Leading the Industry in Cleaning Technology for Over 30 Years.
## Aqua ROSE™ Batch Cleaner / ROSE Tester

**CHEMISTRY TYPE:**
Water and Aqueous Cleaning Chemistries

**SYSTEM CAPABILITIES:**
Saves Time and Money by Combining Cleaning and Testing in One Step

Austin American Technology’s Aqua ROSE™ cleaner / tester is the only aqueous batch cleaner with automatic IPC “ROSE” cleanliness testing built into the cycle assuring proper cleaning every cycle.

**Cleans All Flux Types with Programmable Selection**
The Aqua ROSE™ cleans all flux types using aqueous based chemistries or water only with multiple recipes depending on the model type.

**Earth Smart Cleaning Saves Power and Water**
The Aqua ROSE™ cleaning system can be configured with a closed loop wash and rinse.

**Tool Specifications:**
Footprint: 32.5”W x 27.25”D x 61.5”H (82.55 cm x 69.22cm x 156.21cm)
Electrical: 208/230V, 50/60Hz, 20AMPs Single Phase
Weight: 350 lb (159 kg)

<table>
<thead>
<tr>
<th>Configurations</th>
<th>Aqua ROSE–OL™</th>
<th>Aqua ROSE–CL™</th>
<th>Aqua ROSE–ES™</th>
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<tbody>
<tr>
<td>Wash</td>
<td>Open Loop Pump to Drain</td>
<td>Closed Loop</td>
<td>Closed Loop</td>
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<tr>
<td>Rinse</td>
<td>Open Loop Pump to Drain</td>
<td>Open Loop Pump to Drain</td>
<td>Closed Loop</td>
</tr>
<tr>
<td>Chemistry or Water Only</td>
<td>Water Only</td>
<td>Chemistry</td>
<td>Chemistry</td>
</tr>
</tbody>
</table>

### Standard Features

- Cleans All Fluxes
- Automatic “ROSE” Cleanliness Tester
- Fast Cycle Time for Wash, Rinse, “ROSE” Test, and Dry
- Efficient Coherent Washing and Rinsing Jets with 3 Spray Wands
- Rapid Drying with Three Manifolds
- 2 Board Racks with 4 Pin Inserts
- Programmable “ROSE” Limits 0.01 to 10.00 ug NaCl eq/CM²
- Automatic Data Logging (USB)
- Easy Programming with Password Protection
- Stainless Steel Cabinet and Processing Chamber
- Heated Wash and Rinse 104–176F (40-80°C)
- Programmable Rinse Purity 0.05 – 100uS
- Auto Chemistry Mixing 4-20%
- Viewing Window with Internal LED Lighting
- 9” Industrial Touch Screen
- Quiet Operation: < 60 db
- Max Board Size: 18” x 20” (45.72cm X 50.8cm)

### Options

- Flash Heater for Rinse (requires 60 AMPs)
- Drip Tray
- Light Tower
- Transfer Station (CL & ES only)
Aqua ROSE–ES™ Batch Cleaner ROSE Tester

Aqua ROSE–CL™ Batch Cleaner ROSE Tester
AquaTherm 9100™ Open Loop Batch Cleaner

**CHEMISTRY TYPE:**
Water and Aqueous Cleaning Chemistries

**SYSTEM CAPABILITIES:**
- Multiple Cleaning Technologies
- Removes Fluxes in Tight Spaces
- Rinses to Programmable Ionic Level
- Standard Chemical Metering Pump
- High Temperature (199F) Operation
- Multiple Steam Cycle Capability
- User-Friendly Operator Interface
- Cleans with Water Only or Chemistry

**Cleans All Flux Types with Programmable Selection**
The AquaTherm 9100™ cleans all flux types using aqueous based chemistries or water only with multiple recipes depending on the model type.

