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 testing 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-9000, industrial, military or your own internal specifications. Whatever the challenge, PACE stands ready to help you set a new standard.



PACE USA

9030 Junction Drive Annapolis Junction MD 20701 U.S.A. Tel: 301-490-9860 Fax: 301-498-3252

PACE EUROPE

Sherbourne House, Sherbourne Drive Tilbrook, Milton Keynes, MK7 8HX United Kingdom Tel: (44) 1908-277666 Fax: (44) 1908-277777

INTERNET

www.paceworldwide.com

P/N 5400-0131 07/04

A CUSTOMER COMMITMENT

In 2001 the distinguished Frost & Sullivan Award for the World Surface Mount Technology Rework and Repair Equipment Industry was bestowed upon PACE.

The Frost & Sullivan Market Engineering Customer Service Leadership Award is presented to companies that have demonstrated superior responsiveness to customer needs and value-added support in technology and services.

PACE was selected based upon independent research with customers, key market participants and even our competition. This award reiterates PACE's commitment to excellence from product concept to customer service in the field. Frost & Sullivan's research recognizes that the key to PACE's success in the industry is our interactive approach with customers to provide solutions and respond to end-user feedback when developing products.

In 2002 PACE was awarded World Class Status, signifying that PACE uses best practices in its design, development and manufacturing processes to provide the finest quality products to its customers at the lowest possible cost. The first Maryland based company to receive this coveted award, PACE stands alone in its market segment in achieving this highly regarded status.

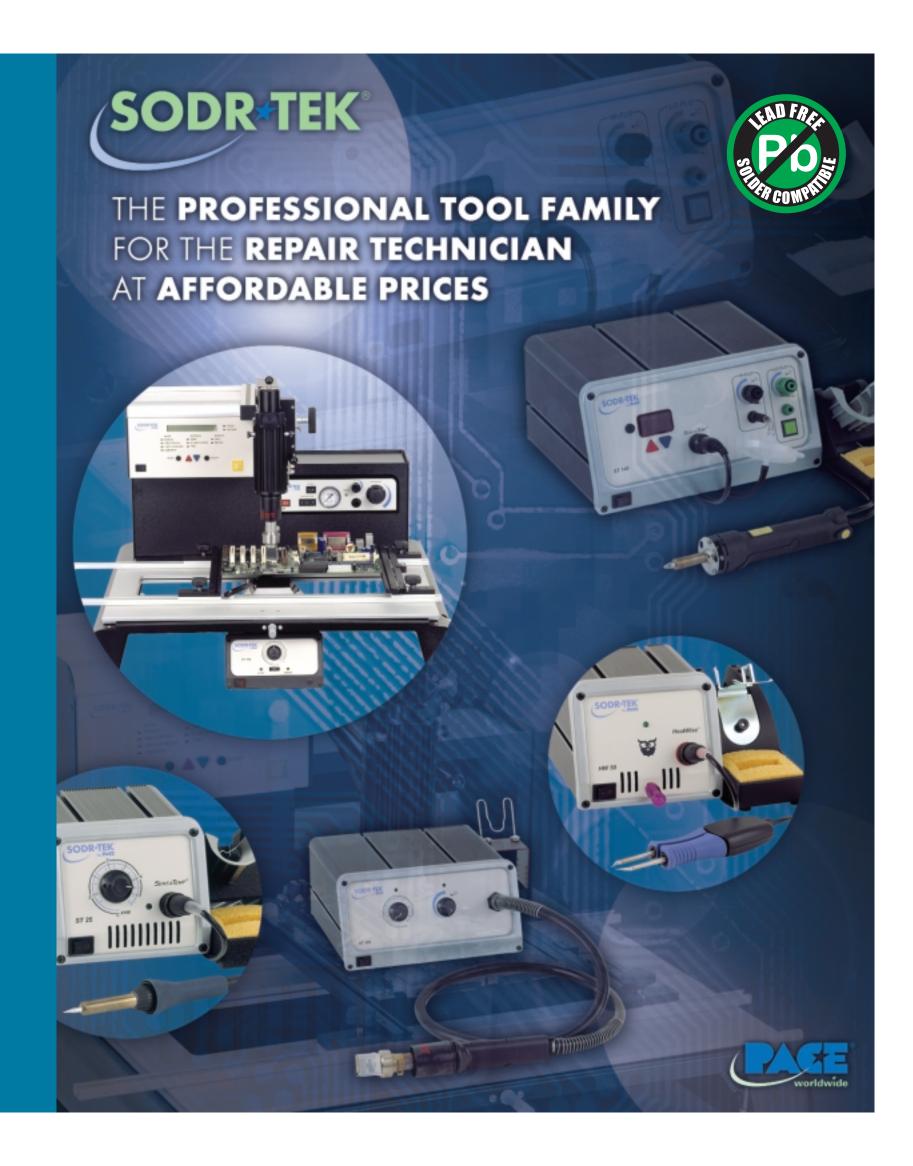
SOLUTIONS FOR THE ELECTRONICS INTERCONNECTION PROCESS

The following are trademarks and/or service marks of PACE, Incorporated, Annapolis Junction, MD USA: INSTACALTM, ENDURATM, FUMEFLOTM, HI-FLOTM, LO-FLOTM MINITWEEZTM, PACEWORLDWIDETM, POWERMODULETM and POWERPORTTM.

The following are registered trademarks and/or service marks of PACE, Incorporated, Annapolis Junction, MD USA: ARM-EVAC®, FLO-D-SODR®, HEATWISE®, MINI-WAVE®, PACE®, PERMAGROUND®, SENSATEMP®, SNAP-VAC®, SODRTEK®, SODR-X-TRACTOR®, TEMPWISE®, THERMO-DRIVE®, THERMOFLO®, THERMOJET®, THERMOTWEEZ® and VISIFILTER®.

