

Leading the Industry in Cleaning Technology since 1986.





AquaTherm 4.0[™] Entry Level Batch Cleaner | Open Loop

CHEMISTRY TYPE:

Water and Aqueous Cleaning Chemistries

SYSTEM CAPABILITIES:

Multiple Cleaning Technologies Removes Fluxes in Tight Spaces Rinses to Programmable Ionic Level High Temperature Operation User-Friendly Operator Interface Cleans with Water Only or Chemistry

Cleans All Flux Types with Programmable Selection

The AquaTherm $4.0^{\rm m}$ cleans all flux types using aqueous based chemistries or water only with multiple recipes.

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, 40AMPs Single Phase Weight: 350 lb (159 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
- 999 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: < 60dB

- Process Viewing Window
- Internal LED Lighting
- Superior Cleaning Performance
- Eliminates "Blind" Areas When Fully Loaded
- Suitable for Micro-circuitry and Semiconductor
- Built for Durability and Chemical Resistance
- Accommodates a Wide Range of Product Sizes and Shapes
- Easy to Learn
- Easy to Operate
- Saves Energy, Minimal Space Requirements
- High Temperature Operation
- Max Board Size: 18" x 20" (45.72cm X 50.8cm)





AquaTherm 4.0

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Aqua ROSE 4.0[™] Batch Cleaner / ROSE Tester

CHEMISTRY TYPE:

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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 4.0[™] 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 4.0[™] cleans all flux types using aqueous based chemistries or water only with multiple recipes.

Earth Smart Cleaning Saves Power and Water

The Aqua ROSE 4.0 $^{\rm M}$ 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, 40AMPs Single Phase Weight: 350 lb (159 kg)

Configurations	Aqua ROSE–ES™	Aqua ROSE–CL [™]	Aqua ROSE–OL™			
Wash	Closed Loop	Closed Loop	Open Loop Pump to Drain			
Rinse	Closed Loop	Open Loop Pump to Drain	Open Loop Pump to Drain			
Chemistry or Water Only	Chemistry	Chemistry	Water Only			
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 10.00ug NaCl eq/CM2 Automatic Data Logging (Ethernet or USB) 		 Easy Programming with Password Protection Stainless Steel Cabinet and Processing Chamber Heated Wash and Rinse 104–176F (40-80C) Programmable Rinse Purity 0.05 – 20µS Auto Chemistry Mixing 3 – 26% Viewing Window with Internal LED Lighting 9" Industrial Touch Screen Quiet Operation: < 60dB Max Board Size: 18" x 20" (45.72cm X 50.8cm) 				
Options						
 Flash Heater for Rinse (requires 60AMPs) Drip Tray Sample Port 		 Light Tower Transfer Station (CL & ES only) Bar Code Scanning 				

Austin American Technology









Aqua ROSE 4.0–CL[™] Batch Cleaner ROSE Tester







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 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 100X 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)

Configurations	Mega ION°		Mega SA°			
Process	 Clean Only Clean and "ROSE" Test "ROSE" Test Only 		• Clean Only			
Solvent Compatibility	IPA, Complex Alcohols, and Organic Solvents		Terpene and Other Organic Solvents			
Rinse	Closed Loop Single Solvent		Open Loop Water Rinse to Drain			
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 < 70dB 				
Options						
 Heated Holding Tank < 150F (65C) – Service Requirement 30AMPs Hot Vortex Dryer 		 Process Data Logging Extra Large Tank and Custom Tank Sizes Available 				







 $Mega~ION^{\circ}~Pre\text{-}conformal~Coat~Cleaner~/~ROSE~Tester$









X30 4.0[™] & X40 4.0[™] 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 throughhole, blind assemblies, and the ability to remove uncured glues and adhesives, yet gentle enough to use on frameless and foil stencils. The integration of the New I/O Link Smart Devices provide the best reliability and simplify future maintenance.

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 (59" to 90") H (123.19 cm x 111.76 cm x (149.86 cm to 228.6 cm)

X40A[™] Footprint: 58.5″ W X 44″ D X (59″ to 90″) H

(148.59 cm x 111.76 cm x (149.86 cm to 228.6 cm) Electrical: 220V, 60Hz, 20AMPs, 3 Phase

X30A[™] Weight: 700 lb (318 kg) X40A[™] Weight: 1100 lb (499 kg)



Standard Features	Clean Stencils	Clean Misprints	PCB De-fluxing				
Automatic Wash, Rinse, and Dry	about 10 minutes	about 20 minutes	about 25 minutes				
I/O Link Smart Devices	•	•	•				
High Impingement Counter Rotating Wash Spray Bars	•	•	•				
Heated Chemistry Wash <140F (60C)	•	•	•				
Effective Programmable Chemistry Isolation	•	•	•				
Fixed Rinse and Air Dry	•	•	•				
Built in Drain Pump	•	•	•				
Automated Chemical Metering Pump	•	•	•				
Options							
Closed Loop Rinse	•	•	•				
Misprint PCB Water Knife–Final Rinse		•	•				
Hot Vortex Air Dry	•	•	•				
Spring Board Holder		•	•				
Environmental Benefits							
Closed Loop Wash	•	•	•				
Wash and Rinse Waste Stream Filtration	•	•	•				
Low Energy and Chemical Consumption	•	•	•				