**Tool Specifications:**
- **Footprint:** 24.2” W x 27.5” D x 51.5” H (61.5 cm x 69.9 cm x 130.8 cm)
- **Electrical:** 208/230V, 50/60Hz, 20AMPs Single Phase
- **Weight:** 300 lb (136 kg)

### Standard Features

- Chemistry / Water Cleaning
- Open Loop Wash and Open Loop Rinse
- Top, Middle, and Bottom Coherent Jet Nozzles
- Auto Fill and Drain
- High Temperature Operation
- Rinse Cleanliness Verification
- 12 Programmable Recipes
- Forced Air Drying System
- Mirror Bright Type 304 Stainless Steel Interior
- Easily Configured Top and Bottom Racks
- Electronic Controls with User Friendly Interface
- Quiet Operation: < 60 Db
- Process Viewing Window
- Internal LED Lighting

- Superior Cleaning Performance
- Steam Penetrates and Softens Baked-on Residues
- Eliminates “Blind” Areas When Fully Loaded
- Suitable for Micro-circuitry and Semiconductor
- Built for Durability and Chemical Resistance
- Standard Chemical Metering Pump
- Accommodates a Wide Range of Product Sizes and Shapes
- Easy to Learn
- Easy to Operate
- Saves Energy, Minimal Space Requirements
- High Temperature < 199F (92.78C) Operation
- Max Board Size: 18” x 20” (45.72cm X 50.8cm)
AquaTherm 9100™ Open Loop Batch Cleaner
Mega® Series

CHEMISTRY TYPE:
Water, IPA, Complex Alcohols, And Organic Solvents

SYSTEM CAPABILITIES:

Pre-conformal Coat Cleaning
The Mega ION® Solvent Cleaner is perfect for pre-conformal coat cleaning. The built-in “ROSE” test assures every batch cleaned meets IPC cleanliness guidelines and is compatible with IPA and many other original solvents.

Primary Defluxing
Designed for use with many primary defluxing solvents to allow for cleaning a full range of circuit assemblies.

Degreaser Replacement
Mega SA’s® sealed cleaning system is compatible with traditional degreasing solvents and with many other non-azeotropic cleaning solvents.

Built-in Solvent Ionic Regeneration
Increases bath life by removing flux and other contamination from the wash solution. This provides on average a 100 X Reduction in Solvent Consumption.

NOTE: Check for Solvent Compatibility

Tool Specifications:
Footprint: 36”W x 30”D x 64”H (91.44 cm x 76.2 cm x 162.6 cm)
Electrical: 220V, 60 Hz, 20AMPs, Single Phase
Weight: 350 lb (159 kg)

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<table>
<thead>
<tr>
<th>Configurations</th>
<th>Mega ION®</th>
<th>Mega SA®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>• Clean Only</td>
<td>• Clean Only</td>
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<tr>
<td></td>
<td>• Clean and “ROSE” Test</td>
<td></td>
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<tr>
<td></td>
<td>• “ROSE” Test Only</td>
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<tr>
<td>Solvent Compatibility</td>
<td>• IPA, Complex Alcohols, and Organic Solvents</td>
<td>• Terpene and Other Organic Solvents</td>
</tr>
<tr>
<td>Rinse</td>
<td>• Closed Loop Single Solvent</td>
<td>• Open Loop Water Rinse to Drain</td>
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</tbody>
</table>

Standard Features

- Fast Cycle Times (15-20 Minutes per Batch)
- Spray Under Immersion
- Multi-Solvent Capable
- Ionic Contamination Test (IPC – ROSE)
- Ideal for High Reliability Cleaning
- 15” Color Touch Screen Industrial Interface
- Designed for Safety, Sealed Process Chamber
- Stainless Steel Construction with Vent Hood
- Built-in Solvent Purification
- Extends Solvent Life 100X
- VOC Regulation Compliant (SCAQMD Rule 1171)
- Quiet Operation < 70 Db

Options

- Heated Holding Tank < 150F (65C) – Service Requirement 30AMPs
- Hot Vortex Dryer
- Process Data Logging
- Extra Large Tank and Custom Tank Sizes Available
Mega ION® Pre-conformal Coat Cleaner / ROSE Tester

Mega SA® Solvent Cleaner
**X30™ & X40™ Series Stencil / Misprint / PCB Cleaner**

**CHEMISTRY TYPE:**
X30™ and X40™ models are available for flammable and combustible solvents/chemistries as well as aqueous based chemistries.

**SYSTEM CAPABILITIES:**

**Stencil / Misprint / PCB Defluxing All In One System**
The X-Series system is designed around counter-rotating blind hole high energy spray bars. The added pressure allows the system to successfully clean fine pitch stencils, low stand-off components, misprinted through-hole, blind assemblies, and the ability to remove uncured glues and adhesives, yet gentle enough to use on frameless and foil stencils.