PACE products meet or exceed all applicable military and civilian EOS/ESD, temperature stability and other specifications, including MIL-STD-2000, ANSI/J-STD-001, IPC 7711, IPC 7721 and IPC-A-610.

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SODR-TEK®

THE PROFESSIONAL TOOL FAMILY FOR THE REPAIR TECHNICIAN AT AFFORDABLE PRICES

PACE®, Incorporated is pleased to introduce "Sodr-Tek®". Sodr-Tek® products have been designed specifically to meet the changing needs of today's service and bench-top technicians. Sodr-Tek systems are modular and integrate with each other, allowing technicians to purchase only the tools required for today without sacrificing the needs of tomorrow. With Sodr-Tek®. additional equipment and functionality can be added at any time to meet the ever changing needs as required by your future work or by changes in electronics technology. Because Sodr-Tek® is part of the PACE® family, you can rest assured that you will always have the right tools for the job!

In addition to top of the line equipment, the Sodr-Tek® product line also includes everything the service technician will need to complete their work... from solder (leaded and lead free) and flux to solder wick. The difference with Sodr-Tek® is that all of our material products are packaged in quantities that make sense for the technician!

When job variability is high and contracts change so quickly, it just does not make sense to purchase solders and fluxes in large quantities!

With almost 50 years of experience and industry leadership in rework and repair technology and techniques, PACE® provides much more than simply equipment. When you select Sodr-Tek®, you receive access to one of the most valuable resources in the industry, PACE's applications and technical support services. Over the years, our applications support services have been the cornerstone of quality assurance and repair reliability for countless customers. Whenever you encounter a new component, a new PCB, or if you just want reassurance that your process is correct and safe, simply contact PACE® and we will create a procedure for you that not only identifies the equipment required to do the job correctly, but also every step in the process! Let's take a look at the products!



PACE is the proud recipient of the 2003 SMT Vision Award for Rework and Repair Products.



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SODR-TEK® PRODUCTS FEATURE TWO THERMAL CONTROL TECHNOLOGIES REGARDLESS OF YOUR WORK, WE HAVE THE BEST SOLUTION.

HEATWISE® TECHNOLOGY

Its no secret that today's PCBs offer a greater variety of challenges than ever before. The size of the PCB and components continue to decrease, requiring micro-tools, component density is increasing posing accessibility problems, and the thermal demand of the PCB continues to increase as more and more layers and processing power is packed into ever shrinking areas. Systems that only offer one thermal management approach are not always adequate to meet the challenges posed by the high variability in rework and repair operations. PACE® is pleased to offer the latest advancement in technology and productivity enhancing solutions for soldering and repair operations in over twenty years to the Service Technician at an affordable price... HEATWISE® Performance Control Technology!

The key advantage of HEATWISE® is that its advanced electronics provide instantaneous load sensing and on-demand power to quickly reflow solder joints, regardless of the mass of the application. For applications where the work cycle is high and for micro-miniature applications

the direct power approach is ideal as the thermal demand is continuously monitored and the heater responds immediately by providing adequate power to meet the demand from the work, without overshoot.

▲ THE CHALLENGE - Efficiency of joints soldered per hour with

	1 0 /	
128%	PACE Heatwise® Heating Technology Systems	
117%	Brand "M"	
100%	Conventional Iron Brand "P"	
99%	Brand "H"	
67%	Conventional Iron Brand "H"	· What does this mean to you?
57%	Conventional Iron Brand "W"	 Substantial productivity savings by maximizing efficiency and thru-put.
		maximizing efficiency and mira-par.

■ PACE HEATWISE® TECHNOLOGY SYSTEMS SAVE YOU TIME & MONEY

ANNUAL HOURS SAVED WITH HEATWISE®		annual savings (us \$)*
BRAND M	58 HOURS	\$1,160
CONVENTIONAL IRON BRAND P	164 HOURS	\$3,280
BRAND H	176 HOURS	\$3,520
CONVENTIONAL IRON BRAND H	553 HOURS	\$11,060
CONVENTIONAL IRON BRAND W	768 HOURS	\$15,360

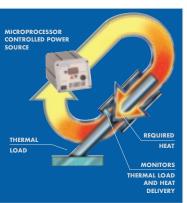
* Assuming a fully burdened labour rate of \$20 USD per hour

SENSATEMP® TECHNOLOGY

SensaTemp® is a highly responsive Heat Delivery System that continuously monitors the thermal demand of the work and responds immediately by driving in the required power for safe, rapid reflow of any joint.

At the heart of SensaTemp is a laser trimmed, platinum RTD sensor that is 5 times more accurate than conventional thermo-couples. This level of accuracy allows for safe, productive soldering at the lowest possible

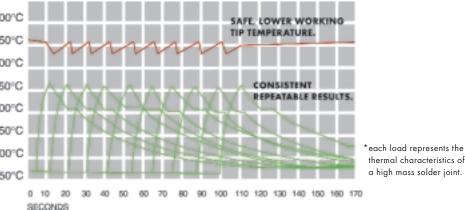
■ SENSATEMP CONTROL



temperatures. As a result, the amount of time spent reflowing each joint is reduced, minimizing the possibility of damage. Additionally, SensaTemp® allows you to change tips, heaters, and handpieces at will, without ever having to recalibrate! SensaTemp's unique Thermal Management System acts as thermal dampener that minimizes tip temperature overshoot, ensures temperature stability and creates a "thermal reservoir" that can be accessed instantaneously when high mass applications are being performed. SensaTemp® delivers consistent repeatable results regardless of the thermal demand of the work. Its ability to respond quickly is ideal for light work, while its amazing thermal capacity can meet the challenges of the heaviest thermal loads, providing the operator with the flexibility that is essential in today's ever changing environment. Regardless of your application, SensaTemp® delivers unsurpassed thermal performance, productivity and "bottom line" savings.

