# Product Overview







Solder, Desolder & Rework

SMT & Area Array Rework Fume Extraction

Solutions and Systems for Soldering, Rework & Repair of Electronics







# Single-Channel Systems

### The ADS200 AccuDrive® System has been updated!

As we continue to bring you the best in soldering & rework systems, we're proud to announce a major update to the ADS200 AccudDrive® System. Starting in the Spring of 2024, the ADS200 will now be called the **ADS200 PLUS.** Through redevelopment of the entire thermal cycle, from power source to tip heater cartridge, the ADS200 PLUS is now **more responsive** when higher thermal demand is required in the soldering process, as well as offering **improved thermal recovery.** PACE is happy to provide these enhancements at no extra cost!



# ADS200 PLUS

ADS200 PLUS with TD200 AD PN: 8007-0578 (120V), 8007-0580 (230V)

PACE's ADS200 PLUS is a high power (up to 120 Watts), yet low-cost professional soldering station for serious cell-phone repairers, electronics techs, engineers, DIYers & production solder techs. It features the groundbreaking TD-200 Tip-Heater Cartridge Soldering Iron, with its sleek and ergonomic aluminum handle designed to stay cool and comfortable during continuous production soldering. Blue Series Tip-Heater Cartridges integrate a high accuracy sensor with a robust heater, delivering up to 120 Watts of pure power. \*TIP INCLUDED\*



### Solder-Rework Bundle 40 57

PN: 8007-0613 (120 V), 8007-0614 (230 V)

Enjoy complete interoperability and interchangeability with the Solder-Rework Bundle. The 2-System bundle's functionality expands and customizes easily by adding AccudDrive® and Sensatemp®-compatible handpieces.



#### ADS200 PLUS with MT200 AD

PN: 8007-0590

PACE's ADS200 PLUS with MT-200 Bundle includes our new MT-200 MiniTweez®, a precision thermal tweezer that allows you to rework micro-components. The Bundle can also handle larger SOTs, D-PAKs, SOICs and TSOPs.



#### ST25 5T

PN: 8007-0506 (120 V), 8007-0520 (230 V)

The ST25 is an economical, yet rugged soldering system with simplified dial control featuring SensaTemp closed loop temperature technology. Designed for ease of use with no programming or complicated controls to worry about.



#### ST125 57

PN: 8007-0607 (115 V), 8007-0608 (230 V)

Our compact rework station comes with a Hi-Flo Snap-Vac® Pump for both hot-air and vacuum applications and powered with SensaTemp® Heating Technology. Comes standard with the **SX-100 Sodr-X-Tractor®**.





Multi-Channel Systems

# **MBT**450

# The Next Generation of PACE Multi-Channel Rework Systems

The **MBT450** represents the next generation of all-in-one, miniature and microminiature, repair systems from PACE. The compact unit can tackle just about any thru-hole or surface mount application, whether conformally coated or not, and is well suited for multilayer repairs on damaged circuit card assemblies. Comes standard with the new **TF-Ultra Hot-Air** Handpiece.





# Advanced Technology, Programmability & Features

- Color Touch Screen Display with wide viewing angle makes changing temperatures, settings and programming easy and intuitive.
- **Built-in storage** and full motion playback (with sound) for video training and manuals.
- Includes two **AccuDrive**® ports and one **SensaTemp**® port with set and actual temperature of all 3 channels displayed on the touch screen.
- **VisiFilter Filtration** has been integrated into the front panel, allowing filter changes in seconds.
- Fault and maintenance monitoring functions include **vacuum performance monitor** and vacuum pulls counter to help prevent potential solder clogs.

# **MBT**360

MBT360 Multi-Channel Soldering and Rework Station w/ TD-200, MT-200 and SX-100 PN: 8007-0597 (120V), 8007-0598 (230V)

The MBT360 is truly the best of both worlds, combining our renowned **SensaTemp**® heating technology, which boasts superior performance and versatility, with our new advanced **AccuDrive**® tip-heater cartridge capability for today's most challenging production soldering and rework applications. The MBT360 allows the user to customize their workbench with any AccuDrive or Sensatemp handpiece for maximum capability, versatility and economy.

- Two AccuDrive® ports, One SensaTemp® port
- Self-contained auto **Snap-Vac®** pump



- Includes (2) ISB Cubbies with Auto-Off, to extend tip life
- Full Backward Capability



# Handpieces

TD-200 AccuDrive® Tip-Heater Cartridge Iron 🐠 PN: 6010-0166-P1 (Handpiece), 6993-0317-P1 (Kit)

The TD-200 AccuDrive® Tip-Heater Cartridge Soldering Iron combines unsurpassed thermal performance with an an ergonomic aluminum handle designed to stay cool and comfortable during extended or continuous soldering. The slim & lightweight handle dramatically reduces grip stress/operator fatigue.