**Independent Wash and Rinse Holding Tanks**
The system features two independent holding tanks, which allow for lower water use. Final DI water rinse (if selected) displaces spent rinse water in the rinse tank throughout the rinse operation. This provides for higher tank cleanliness, and component cleanliness.

**Large Process Chamber Dimensions**
- **X-30™ Series Process Reservoir:** 30” x 30” x 3” (76.2 cm x 76.2 cm x 7.62 cm)
- **X-40™ Series Process Reservoir:** 40” x 40” x 3” (101.6 cm x 101.6 cm x 7.62 cm)
Conforms with NFPA 70, NFPA 79, IES, NEMA 1, NFPA 13, OSHA

**Tool Specifications:**
- **X30A™ Footprint:** 48.5” W X 44” D X (49” to 80”) H (123.19 cm x 111.76 cm x (124.46 cm x 203.2 cm))
- **X40A™ Footprint:** 58.5” W X 44” D X (49” to 80”) H (148.59 cm x 111.76 cm x (124.46 cm x 203.2 cm))
- **Electrical:** 220V, 60Hz, 20AMPs, 3 Phase
- **X30A™ Weight:** 500 lb (227 kg) **X40A™ Weight:** 700 lb (318 kg)

### Standard Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Clean Stencils</th>
<th>Clean Misprints</th>
<th>PCB De-fluxing</th>
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<tbody>
<tr>
<td>Automatic Wash, Rinse, and Dry</td>
<td>about 10 minutes</td>
<td>about 20 minutes</td>
<td>about 25 minutes</td>
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<tr>
<td>High Impingement Counter Rotating Wash Spray Bars</td>
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<tr>
<td>Heated Chemistry Wash &lt;130F (55°C)</td>
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<tr>
<td>Effective Programmable Chemistry Isolation</td>
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<td>Fixed Rinse and Air Dry</td>
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<td>Built in Drain Pump</td>
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<tr>
<td>Automated Chemical Metering Pump</td>
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### Options

<table>
<thead>
<tr>
<th>Feature</th>
<th>Clean Stencils</th>
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<tbody>
<tr>
<td>Closed Loop Rinse</td>
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<tr>
<td>Misprint PCB Water Knife–Final Rinse</td>
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<td>Hot Vortex Air Dry</td>
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<tr>
<td>Spring Board Holder</td>
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### Environmental Benefits

<table>
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<tr>
<th>Feature</th>
<th>Clean Stencils</th>
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<th>PCB De-fluxing</th>
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</thead>
<tbody>
<tr>
<td>Closed Loop Wash</td>
<td></td>
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<tr>
<td>Wash and Rinse Waste Stream Filtration</td>
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<tr>
<td>Low Energy and Chemical Consumption</td>
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</table>
X30A™ & X40A™ Stencil / Misprint / PCB Cleaner
ExtremeJet® Inline Cleaner

**CHEMISTRY TYPE:**
Water and Semi-Aqueous Cleaning Chemistries

**SYSTEM CAPABILITIES:**
- 15” Color Touch Screen Industrial Interface – PLC Controlled
- LED Lighted Interior
- Double Tempered Glass Viewing Windows
- Stainless Steel Plumbing, Wash and Rinse Spray Bars
- Washes with Chemistry or Water in One Machine
- 18” (45.72 cm) Conveyor Belt
- Heated Chemistry Wash Up to 150 F (66 C)
- Heated Chemistry Rinse Up to 140 F (60 C)
- Progressive Energy Dynamics (PED) Wash and Rinse Spray Manifolds
- Effectively Rinses Under Tight Spaces and Small Gaps
- New Air Curtain Isolation Cells
- Built-In Demister
- Foam Detection with De-foam Metering Pump (option)
- Short Cycle Time for Typical Wash, Rinse, and Dry (High Throughput)
- Patented Dual Manifold Drying
- HEPA Air Filtration
- VFD Controlled Pumps and Blowers
- Integrated Closed Loop DI System Saves Water and Heat Costs
- Low Maintenance
- Low Operating Cost Saves Resources
- “GREEN” Zero Discharge to Drain (except during maintenance)
- Automatic Chemical Metering with Chemistry System
- Automatic Resistivity Monitoring and Alarm
- Optional Customized Lighted Name Badge