▲ SENSATEMP PERFORMANCE CHART





a high mass solder joint.

HANDPIECES

It is important to develop a full understanding of the capabilities of each of the available handpieces because they are unique to the application being performed. Please refer to the table below to match your application with the appropriate handpieces. The details and specifications for each handpiece are listed after the table.

	HeatWise H	landpieces			SensaTem	Handpieces			Component Handling
	TD-100	MT-100	PS-90	SX-80	TT-65	TJ-70	TJ-80	TP-65	PV-65
Handpiece Kit Part Number (Handpiece & Stand)	6993-0242-P1	6993-0243-P1	6993-0199-P1	6993-0213-P1	6993-0207-P1	6993-0206-P1	6993-0247-P1	6993-0205-P1	
Handpiece Only Part Number	6010-0132-P1	6010-0140-P1	6010-0131-P1	6010-0106-P1	7025-0001-P1	7023-0002-P1	6010-0142-P1	7024-0001-P1	7027-0001-P1
High Cycle Soldering	4		4						
Standard Soldering	4		4						
High Mass Soldering			4						
Micro Soldering	4								
Solder Wicking	4								
Thru-Hole Desoldering				4					
SMT Land Preparation	4		4	4					
Solder Removal from Lands				4					
Thru-Hole Desoldering				4					
Large SMD Removal					4			4	
Standard SMD Removal	4	4	4	4	4			4	
Micro SMD Removal	4	4	4		4				
Large Component Installations with Solder Paste						4			
Standard Component Installations with Solder Paste						4	4		
Micro Component Installations with Solder Paste						4	4		
Component Manipulation									1

HANDPIECES

HEATWISE® HANDPIECES

The following handpieces are compatible with the HW 50 system.

The only Soldering Iron (**TD-100 Thermo-Drive® Iron**) crafted by a team of surgical instrument engineers, is uniquely designed to eliminate operator fatigue, improve control and enhance productivity in demanding soldering applications. The TD-100 uses a patented tip-heater cartridge that is not only the best performing heater cartridge, but is also the lowest priced tip-heater cartridge on the market today! Over 50 soldering tip geometries are available as well as over 30 surface mount removal tips. See Pages 8 & 9 for tip selection.

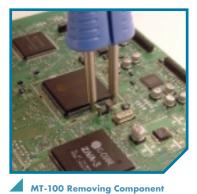
The only high capacity, micro tweezer (MT-100 MINITWEEZTM) on the market today features soft comfort grips, the smallest stroke available, and its tweezing action mimics the natural motion of the human hand to eliminate hand fatigue. With more than 10 styles of component removal tips available the MT-100 is one of the most versatile component removal tweezers and our tips cost less than half of our competitors! See Page 9 for tip selection.





TD-100 Thermo-Drive® Iron





MT-100 MINITWEEZ TM

SENSATEMP® HANDPIECES

The handpieces listed below feature SensaTemp control technology and are compatible with the ST 25, ST 45, ST 125, and ST 145.

The Universal Soldering Iron (**PS-90**) is ideal for most soldering applications and SMT rework operations where high thermal capacity and flexibility is required. There are over 75 single point soldering tips and over 30 surface mount removal tips available for the PS-90. See Pages 10 & 11 for tip selection.





PS-90 Universal Soldering Iron

■ PS-90 FEATURES

- △ A High Tensile Stainless Steel heater shroud for maximum ruggedness, durability and life in the harshest environments,
- ∠ Gold connectors to ensure reliability and virtually eliminate oxidation, and
- △ An operator replaceable plug-in heater cartridge that can be changed in seconds,

HANDPIECES

SENSATEMP® HANDPIECES

DESOLDERING & SOLDER REMOVAL

The best performing, in-line, vacuum desoldering tool (SX-80 Sodr-X-Tractor®) is ideal for Thru-Hole desoldering when fitted with Endura™ Desoldering tips and for SMT land clean-up when fitted with Flo-D-Sodr® tips. Endura desoldering tips are the longest lasting, best performing soldering tips on the market! The SX-80 features a unique solder collection system that can utilize disposable Flux/Solder traps or a re-usable glass collection tube. An operator replaceable plug-in heater cartridge that can be changed in seconds is standard. The SX-80 has a wide range of standard and precision Endura desoldering tips for when access is tight! The handpiece can also be fitted with PACE's Pik-Tips for surface mount component removal. See Page 12 for tip selection.



SX-80 Sodr-X-Tractor®



SX-80 Desoldering
Thru-hole Solder Join

HANDPIECES

SENSATEMP® HANDPIECES

MINI HOT AIR JET

When the precise application of hot air is required, our slim line air pencil (TJ-80 THERMOJET®) is ideal for delivering heat for the installation and removal of chip components, SOTs, and SOICs. Multiple quick-change nozzle sizes are available. The handpiece's slim line, pencil grip design maximizes operator comfort and control. The TJ-80's airflow is actuated with a foot pedal when connected to the Hi-Flo pump and with a panel mounted switch when connected to the Lo-Flo pump for micro work demanding the focused, gentle, and precise application of hot air, such as 0402s and 0201 s. See Page 14 for nozzle tip selection.