#### PS-90 Universal Soldering Iron 57 SensaTemp PN: 6010-0131-P1 (Handpiece), 6993-0199-P1 (Kit)

The PS-90 is excellent for general purpose and heavyduty soldering and SMT rework operations where high thermal capacity and flexibility are required. The Iron provides a wide range of SMD and Thru-Hole installation and removal capability as well as unsurpassed thermal performance on heavy, multilayer Thru-Hole assemblies at safe, lower working temperatures.

## TJ-70 ThermoJet® 57

SensaTemp PN: 6010-0131-P1 (Handpiece), 6993-0199-P1 (Kit)

The TJ-70 ThermoJet® hot air pencil is ideal for delivering heat for the installation and removal of chip components, SOTs, and SOICs. A variety of quick change nozzles are available, to meet your operational needs. Its pencil grip design and finger-actuated control switch facilitates ease-of-use and manipulation in tight places for the precise application of hot air for small SMDs such as 0201s.

### PACE Heating Technologies

AccuDrive® AD



SENSATEMP® ST



MT-200 AccuDrive® MiniTweez® Thermal Tweezer Handpiece AD

PN: 6010-0169-P1 (Handpiece), 6993-0321-P1 (Kit)

The MT-200 MiniTweez® is a high-powered precision thermal tweezer designed to rework micro-components such as 0402's, 0603's, 0201's, and even 01005's in a simple, one-handed operation. The MT-200 has been engineered for multi-axis and rotational (theta) tip alignment that provides ultimate control and targeting accuracy. A Tip-Gap Adjustment Wheel adjusts the gap between the tips to reduce the distance from tip-end to tip-end there by reducing grip stress and operator fatigue during repetitive operations.

#### TT-65 ThermoTweez® 57



Sensatemp PN: 7025-0001-P1 (Handpiece), 6993-0268-P1 (Kit)

The most versatile and only patented SMT removal tool provides safe, one-handed, rapid reflow and component removal of PLCCs and other 4 or 2 sided SMT components.

### SX-100 Sodr-X-Tractor® 57

when fitted with SMD removal tips.









#### System **MBT360** ADS200+ **ST125 ST35 ST25** 2 AccuDrive® Power Ports 1 SensaTemp® 1 AccuDrive® 1 SensaTemp® 1 SensaTemp® 1 SensaTemp® Snap-Vac® Vacuum/Pressure Χ Yes Χ TD-200 AccuDrive® Soldering Iron Yes MT-200 AccuDrive® MiniTweez® Yes SX-100 SensaTemp® Sodr-X-Tractor® Yes TJ-70 SensaTemp® ThermoJet® Yes TT-65 SensaTemp® ThermoTweez® Yes

Yes

PS-90 SensaTemp® Universal Soldering Iron



**Tips** 

For optimum thermal performance, select the shortest, thickest tip geometry with the maximum surface contact area, which can safely access the work. Additional tip geometries can be found at www.paceworldwide.com

# AccuDrive® Blue Series Tip-Heater Cartridges

TD-200 AccuDrive® Tip-Heater Cartridges

MT-200 AccuDrive® MiniTweez® Tip Pairs





# SensaTemp® Tips

SX-100 Sodr-X-Tractor® Tips



Flo-D-Sodr® Tips



**Precision Desoldering** Tips



Thermo-Drive®
Desoldering Tips



Pik-Tips® SMD Removal

PS-90 Universal Soldering Iron Tips





TT-65 Tips

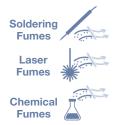
ThermoTweez®
Tips

TJ-70 Nozzles



Mini ThermoJet® Nozzles

# **Systems**



# Make Fume Extraction A Priority.

Where manual soldering is being performed or where solder-pots/fountains are utilized, hazardous fumes are produced and workers need to be protected from them. For more information on other collection accessories and replacement filters, please go to www.paceworldwide.com.

# ARM-EVAC® Modular Systems

Each Arm-Evac® 105, 200 and 250 comes standard with a 4' ESD-Safe Flex Arm, Cowl Endpiece and HEPA Combo Filter.



#### Arm-Evac® 105

PN: 8888-0110-P1 (120 V), 8888-0105-P1 (230 V)

The best protection from harmful fumes in its price range, the **AE**105 is portable, compact and can be easily placed on or under a workbench. The unit features a heavy-duty, maintenance-free brushless motor.