**Tool Specifications:**
- **Footprint:** 10’ x 5’ x 5’ (304.8 cm x 152.4 cm x 152.4 cm)
- **Electrical:** 480V, 50/60Hz, 150AMPS, 3 Phase
- **Weight:** 4000 lb (814 kg)
- **Quiet Operation:** <80 db
**Superior Wash & Rinse Technology with New Air Curtain Isolation – When Using Chemistry**

- With ExtremeJet’s® advanced dual cleaning technology and new air curtain isolation, the dual action spray bars combine coherent spray jets that use high impingement energy to clean tough areas and flooding jets to give the highest performance with variable board geometries to create the ultimate cleaning experience. AAT has also added 4 new air curtain isolation cells with coherent jet technology to cut chemistry consumption by reducing drag out, improving DI closed-loop bed life, and speeding up the process.

- We use coherent jets with PED in our power rinse section. There is a final “polishing rinse” before going to our dryer which is metered and alarmed.

**Industry Leading Patented Jet Dryer**

- Our patented Coherent Air Jet Dryer gives you the best drying possible at the lowest energy costs. Since we are using displacement drying we do not need to bring in additional heat to try to evaporate the water which can leave baked on ionics on your boards. We have 2 upper and 2 lower Jet Manifolds that get your boards much dryer in a shorter space at higher throughput speeds than any other inline available.

**Earth Smart Closed Loop Rinse System Built-in**

- All of AAT’s Jet® Inline cleaners come standard as a closed-loop system. Earth Smart green cleaning closed loop systems save chemistry, save water, lower operational costs, and save money and the environment.

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**ExtremeJet® Inline Cleaner**
HydroJet® Inline Cleaner

**CHEMISTRY TYPE:**
Water and Semi-Aqueous Cleaning Chemistries

**SYSTEM CAPABILITIES:**
- Washes with Chemistry or Water in One Machine
- 24” (60.96 cm) Conveyor Belt
- 15” Color Touch Screen Industrial Interface – PLC Controlled
- LED Lighted Interior
- Double Tempered Glass Viewing Windows
- Stainless Steel Manifold and Spraybars in Wash and Rinse Sections
- Heated Chemistry Wash Up to 150 F (66 C)
- Heated Chemistry Rinse Up to 140 F (60 C)
- Progressive Energy Dynamics (PED) Wash and Rinse Spray Manifolds
- Effectively Rinses Under Tight Spaces and Small Gaps
- Foam Detection with De-foam Metering Pump (option)
- Patented Jet Manifold Drying
- Fluid Isolation System
- Short Cycle Time Belt Speeds up to 5’ per Minute for a Typical Wash, Rinse, and Dry
- Integrated Closed Loop DI System Saves Water and Heat Costs
- HEPA Air Filtration
- VFD Controlled Pumps and Blowers
- Low Maintenance
- Low Operating Cost Saves Resources
- “GREEN” Zero Discharge to Drain (except during maintenance)
- Automatic Chemical Metering with Chemistry System
- Automatic Resistivity Monitoring and Alarm

**Tool Specifications:**
- **Footprint:** 16'9" x 6' x 5' (515.11 cm x 182.88 cm x 152.4 cm)
- **Electrical:** 480V, 50/60Hz, 200AMPs, 3 Phase
- **Weight:** 4000 lb (1814 kg)
- **Quiet Operation:** <85 db
### Progressive Energy Dynamics (PED) Provides Superior Wash Technology

- Progressive Energy Dynamics: Based on our Computational Fluid Dynamics (CFD) modeling we developed a Coherent Jet Wash Spray Technology with PED for our wash section. The concept of PED is to increase the energy from the first spray bar to the last in the entire wash section, starting with a flooding jet and progressing to a High Energy Coherent Jet. This gives you the best and fastest removal of flux possible.

- Coherent Jets are solid streams of fluid that have the highest impingement pressure at the board surface. Once they hit the board, they are omni-directional giving you the best flux removal as well as best under low profile component penetration needed for cleaning to 1ml gaps.

### Superior Rinsing

- We use coherent jets with PED in our power rinse section. There is a final “polishing rinse” before going to our dryer which is metered and alarmed.