TJ-80 Mini Thermal Jet



TJ-80 Reflowing

HEAVY DUTY THERMAL TWEEZER

The most versatile and the only patented SMT removal tool (TT-65 ThermoTweez®) provides safe, one-handed, rapid reflow and component removal of PLCCs and other 4 or 2 sided SMT components. Unlike other methods, its high thermal capacity and targeted heat delivery remove even the largest SMDs in just seconds without damaging the PCB or risking of adjacent component reflow; even on heavy assemblies. The unique vertically oriented handpiece and a wide variety of quickchange, slim-line tips easily reach into the tightest spaces for fast, safe component removal. The TT-65 also features a patented "stroke" adjustment to reduce hand fatigue for repetitive operations. See Pages 12 & 13 for tip selection.



✓ TT-65 ThermoTweez[®]



TT-65 Removing SMT Compon

QFP REMOVAL TOOL

One of the most unique and innovative handpieces (TP-65 THERMOPIK®) available for removing 4 sided components provides safe, one-handed reflow and removal of of QFPs in just seconds. Its high efficiency design targets controlled heat at the joints, away from sensitive adjacent components and substrate areas. The TP-65 is also fitted with a vacuum pik for secure component lift-off after reflow. Vacuum actuation is through a finger switch on the handpiece. See Page 11 for tip selection.





HOT AIR JET

The high capacity air pencil (TJ-70 THERMOJET®) provides safe, rapid reflow of chip components, SOTs, SOICs, PLCCs, and QFPs. Its flared grip design and focused nozzle-tips lets you easily target controlled heat right at the solder joints without damage to the board or adjacent components. A finger actuated air switch provides safe "On-Demand" capability without the constant running of the Hi-Flo pump. Unique nozzle-tips offer single and dual airstreams so 2 sides of a component can be simultaneously reflowed. See Page 14 for nozzle tip selection.





TJ-70 Reflowing both sides

COMPONENT HANDLING WAND

When you need to hold components securely, and safely with out risking contamination or damage, the vacuum wand (PV-65 Pik-Vac) is the ideal choice! The PV-65 is slim, comfortable, and features on-demand vacuum that is controlled by your finger. A variety of vacuum cups are available for use with the PV-65.





PV-65 Pik-Vac

TD-100 SOLD		- r -		
TIPS	DESCRIPTION	TIP SIZE - L	SIZE - D	PART NUMBER
+	1/32" Conical Sharp Extended	13.4mm (0.530")	0.80mm (0.031")	1124-0001-P1
-	1/64" Conical Sharp	7.8mm (0.310")	0.40mm (0.016")	1124-0002-P1
*	1/64" Conical Sharp Bent 30 Degrees	7.8mm (0.310")	0.40mm (0.016")	1124-0003-P1
+	1/64" Conical Sharp Extended	13.5mm (0.535")	0.40mm (0.016")	1124-0004-P1
□ +	1/32" Conical	4.7mm (0.188")	0.80mm (0.031")	1124-0005-P1
\rightarrow	3/128" Conical	4.6mm (0.184")	0.58mm (0.023")	1124-0006-P1
	1/16" 90 Degree Chisel	10.9mm (0.430")	2.03mm (0.080")	1124-0007-P1
	3/64" 30 Degree Chisel	9.7mm (0.380")	1.20mm (0.047")	1124-0008-P1
	3/64" 30 Degree Bevel	3.6mm (0.140")	1.20mm (0.047")	1124-0009-P1
F	13/64" Chisel	7.62mm (0.300")	5.15mm (0.203")	1124-0010-P1
+	1/64" 60 Degree Bevel	14.7mm (0.580")	0.40mm (0.016")	1124-0011-P1
₹	1/32" 30 Degree Chisel	9.1 mm (0.360")	0.80mm (0.031")	1124-0012-P1
	3/32" 30 Degree Chisel	9.9mm (0.390")	2.40mm (0.094")	1124-0013-P1
D=+	5/64" 60 Degree Chisel	4.7mm (0.185")	2.00mm (0.078")	1124-0014-P1
6	1/64" Conical, Sharp, Bent 30 Degrees, Extended	15.1 mm (0.595")	0.40mm (0.016")	1124-0015-P1
1 1 1 ±	3/64" Chisel Bent 30 Degrees	11.7mm (0.460")	1.20mm (0.047")	1124-0016-P1
	1/16" 60 Degree Chisel	15.8mm (0.620")	1.60mm (0.063")	1124-0017-P1
₽	1/32" Conical Sharp Extended	16.7mm (0.660")	0.80mm (0.031")	1124-0018-P1
	1/16" 30 Degree Chisel	9.9mm (0.390")	1.60mm (0.063")	1124-0019-P1
	1/8" 90 Degree Chisel	4.8mm (0.190")	3.20mm (0.125")	1124-0020-P1
	3/128" Conical Sharp Bent 30 Degrees	14.4mm (0.570")	0.58mm (0.023")	1124-0021-P1
	1/16" Conical Sharp	9.9mm (0.390")	1.60mm (0.063")	1124-0022-P1
	1/8" 90 Degree Chisel Extended	8.6mm (0.340")	3.20mm (0.125")	1124-0023-P1
	1/16" 30 Degree Bevel	9.9mm (0.390")	1.60mm (0.063")	1124-0024-P1
₽	1/16" Conical Sharp Extended	12.1 mm (0.478")	1.60mm (0.063")	1124-0025-P1
NT I	1/16" Chisel Bent 30 Degrees	9.7mm (0.385")	1.60mm (0.063")	1124-0026-P1
	3/128" Conical Sharp	15.2mm (0.600")	0.58mm (0.023")	1124-002 <i>7-</i> P1
	3/64" Chisel, Bent 30 Degrees, Extended	15.2mm (0.600")	0.91 mm (0.36")	1124-0028-P1
□ ÷	1/32" 30 Degree Bevel	9.1mm (0.360")	1.91 mm (0.75")	1124-0029-P1
I	1/32" Conical Sharp	9.9mm (0.390")	0.80mm (0.031")	1124-0030-P1
C +	Heat Staking	N/A	4.04mm (0.159")	1124-0031-P1
	MiniWave	N/A	3.05mm (.120")	1124-0032-P1
81->-	Angled MiniWave, 3.3 mm	N/A	3.05mm (.120")	1124-0033-P1
	Single Sided Chisel	N/A	3.05mm (.120")	1124-0034-P1
	Angled MiniWave, 2.4mm	N/A	2.11 mm (.083")	1124-0035-P1
	1/128" Conical	N/A	0.20mm (0.008")	1124-0036-P1
Z77	1/4 Flat Blade	N/A	4.57mm (0.180")	1124-003 <i>7-</i> P1
XxxXXX	Single Sided Chisel, Fine Pitch	N/A	1.5mm (.06")	1124-0038-P1
	Angled MiniWave, Fine Pitch	N/A	1.6mm (.064")	1124-0039-P1
55 y	MicroFine Single Sided Chisel	N/A	0.9mm (.035")	1124-0040-P1
58\y	MicroFine Single Sided Chisel	N/A	1.1mm (.045")	1124-0041-P1
	MicroFine Conical	N/A	0.25mm (.01")	1124-0042-P1
	MicroFine Bent Conical	N/A	0.76mm (.03")	1124-0043-P1
	MicroFine Bent Conical	N/A	0.5mm (.02")	1124-0044-P1
	Angled Micro-Wave	N/A	1.1mm (.045")	1124-0045-P1
	Micro-Wave	N/A	1.1mm (.045")	1124-0046-P1
	Angled Chisel, 1.33mm	8.4mm (0.33")	1.33mm (0.051")	1124-004 <i>7-</i> P1
	Single Sided Chisel, 0.3/16mm	17.00mm (0.693")	4.55mm (0.178")	1124-0048-P1

