# Product Overview





Solder, Desolder & Rework SMT & Area Array Rework Fume Extraction

Solutions and systems for soldering, rework and repair of electronics





# Solder & Rework

### 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<sup>®</sup> 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<sup>®</sup> AD

SENSATEMP® ST

MT-200 AccuDrive<sup>®</sup> MiniTweez<sup>®</sup> Thermal Tweezer Handpiece 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

Sensatemp PN: 6010-0106-P1 (Handpiece), 6993-0213-P1 (Kit) The best performing, in-line, vacuum desoldering tool is ideal for Thru-Hole desoldering when fitted with SX-100 Desoldering Tips, for SMT land clean-up when fitted with SX-100 Flo-D-Sodr<sup>®</sup> Tips, and for one-handed surface mount component removal when fitted with SMD removal tips.

System	<b>MBT360</b>	ADS200+	ST125	ST35	ST25
Power Ports	2 AccuDrive <sup>®</sup> 1 SensaTemp <sup>®</sup>	1 AccuDrive®	1 SensaTemp <sup>®</sup>	1 SensaTemp <sup>®</sup>	1 SensaTemp <sup>®</sup>
Snap-Vac® Vacuum/Pressure	Yes	Х	Yes	Х	Х
TD-200 AccuDrive® Soldering Iron	Yes	Yes	X	Х	Х
MT-200 AccuDrive® MiniTweez®	Yes	Yes	X	Х	Х
SX-100 SensaTemp® Sodr-X-Tractor®	Yes	Х	Yes	Х	Х
TJ-70 SensaTemp® ThermoJet®	Yes	Х	Yes	Х	Х
TT-65 SensaTemp® ThermoTweez®	Yes	×	Yes	Yes	Yes
PS-90 SensaTemp® Universal Soldering Iron	Yes	Х	Yes	Yes	Yes

# Solder & Rework

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<sup>®</sup> Blue Series Tip-Heater Cartridges





### SensaTemp® Tips

SX-100 Sodr-X-Tractor® Tips



# Solder & Rework 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<sup>®</sup> 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 (40) 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 49 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 49 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.



**ADS**200

Plus

#### ST25 57

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.



#### **ST**125 5

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<sup>®</sup> Heating Technology.



# Solder & Rework

### **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.



**Available** 

# 

#### 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**<sup>®</sup> ports and one **SensaTemp**<sup>®</sup> 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 49 PN: 8007-0597 (120V), 8007-0598 (230V)

The MBT360 is truly the best of both worlds, combining our renowned **SensaTemp**<sup>®</sup> heating technology, which boasts superior performance and versatility, with our new advanced **AccuDrive**<sup>®</sup> 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<sup>®</sup> ports, One SensaTemp<sup>®</sup> port
- Self-contained auto **Snap-Vac**<sup>®</sup> pump



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

# SMT Rework

Convective systems use **hot air to reflow solder joints** and are often thought of as a "safer" method for removing and installing components from PCBs because of the non-contact process.

# **ST**925

### SMT Rework Station

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

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 **PH100 Low Profile Infrared Preheater** 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.

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**325

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.



#### **ST**400

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).



#### PH100 PN: 8007-0563 (120 V), 8007-0564 (230 V)

The PACE PH100 is a high powered (1600W), non-contact infrared(IR) underheating system with an ergonomic, low-profile design which permits operators to safely pre-heat PCB's.

#### IR1000 PN: 8007-0536 (120 V), 8007-0537 (230 V)

The IR1000 is capable of installing and removing passives, QFPs, SOICs, PLCCs, MLFs, TSOPs, and coarse pitched BGAs. It incorporates a 500W top heater and a 400 W pre-heater. The system allows for simple one zone profiles up to more complicated multi zone profiles. The system features a spring loaded, adjustable vacuum pik, a cooling fan, and a built-in, spring loaded, board-holder. The distance between the top heater and PCB can be adjusted and saved in the profile to ensure repeatability.





### Modular Accessories

Product	Description	Part Number
ST500 Z-Axis Platform	Z-Axis stand for the ST 300/325 handpiece	6993-0258-P1
ST500A Adjustable Z	Z-Axis stand for the ST 300/325 handpiece/Fits PH-100 Preheater	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.



#### IR3100

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**<sup>®</sup>

**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 inlcudes 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.

# Fume Extraction



### Why is fume extraction needed?

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



Arm-Evac 250 PN: 8889-0255-P1 (120 V), 8889-0250-P1 (230 V)

The Arm-Evac 250 is ideal for heavyduty operations that need high-capacity and continuous particle filter monitoring. It incorporates a microprocessor, which displays filter efficiency on an easy-to-read graphical LED monitor.

### **ESD Safe Flex-Arm**

Fume Collection Accessories give the operator the ability to complement their fume extractor with a variety of fume collection options to suit their immediate needs. 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

# Fume Extraction



### **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") 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).



#### 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).

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

Part Number: 8885-1225-P1 Doubles as mobility cart with front-locking casters.







### Optional Endpieces for 3"

- 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

# Fume Extraction Filters & Systems

### **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 lasts up to 2 years, and can be extended with the use of Pre-filters (P/N 8883-0112-P5).

#### **Combo Filter Types**



Filter Type	PN	Recommened Application
General Combo Filters	8883-0932-P1	Recommended for soldering applica- tions where normal volumes of fumes are being generated for 1 or 2 shifts. (0.2-80 microns)
HEPA Combo Filters	8883-0922-P1	Recommened for applications in cleanroom environments or where high filtration effeciency is required. (.2-2 microns)
Adhesive Combo Filters	8883-0952-P1	Recommended for any bench top appli- cation utilizing adhesives, solvents, and cleaners used in small quantities.

### **ARM-EVAC** 150

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

PACE's Arm-Evac® 150 captures hazardous fumes locally and is suitable for bench top soldering and electronic rework applications. The low-cost Arm-Evac 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





Solder Fumes

Laser Fumes

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