#### Arm-Evac® 200

PN: 8889-0205-P1 (120 V), 8886-0200-P1 (230 V)

The **AE**200 is designed to meet the needs of light duty production as well as rework and repair operations. Lightweight and compact, the **AE**200 installs in minutes.



### Arm-Evac® 250

PN: 8889-0255-P1 (120 V), 8889-0250-P1 (230 V)

The **AE**250 is ideal for heavy-duty operations that need high-capacity and continuous particle filter monitoring. It incorporates a microprocessor, which displays filter efficiency and automatically adjusts airflow speed for consistent use.

# ARM-EVAC® 150

PN: 8889-0150-P1 (120 V) 8889-0155-P1 (230 V)

PACE's **AE**150 captures hazardous fumes locally and is suitable for bench top soldering and electronic rework applications. The low-cost **AE**150 System comes complete with self-supporting SteadyFlex ESD-Safe Arm/Nozzle assembly, Wireless Remote Control and 3-stage filtration system... everything you need to set up one operator!



Steady Flex™ ESD-Safe Arm Nozzle Assembly stays put, exactly where you position it.



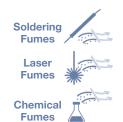
**10 Air Flow Speed Settings** with LED Motor Speed Indicator and Timed Shut-Off feature.



Wireless Remote allows easy operation of most functions, from a distance.



# Filters & Flex-Arm



# **Filters**

PACE offers 3 different "Combo" filters for the Arm-Evac 105, 150, 200 and 250. Each filter combines both the Primary Particle Filter and Gas Filter into one filter cartridge. PACE filter life can be extended with the use of Pre-filters (P/N 8883-0112-P5).



### **Combo Filter Types**



Filter Type	PN	Recommened Application	
General-Puirpose Combo Filters	8883-0932-P1	Recommended for applications where fumes are being generated and require fume extraction (0.2-2 microns)	
HEPA Combo Filters	8883-0922-P1	Recommened for soldering applications where fumes are generated and require high filtration efficiency (.2-2 microns)	
Adhesive Combo Filters	8883-0952-P1	Recommended for any bench top application utilizing adhesives, solvents, and cleaners used in small quantities.	

# **ESD Safe Flex-Arm**

PACE's ESD Flex-Arm can be positioned anywhere on the workbench. The ESD Safe Flex-Arm features a highly flexible hard plastic that easily adjusts to an infinite number of positions. The ESD Flex-Arm can be mounted directly to the Arm-Evac® unit, or it can be mounted using the optional quick mounting bracket (P/N 8886-0552-P1).

All accessories are compatible with the Arm-Evac 105, 200, and 250 Fume Extractors.

Specifications	4' (3" Diam.) ESD Safe Flex-Arm		
Part Number	8886-0760-P1		
ESD Rating	Surface Resistivity: 1.00E3 Ohm; Volume Resistivity: <6.00E2 Ohm-cm		
Length / Diameter	1.2m (4') / 75mm (3")		
Standard Endpiece	Cowl		
ESD-Safe Extension Tube	PN: 8886-0790-P1		



# **Expansion Kits and Accessories**

Expand your Arm-Evac's capability with our Flex-Arm Expansion Kits & Accessories.

\*For the Arm-Evac 105, 200, and 250.



### 75mm (3") ESD Safe Flex-Arm Kit

Part Number: 8886-0765-P1

Includes: (1)ESD Safe Flex-Arm (P/N 8886-0750-P1), (1)Bench Mounting Bracket Kit (P/N 8886-0745-P1).



### 75mm (3") Expansion Kit

Part Number: 8882-0105-P1

Includes: (2) 2.5m (8'2") length of 75mm (3") ESD Safe Flex Hose, (1) 75mm (3") Y (PN 8882-0691), and (4) 75mm (3") End Cuff (P/N 8882-0776-P1).



# **Optional Endpieces**

- A Round Endpiece for omni-directional fume collection.
  Part Number: 8886-0792-P1
- B Cowl Endpiece for high volume laminar flow fume extraction. Part Number: 8886-0793-P1
- Collection Tube Endpiece for focused and pin-point fume collection.

Part Number: 8886-0794-P1



### 75mm (3") Flex-Arm Bench Mounting Bracket Kit

Part Number: 8886-0745-P1

Includes: 2.5m (8') of 75mm (3") ESD Safe Flex Hose (P/N 8882-0755-P1), Bench Mounting Bracket (P/N 8886-0770-P1).