TIPS

TD-100 SMT REMOVAL TIPS

TIP - CHIP / SOT REMOV	/AL	COMPONENT TYPE	SIZE - A	SIZE - B	PART NUMBER
` <u>`</u>		Chip 0402 Angle (fig.A)	2.2mm (.085")	-	1124-0518-P1
(fig.A)	(fig.E)	Chip 0201 Angle (fig.A)	0.5mm (.02")	-	1124-0533-P1
	I	Chip 1808 (fig.B)	5.0mm (. 195")	-	1124-0520-P1
(fig.B)	(fig.F)	Chip 0402 (fig.C)	1.0mm (.040")	-	1124-0521-P1
		Chip 0201 (fig.C)	0.5mm (0.2")	-	1124-0534-P1
(fig.C)	(fig.G)	SOT 23 (fig.D)	1.8mm (.070")	-	1124-0522-P1
	Ţ	SOT 89 (fig.E)	2.8mm (.110")	-	1124-0523-P1
(fig.D)		Chip 1206 (fig.F)	3.6mm (.142")	-	1124-0524-P1
		Chip 0805 (fig.G)	2.4mm (.095")	-	1124-0525-P1
TIP - SOIC / SOP / TSOF	REMOVAL	COMPONENT TYPE	SIZE - A	SIZE - B	PART NUMBER
		SOIC 14/16	5.2mm (.205")	10.5mm (.415")	1124-0504-P1
		SOIC 20	9.6mm (.377")	13.6mm (.535")	1124-0505-P1
		SOP 28	10.8mm (.426")	18.6mm (.734")	1124-0506-P1
A		SOP 40	11.9mm (.467")	25.7mm (1.011")	1124-0507-P1
† <u> </u>		SOP 44	13.1 mm (.516")	28.4mm (1.120")	1124-0508-P1
		TSOP 56	18.8mm (.739")	14.1 mm (.557")	1124-0509-P1
		TSOP 28	12.0mm (.471")	8.5mm (.333")	1124-0510-P1
		SOIC 8	5.1mm (.202")	4.65mm (.183")	1124-0519-P1
		TSOP 40	18.8mm (. <i>7</i> 40")	10.4mm (.410")	1124-0526-P1
TIP - PLCC / QFP REMOV	/AL	COMPONENT TYPE	SIZE - A	SIZE - B	PART NUMBER
— - ∆ 		PLCC 28 Socket	9.3mm (.365")	9.3mm (.365")	1124-0511-P1
		PLCC 32	14.2mm (.561")	11.7mm (.459")	1124-0512-P1
		PLCC 44	16.8mm (.662")	16.8mm (.662")	1124-0513-P1
		QFP 144	20.6mm (.810")	20.6mm (.810")	1124-0514-P1
B		PLCC 28	11.8mm (.465")	11.8mm (.465")	1124-0515-P1
		QFP 100/128	22.0mm (.865")	16.0mm (.628")	1124-0516-P1
		PLCC 20	9.3mm (.365")	9.3mm (.365")	1124-0527-P1
		PLCC 18	7.6mm (.300")	12.8mm (.505")	1124-0528-P1
		TQFP 80	12.5mm (.491")	12.5mm (.491")	1124-0529-P1
		PLCC 52	19.4mm (.762")	19.4mm (.762")	1124-0530-P1
		QFP 100	26.6mm (1.048")	26.6mm (1.048")	1124-0531-P1
BLADE TIPS		SOLDER REMOVAL BLADES	SIZE - A	SIZE - B	PART NUMBER
FI T		Blade	10.8mm (.425")	-	1124-0501-P1
		Blade	16.0mm (.630")	-	1124-0502-P1
		Blade	21.2mm (.835")	-	1124-0503-P1
		Blade	25.0mm (.984")	-	1124-0532-P1

