atotech USA Inc. - 4/2007