### Silencer Cart for Arn-Evac® 200/250

Part Number: 8885-1225-P1

Doubles as mobility cart with front-locking casters.



### **Metal Plenum**

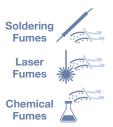
Part Number: 8886-0366-P1

At 18" wide, the Metal Plenum can supply laminar airflow for a larger work area, while also doubling as a shelf, preserving bench-top space.



# Arm-Evac® Expansion Configurations

\*For the Arm-Evac 105, 200, and 250.



As your workspace or production line evolves, the Arm-Evac's modular system can be easily scaled with additional arms and extensionss, ensuring consistent air quality for all your operators. Arm-Evac® Systems can service up to 4 operators at a time, greatly reducing energy costs, while saving money on replacement filters.



### **Single Operator**

- A Includes: (1) Arm-Evac® 105/200/250 System (1) ESD-Safe Flex-Arm (8886-0760-P1)\*
- B Includes: (1) Arm-Evac® 105/200/250 System
  (1) Flex-Arm Kit (8886-0765-P1)\*
  (2) Flow Controllers (8886-0795-P1) (optional)



## **Two Operators**

- A Includes: (1) Arm-Evac® 105/200/250 System (2) ESD-Safe Flex-Arm (8886-0760-P1)\*
- B Includes: (1) Arm-Evac® 105/200/250 System
  (2) Flex-Arm Kit (8886-0765-P1)\*
  (2) Flow Controllers (8886-0795-P1) (optional)



### **Four Operators**

A Includes: (1) Arm-Evac® 200/250 System

(4) Flex-Arm Kit (8886-0765-P1)\*

(4) Flow Controllers (8886-0795-P1) (optional)

(2) Expansion Kit (8882-0105-P1)

<sup>\*</sup>Cowl Endpiece has replaced the Round Endpiece as standard packout for the Flex-Arm and Flex-Arm Kits.

# SMT Rework



PACE's family of hot air rework systems are ideal for all SMT applications. A wide range of product features are available to meet your specific needs. They can be easily upgraded by adding one of our powerful pre-heaters and/or PCB holders.

# **ST**925

# Convective & Infrared **SMT Rework Station**

PN: 8007-0576 (120 V), 8007-0577 (230V)

The ST925 combines three popular PACE products together into one convenient, low-cost SMT Rework System. The system is comprised of the ST325 Programmable Convective/Hot Air Rework Station, the ST1600 InfraRed Pre-Heater and ST500A Z-Axis Platform. Together, the system provides a 575 Watt convective top-side heater plus a 1600 Watt IR bottom-side preheater which allows operators to safely rework PCBs. Together, the system provides a powerful 575 Watt convective top-side heater plus a 1600 Watt IR bottom-side preheater which allows operators to safely rework PCBs for fast, efficient soldering, rework or



### ST1600 Pre-Heater

PN: 8007-0563 (120 V), 8007-0564 (230 V)

The ST1600 Is our most powerful pre-heater, with four 400 Watt IR heaters for a total power output of 1600 Watts. Each heater can be controlled independantly giving the operator the maximum flexibilitiv. Comes standard with an integrated PCB holed 305mm x 306mm (12" x 16").



#### ST325 Hot Air Rework Station

PN: 8007-0429 (120 V), 8007-0432 (230 V)

The ST325 is a digital. self-contained system that is fully programmable and can be used to remove or install surface mount components. A vacuum pick for holding/ lifting components is a standard feature. Handpiece includes spring loaded vacuum pick with 3 sizes of vacuum cups.



#### ST400 Pre-Heater

PN: 8007-0435 (120 V), 8007-0436 (230 V)

The ST400 is an analog (dial), closed loop temperature controlled pre-heater with a 400W radiant (medium/long wave IR) heater. Temperatures range 37°C -205°C (100°F - 300°F).



#### ST550 18"x18" Board Holder

PN: 8007-0435 (120 V), 8007-0436 (230 V)

The ST 550 features spring loaded rails with cocking mechanism for easy PCB removal and insertion. Create a flexible and repeatable system, with the addition of an ST325 and ST500 Z-Axis Platform.