MT-100 SMT REMOVAL TIPS

TIP - CHIP / SOT REMOVAL	COMPONENT TYPE	SIZE - A	SIZE - B	PART NUMBER
<u>A</u> B	Chip (fig.A)	0.2mm (.008")	0.2mm (.008")	1124-1001-P1
(fig.A)	Chip, SOT (fig.B)	0.7mm (.03")	0.5mm (.03")	1124-1002-P1
A A 119.00	Chip, SOT (fig.B)	0.7mm (.03")	1 mm (.04")	1124-1003-P1
	Chip, SOT (fig.B)	0.7mm (.03")	2mm (.08")	1124-1004-P1
A B (fig.B)	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	6mm (.24")	1124-1005-P1
A A	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	8mm (.31")	1124-1006-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	10mm (.39")	1124-1007-P1
A B (fig.C)	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	13mm (.51")	1124-1008-P1
(11g.C)	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	18mm (.74")	1124-1009-P1
H H	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	28mm (1.09")	1124-1010-P1

PS-90 SOLDERING TIPS

TIPS	DESCRIPTION	TIP SIZE	PART NUMBER
 	1/16" Chisel	1.60mm (0.063")	1121-0335-P5
□ →‡	1/32" Conical	0.80mm (0.031")	1121-0336-P5
	1/8" Chisel	3.20mm (0.125")	1121-033 <i>7-</i> P5
 	1/16" Chisel (MicroFine)	1.60mm (0.063")	1121-0349-P5
	1/32" Chisel	0.80mm (0.031")	1121-0359-P5
	3/32" Chisel	2.40mm (0.094")	1121-0360-P5
	1/32" Bent Chisel	0.80mm (0.031")	1121-0361-P5
	1/64" Bent Conical	0.40mm (0.016")	1121-0828-P5
	Single-Sided Chisel	3.30mm (0.13")	1121-0406-P5
<u></u>	1/16" Chisel (High Capacity)	1.60mm (0.063")	1121-0414-P5
	Mini-Wave	3.30mm (0.13")	1121-0490-P5
	1/16" Chisel, Long Reach	1.60mm (0.063")	1121-0499-P5
	1/16" Bent Chisel, Long Reach	1.60mm (0.063")	1121-0500-P5
	1/16" Chisel, Extended Reach	1.60mm (0.063")	1121-0533-P5
	Angled Mini-Wave	2.40mm (0.09")	1121-0610-P5
	1/64" Sharp Conical	0.40mm (0.016")	1121-0829-P5
	1/64" Sharp Bent Conical	0.40mm (0.016")	1121-0830-P5
	1/64" Sharp Conical, Extended Reach	0.40mm (0.016")	1121-0831-P5
	1/64" Sharp Bent Conical, Extended Reach	0.40mm (0.016")	1121-0832-P5

^{*} The PS-90/PS-90N can be used with over ninety tips. The PS-90/PS-90N can be used with 4.7mm(3/16") shank diameter, Standard Life, Long Life, and SMT Rework tips, making it the most flexible, universal iron on the market today! Visit our website at www.paceworldwide.com for more details.

PS-90 SMT REMOVAL TIPS

TIPS	DESCRIPTION	TIP SIZE	PART NUMBER
(fig.A)	SOIC - 8 (JEDEC) (fig.A)	5.05mm x 5.08mm (0.199" x 0.200")	1121-0390-P1
	SOIC - 14 (JEDEC) (fig.A)	5.05mm x 8.99mm (0.199" x 0.354")	1121-0391-P1
A B (fig.B)	SOIC - 16 (JEDEC) (fig.A)	5.05mm x 10.2mm (0.199" x 0.404")	1121-0392-P1
(fig.C)	Chip Component (fig.B)	3.56mm x 2.03mm (0.14" x 0.08")	1121-0303-P1
A	TSOP (fig.C)	19.333mm x 8.1mm (0.76" x 0.32")	1121-0403-P1

TIPS

PS-90 SMT REMOVAL TIPS

TIPS	DESCRIPTION	TIP SIZE	PART NUMBER
8	Flat Blade Tip	A = 7.6mm (0.3")	1121-0512-P1
	Flat Blade Tip	A = 10.2mm (0.4")	1121-0514-P1
A	Flat Blade Tip	A = 12.7mm (0.5")	1121-0473-P1
A	Flat Blade Tip	A = 17.8mm (0.7")	1121-0416-P1
	Flat Blade Tip	A = 20.3mm (0.8")	1121-0497-P1
A	Flat Blade Tip	A = 25.4mm (1.0")	1121-0448-P1

TP-65 SMT REMOVAL TIPS

TIPS	DESCRIPTION	TIP SIZE	PART NUMBER
9	FlatPack Tip	15.5mm x 21.6mm (0.61" x 0.85")	1121-0322-001-P1
	FlatPack Tip	16.8mm x 22.9mm (0.66" x 0.90")	1121-0322-002-P1
	PQFP-68 Tip (bumper pack)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0323-P1
Application	PQFP-64/80 (non-bumper pack)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0484-P1
Flat Pack	PQFP-84 Tip	18.3mm x 18.3mm (0.72" x 0.72")	1121-0324-P1
	PQFP-100 Tip	20.8mm x 20.8mm (0.82" x 0.82")	1121-0325-P1
Note: The TP-65 ThermoPik requires an SX Tip & Tool	PQFP-132 Tip	25.9mm x 25.9mm (1.02" x 1.02")	1121-0326-P1
Stand.	PQFP-144	29.2mm x 29.2mm (1.15" x 1.15")	1121-0456-P1
	PQFP-208	30.0mm x 30.0mm (1.18" x 1.18")	1121-0544-P1
	PQFP-160 Tip	31.0mm x 31.0mm (1.22" x 1.22")	1121-0351-P1
	PQFP-196	36.3mm x 36.3mm (1.43" x 1.43")	1121-0483-P1
	Vacuum Cups		
	Small	4.4mm (0.195")	1121-0382-P5
	Medium	7.62mm (0.300")	1121-0383-P5
	Large	12.7mm (0.500")	1121-0384-P5
	Kit (with 3 cups)	Includes one of each size	6993-0153-P1