X30A[™] & X40A[™] Stencil / Misprint / PCB Cleaner







NanoJet[®] Inline Cleaner

CHEMISTRY TYPE:

Water OR Semi-Aqueous Cleaning Chemistries

SYSTEM CAPABILITIES:

12" Conveyor Belt Includes 12" On load/Off load Progressive Energy Dynamic Spray Bars (PED) High Speed Cleaning (0.5 to 3.0 FPM) Coherent Jet Spray Bars Reach Under Low-Profile Components Air Knife Isolation for Low Chemistry Consumption HEPA Dry Air Filtration Integrated DI Closed Loop System "GREEN" Zero Discharge to Drain (except during maintenance) Low Power Consumption Automatic Chemical Management System Integrated Internal LED Lighting Color Touch Screen Interface

Tool Specifications:

Footprint: 8' 0" X 3' 8" X 4' 2" (2.44m x 1.15m x 1.28m) Electrical: 480V, 50/60Hz, 100AMPs, 3 Phase Weight: 2500 lb (1134 kg) Quiet Operation: <80dB



Progressive Energy Dynamics Wash & Rinse Technology

 Austin American Technology's breakthrough advances in cleaning technology bring Progressive Energy Dynamics (PED) to the NanoJet® inline Cleaning System resulting in cleaning power unequaled in its class. Developed using complex modeling techniques, this innovative approach to cleaning ensures that each progressive stage in the process optimizes mechanical, thermal, and chemical energy to achieve the best possible performance. High-density assemblies can be effectively cleaned at line speeds in a footprint similar to closed loop batch systems.

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.



NanoJet[®] Inline Cleaner







MicroJet® EC Inline Water Cleaner

SYSTEM CAPABILITIES:

18" Conveyor Belt Includes 18" On load (Off load Optional) Progressive Energy Dynamic Spray Bars (PED) High Speed Cleaning (0.5 to 4.0 FPM) Coherent Jet Spray Bars Reach Under Low-Profile Components Patented Displacement Drying HEPA Dry Air Filtration Integrated DI Closed Loop System "GREEN" Zero Discharge to Drain (except during maintenance) Low Power Consumption PLC Controlled Industrial Color HMI Integrated Internal LED Lighting Immersion Heaters w/ Built In Overload Protection Heated Water Wash Up to 150F (66 C) De-Foam Metering Pump w/ Foam Detection Sensor (Optional)

Tool Specifications:

Footprint: 8'6" x 5' x 5' (259.1cm x 152.4cm x 152.4cm) Electrical: 480V, 50/60Hz, 100AMPs, 3 Phase Weight: 2000 lb (1814 kg) Quiet Operation: <85dB



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 1mil 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 MicroJet EC[®] 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.









ExtremeJet® Inline Cleaner

CHEMISTRY TYPE: 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, Manifolds, Wash and Rinse Spray Bars 18" (45.72 cm) Conveyor Belt Heated Chemistry Wash Up to 150F (66C) Heated Water Rinse Up to 140F (60C)" Progressive Energy Dynamics (PED) Wash and Rinse Spray Manifolds Effectively Cleans and 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 Final Rinse Resistivity Monitoring and Alarm Optional Customized Lighted Name Badge

Tool Specifications:

Footprint: 10' x 5' x 5' (304.8cm x 152.4cm x 152.4cm) (excludes On-Load and Off-Load) Electrical: 480V, 50/60Hz, 125AMPs, 3 Phase Weight: 3000 lb (1360 kg) Quiet Operation: <80dB

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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.



ExtremeJet[®] Inline Cleaner







HydroJet® Inline Cleaner

CHEMISTRY TYPE: Water and Semi-Aqueous Cleaning Chemistries **SYSTEM CAPABILITIES:** Washes with Chemistry or Water Only 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 Manifolds and Spraybars in Wash and Rinse Sections Heated Chemistry Wash Up to 150F (66C) Heated Water Rinse Up to 140F (60C) Progressive Energy Dynamics (PED) Wash and Rinse Spray Manifolds Effectively Washes and Rinses Under Tight Spaces and Small Gaps Foam Detection with De-foam Metering Pump (option) Patented Jet Manifold Drying Fluid Isolation System Short Cycle Times with Belt Speeds up to 5' per minute Integrated Closed Loop DI System Saves Water and Heating 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 Final Rinse Resistivity Monitoring and Alarm **Tool Specifications:**

Footprint: 16'9" x 6' x 5' (515.11cm x 182.88cm x 152.4cm) Electrical: 480V, 50/60Hz, 200AMPs, 3 Phase Weight: 4000 lb (1814 kg) Quiet Operation: <85dB

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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 1mil 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.

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.

Earth Smart Closed Loop Rinse System Built-in





HydroJet[®] Inline Cleaner





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

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'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



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Service and Support since 1986!

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[®].

In late 2018 AAT introduced the smallest footprint and most economical high capacity inline cleaner on the market, the ExtremeJet. It is leading the industry in low chemistry consumption, lowest power requirement, best cleaning and drying, and fastest process speeds among any available cleaner. We will continue to build on this platform to lead the industry in effective, green, and space saving cleaning equipment.

Remote and On-Site Service and Support

One of the key things in keeping your equipment in optimal performance is maintaining your system through out the life of your equipment. AAT's equipment is designed to minimize down time 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

Get the newest technology for your aging equipment with complete refurbishment or simple upgrades.

Request a Quote

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



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