# Modular Accessories

Product	Description	Part Number
ST500A Z-Axis Platform	Z-Axis stand for the ST 300/325 handpiece	6993-0258-P1
ST525 PCB Holder	Spring loaded board holder, holds up to 12"x12" PCBs	6993-0253-P1
ST550 PCB Holder	Spring loaded board holder, holds up to 18"x18" PCBs	6993-0254-P1



# **BGA Rework**



# **InfraRed** Systems

PACE's InfraRed Systems can easily install and remove BGA, QFN, μBGA/CSP, Flip Chip and other SMD's. Featuring a 500W infrared (IR) top heater and a 1000W IR bottom preheater, the IR3100 does not require nozzles. A specially-developed IR pyrometer provides non-contact, real-time, closed-loop temperature control throughout the reflow process. A Sodr-Cam Reflow Camera comes standard, allowing you to watch the entire reflow process in real time. The IR 3100's newly designed Windows-based software makes profiling incredibly simple for even the most advanced applications, providing intuitive set-up, multistage profiling, on-the-fly profile adjustment, flux-dipping, unlimited profile storage and much more.



#### **IR**3100

PN: 8007-0586 (120 V), 8007-0587 (230 V)

The IR3100 includes 1550 Watts of total power. Can rework PCBs up to 12" x 12" (305mm x 305mm). Includes a 1000 Watt bottom side pre-heater with an adjustable height of 1.5" (38mm). Also comes with 6 different sized vacuum picks.



The Closed-Loop, Non-Contact IR Pyrometer monitors and controls the ramp-rate and temperature of the component in real time, by controlling the top and bottom heaters' output throughout the reflow process.



#### **IR**4100

PN: v (120 V), 8007-0592 (230 V)

The IR4100 includes 2400 Watts of total power. Can rework PCBs up to 24" x 24" (610mm x 610mm). The bottom-side pre-heater includes a 1000 Watt central heater and (6) 150 Watt peripheral heaters that can be independently controlled.

# **ThermoFlo®**

PACE's ThermoFlo® Systems' patented Inductive-Convection Heating Technology reaches the target temperature in just seconds for safe, rapid solder joint reflow in virtually any component installation or removal application, while using only a fraction of the power required by yesterday's conventional heating technology. The units contain PACE's latest advanced Profiling Software, a 1080p Vision Overlay system for precise component placement and much more...



The Inductive Convection Heater pre-heats the air in a cyclonic fashion around the induction coil before entering the inner chamber, where the air is instantly heated to the target temperature. The low thermal mass design then allows the coil to cool down at a faster rate, consistently yielding high quality solder joints.

To view a complete list of Heat-Focusing Nozzles available for the ThermoFlo® Systems Please visit Paceworldwide.com for more information.





#### **TF**1800

PN: 8007-0574 (120 V), 8007-0575 (230 V)

The TF1800 includes 1500 Watts of total power. Can work rework PCBs up to 12" x 12" (305mm x 305mm). Includes an adjustable bottom-side pre-heater with 1000 Watts of power and an adjustable height of 1.5" (38mm).

#### **TF**2800

PN: 8007-0582 (120 V), 8007-0583 (230 V)

The TF2800 inloudes 2400 Watts of total power. Can rework PCBs up to 24" x 24" (610mm x 610mm). The bottom-side pre-heater includes a 1000 Watt central heater and (6) 150 Watt peripheral heaters that can be independently controlled.

# Solutions and Systems for Soldering, Rework and Repair of Electronics

#### A Worldwide Commitment

With offices worldwide, PACE is a recognized world leader in the development of solutions for the assembly and repair of highly advanced electronics. Our expertise extends back to the dawn of the modern electronics industry. In 1958, PACE introduced training programs for the repair of printed wire assemblies and soon after, revolutionized the industry by creating the first self-contained vacuum desoldering system.

Today, PACE continues to provide innovative solutions, products and training for the rework, repair and inspection of printed circuit assemblies. Our unique capabilities and evolving vision have provided universal solutions for thru-hole and surface mount assembly and rework problems for the most advanced electronics.

Additionally, PACE manufactures Fume Extraction Systems to reduce exposure to harmful particulates and gases created from hand soldering operations. PACE Fume Extraction Systems effectively remove these contaminants from the worker's breathing zone thereby reducing or eliminating health risks and improving productivity.

Our strong commitment and history of achievement has resulted in an unparalleled range of Assembly, Repair and Fume Extraction solutions to meet your needs whether working to ISO-9001, industrial, military or your own internal specifications. Whatever the challenge, PACE stands ready to help you set a new standard.

### Our PACE Sales Team Is Ready To Help You Achieve Your Goals



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PACE products meet or exceed all applicable military or civilian EOS/ESD, temperature stability and other specifications, including MIL-STD-2000, ANSI/J-STD001, IPC 7711, IPC 7721 and IPC-A-610.