SX-80 ENDURA DESOLDERING TIPS & SOLDER REMOVAL TIPS

ENDURA TIPS	DESCRIPTION	TIP SIZE	PART NUMBER
	Thermo-Drive	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0625-P5
	Thermo-Drive	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0624-P5
	Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0626-P5
	Thermo-Drive	2.29mm (0.090") I.D. X 5.1mm (0.200") O.D.	1121-0627-P5
	Thermo-Drive, Flathead	(0.050") x (0.090") I.D. X (0.110") x (0.190") O.D.	1121-0821-P5
	Extended Reach Thermo-Drive	0.76mm (0.030") I.D. X 2.29mm (0.090") O.D.	1121-0628-P5
	Extended Reach Thermo-Drive	1.02mm (0.040") I.D. X 2.54mm (0.10") O.D.	1121-0629-P5
	Extended Reach Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0630-P5
	Precision	0.50mm (0.020") I.D. X 1.79mm (0.070") O.D.	1121-0680-P5
	Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0678-P5
	Precision	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0679-P5
	Precision	1.52mm (0.060") I.D. X 2.79mm (0.110") O.D.	1121-0690-P5
	Flo-D-Sodr	1.52mm (0.060") I.D. X 4.78mm (0.188") O.D.	1121-0631-P5
	Flo-D-Sodr, Precision	0.50mm (0.020") I.D. X 1.78mm (0.070") O.D.	1121-0681-P5
	Flo-D-Sodr, Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0682-P5
	Flo-D-Sodr, Precision	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0683-P5

TIPS

TT-65 SMT REMOVAL TIPS

TIPS	DESCRIPTION	TIP SIZE A × B	PART NUMBER
Vertical Angled	Surface Mount Component Removal Tips		
	Chip Component (vertical)	A=0.76mm (0.03")	1121-0398-P1
A A A A Standard Wall:	Chip Component (vertical)	A=2.0mm (0.08")	1121-0313-P1
Thickness = 1.3mm (0.050") Application	Chip Component (vertical)	A=4.1 mm (0.16")	1121-0399-P1
Chip Component	Chip Component (vertical) Small SOIC	A=6.4mm (0.25")	1121-0401-P1
\	Thin-Walled Chip Component (vertical)	A=0.76mm (0.03")	1121-0520-P1
んじ Thin-Wall: Thickness = 0.43mm (0.017")	Thin-Walled Chip Component (vertical)	A=2.0mm (0.08")	1121-0521-P1
A -	Thin-Walled Chip Component and Small SOIC (vertical)	A=6.4mm (0.25")	1121-0523-P1
Application Chip Component	1/64" Angled Fine Point Conical	A=0.43mm (0.017")	1121-051 <i>7</i> -P1
	Chip Component		
e e	SOIC Components	A=10.2mm (0.4")	1121-0514-P1
A	SOIC, SOJ, SIMMs Component A	=12.7mm (0.5")	1121-0473-P1
Application		A=17.8mm (0.7")	1121-0416-P1
		A=20.3mm (0.8")	1121-0497-P1
Application		A=25.4mm (1.0")	1121-0448-P
	Surface Mount Connectors	A=31.8mm (1.25")	1121-0495-P1
	PLCC/PQFP Removal Tips		
Jarl	PLCC-20	6.86mm x 6.86mm (0.27" X 0.27")	1121-0316-P1
A B	PLCC-28	9.4mm x 9.4mm (0.37" x 0.37")	1121-031 <i>7</i> -P1
Standard Wall: Thickness = 1.3mm (0.050")	PLCC-32	12.2mm x 9.65mm (0.48" x 0.38")	1121-0352-P1
Application PLCC	PLCC-44, PQFP-84	14.5mm x 14.5mm (0.57" x 0.57")	1121-0318-P1
The ThermoTweez can also	PLCC-52, PQFP-100	17.0mm x 17.0mm (0.67" x 0.67")	1121-0319-P1
remove leadless components (LCCCs) if sized correctly.	PLCC-68, PQFP-132	21.9mm x 21.9mm (0.86" x 0.86")	1121-0320-P1
PQFP	PLCC-84, PQFP-160	26.9mm x 26.9mm (1.06" x 1.06")	1121-0321-P1

TJ-70 NOZZLE TIPS

TIPS	DESCRIPTION	TIP SIZE A × B	PART NUMBER
	Small, Straight, Single Jet Tip	0.060" I.D.	1121-0366-P1
	Small, Curved, Single Jet Tip	0.060" I.D.	1121-0338-P1
T _{AL}	SOIC Tip (dual-jet)	A = 4.32mm (0.17")	1121-0330-P1
	Flat End Tip	A = 7.11 mm (0.28") B = 1.88mm (0.074")	1121-0365-P1
A B		A = 6.10mm (0.24") B = 1.88mm (0.074")	1121-0371-P1

TJ-80 HOT JET NOZZLES

TIPS	DESCRIPTION	TIP SIZE A × B	PART NUMBER
	Round Nozzle	1.5mm (.06") Inner diameter	1259-0129-P1
270	Round Nozzle, Bent 60 degrees	1.5mm (.06") Inner diameter	1259-0130-P1
200	Flat Jet Nozzle	6.1 mm x 1.9 mm (.24" X .074") Inner flow dimensions	1259-0131-P1

CONDUCTIVE SYSTEMS & POWER SOURCES

Now that you have identified your applications and selected the appropriate handpiece(s), you now need to choose the Power Source(s) to connect the handpieces to. To determine which handpieces can be connected to which power sources, please refer to the table below. The details and specifications for each power source follow the table.