### Industry Leading Patented Jet Dryer

- Our patented Jet Manifold drying system removes water from the PCB without using an independent heater, eliminating the tendency to “bake” unwanted ionic contamination on the assembly. The HydroJet® uses a HEPA filter to minimize particulate contaminate of sensitive electronics. We have 2 upper and 2 lower Jet Manifolds that get boards much dryer in a shorter space at higher throughput speeds than any other in-line available.

### Superior Isolation – When Using Chemistry

- Wet and Jet Dry Isolation ensures superior chemistry removal and recovery. With our patented Air Jet technology, overall you will get better chemical isolation and recovery with our system which saves on chemistry costs.

### Earth Smart Closed Loop Rinse System Built-in

- All of AAT’s Jet® Inline cleaners come standard as a closed-loop system. Earth Smart green cleaning closed loop systems save chemistry, save water, lower operational costs, and save money and the environment.

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**HydroJet® Inline Cleaner**
What is Earth Smart Certified?

- Lowest Water Consumption
- Lowest Chemical Consumption
- Lowest Power Consumption
- Highest Cleaning Performance
- Advanced Process Features
- Zero Discharge to Drain

AAT “Smart” Cleaners

- All AAT cleaners are now equipped with “Earth Smart” Technology. Earth Smart is the direct result of over thirty years of AAT’s leadership in providing production worthy intelligent closed loop cleaning systems.
- AAT’s Earth Smart provides a powerful combination of cost cutting aqueous or solvent fluid recycling systems, patented energy saving features and advanced factory process communication capabilities.

Benefits For Using Earth Smart Technology

- Saves Time and Money
- Saves on Water Consumption
- Saves on Chemical Consumption
- Saves on Power Consumption

AAT’s Earth Smart Cleaners Include

- Patented Resin Closed Loop Technology
- Automatic “ROSE” Cleanliness Testing
- Intelligent Alarms (level, temps, resistivity, etc.)
- Compatibility with Aqueous or Organic Solvents
- Proven Best “Progressive Energy Dynamic” (PED) Cleaning and Rinsing Jets
- Patented High Efficiency Displacement Drying
- Cost Saving Dry-Wet-Dry Chemical Isolation
- Programmable Final Rinse Cleanliness

Filtration Technology Used in Earth Smart Cleaners

- Molecular Sieve (Water Removal)
- Particulate (Particle Removal)
- Carbon (Organic Removal)
- DI (ION Removal)
Over 30 Years of Service and Support

The cornerstone of AAT has been servicing our customers for the life of their equipment. The focus at Austin American Technology has always been engineering. Our systems are designed to maximize performance and minimize cost of ownership. With over thirty years of collective experience in the electronics and semiconductor industries, we lead the industry in design and process knowledge.

Over 30 Years of Innovative Cleaning Technology

AAT was founded in 1986, as a provider of SMT production equipment and process engineering testing services. In 1988, our focus shifted toward the high-end electronics cleaning segment with the introduction of the world’s first automated stencil cleaner. In the 1990’s, we developed several batch cleaning systems and were early adopters of closed-loop (zero-discharge) capability. During that period, we acquired the cleaning equipment division of ECD, offering batch systems that excelled in solvent and semi-aqueous-based cleaning.

In 2000, Austin American Technology became a market leader in inline cleaning systems with the introduction of the award-winning HydroJet® series. Patented cleaning and drying technologies were incorporated into an energy and space-efficient format to set new standards for performance and low cost of ownership. Building on this success, AAT introduced the MicroJet® inline flip chip cleaner to provide high volume cleaning capability in a small footprint. In 2013 AAT introduced the world’s smallest most efficient inline cleaner, the NanoJet®.

Remote and On-Site Service and Support

One of the key things in keeping your equipment in optimal performance is maintaining your system throughout the life of your equipment. AAT’s equipment is designed to minimize downtime and maximize ease of maintenance.

Austin American Technology’s premier service and support staff are highly trained and committed to our customers, providing true global support solutions.

Annual Preventative Maintenance

Keep your AAT cleaning equipment in factory perfect condition.

Service Contracts

Save money with contractual service plans.

Parts Sales

Call and get the right parts for your cleaner fast.

Upgrades

Technology changes at AAT get the newest improvements on existing systems.

Request a Quote

For information on any services above, call 512-756-4150.