	Power Source Options			Pump Options			
Handpiece Options	HW 50	ST 25	ST 45	ST 125	ST 145	Lo-Flo	Hi-Flo
HeatWise Handpieces							
TD-100							
MT-100							
SensaTemp Handpieces							
PS-90		4	4	4	4		
SX-80		Δ	Δ	4	4		4
TT-65		4	4	4	4		
TJ-70		Δ	Δ	4	4		4
TJ-80		Δ	⊿	4	4	4	4
TP-65		Δ	⊿	4	4		4
Non-Powered Handpieces							
PV-65				4	4	4	/

= Compatible with Power Source/pump 🛮 = Must be used in conjunction with ST 125 or ST 145 via Tek-Link cable for Pump/Vacuum functions

HW 50 HEATWISE SOLDERING SYSTEM

The HW 50 is a single channel HEATWISE® technology based power supply that comes with the Thermo-Drive Soldering Iron (TD-100). The system can also be used with the MINITWEEZ (MT-100). Using Power Modules, the system is the easiest to operate. Simply select the performance level you

desire, plug in the appropriate Power Module, and the system takes care of the calibration hassles associated with other systems. The heavy-duty metal housing makes this system the ideal choice for the

rest! The HW 50 improves quality, reduces costs and eliminates the maintenance and

▲ FEATURES

- ✓ HEATWISE® Technology
- ∠ No calibration required
- ✓ Performance level lockout (if Power) Module is removed, the system is shut down)
- ∠ ESD grounding jack
- ∠ ESD Safe metal housing
- ∠ Can be mounted under workbench or shelf with optional bracket

harshest environments and long life. An optional mounting bracket is available that allows it to be mounted under a work-bench or shelf, preserving precious bench top space. An optional Instant-SetBack Chubby is available for use with the HW 50 and the TD-100 Thermo-Drive Soldering Irons.



POWER MODULES



▲ OPTIONAL INSTANT-SETBACK CUBBY

The optional Instant-SetBack Cubby is available for use with the HW 50. When connected, it automatically puts the system into SetBack mode when the TD-100 is placed in the cubby. Setback mode means that the power applied to the handpiece is reduced to 176°C (350°F) which maximizes the life of your tips! The part number for the Instant-Setback Cubby is 6019-0071-P1

▲ HW 50

▲ SPECIFICATIONS

Part Numbers	8007-0425 HW 50
	8007-0426 HW 50E
Power Requirements:	97-127 VAC, 50/60 Hz, 90 Watts max.
	197-253 VAC, 50/60 Hz, 80 Watts max
Dimensions:	104mm H x 130mm W x 152mm D (4.1" H x 5.1" W x 6.0" D)
Weight:	2.3 Kg (5 lbs.)
Tip to ground resistance:	2 ohms or less
Temperature stability:	± 1.1 °C (± 2 °F) at idle tip temp.
Absolute Temperature Stability	Meets or exceeds ANSI-J-STD 001
Available Power Modules:	5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5

CONDUCTIVE SOLDERING POWER SOURCES

Sodr-Tek offers four power supplies to control conductive handpieces and air pencils handpieces. All power sources feature SensaTemp temperature control technology. SensaTemp improves quality, reduces cost,

eliminates routine maintenance and the need to calibrate! The ESD safe, durable metal housings ensure years of service and the sloped face of the front panels is a standard feature for ease of use. All systems are "stackable" to reduce the "foot print" on the benchtop, fitted with an ESD grounding jack, and are Tek-Link compatible. (See Page 18).

ANALOG POWER SOURCES - EASY TO USE!

The ST 25 is a single channel system without contained vacuum or pressure capability, that is available with the Universal Soldering Iron (PS-90) or as a power source only (PSO) so you can choose the appropriate handpiece. See Chart on Page 15 for compatible handpieces.

▲ ST 25 SPECIFICATIONS

Part Numbers	8007-0445 ST 25 w/ PS-90
	8007-0446 ST 25E w/ PS-90
	8007-0441 ST 25 PSO
	8007-0442 ST 25E PSO
Power Requirements:	97-127 VAC, 50/60 Hz, 90 Watts max.
	197-253 VAC, 50/60 Hz, 80 Watts max.
Dimensions:	104mm H x 130mm W x 152mm D (4.1" H x 5.1" W x 6.0" D)
Weight:	2.3 Kg (5 lbs.)
Tip to ground resistance:	2 ohms or less
Temperature Stability:	± 1.1 °C (± 2 °F) at idle tip temp.
Absolute Temperature Stability	Meets or exceeds ANSI-J-STD
Temperature Range:	176° to 482°C (350° to 900°F) nominal

✓ ST 25 shown with PS-90 Iron



▲ ST 25 FEATURES

- ▲ Analog (dial) control
- ∠ °C/°F on dial display
- ✓ Temperature lockout

DIGITAL POWER SOURCES - UNBEATABLE FEATURES AT AN UNBELIEVEABLE PRICE!

The ST 45 is a single channel, programmable system without contained vacuum or pressure capabiliy. The ST 45 is available with the Universal Soldering Iron (PS-90) or as a power source only (PSO) so you can choose the appropriate handpiece. See Chart on Page 15 for compatible handpieces.

▲ ST 45 SPECIFICATIONS

Part Numbers	8007-0447 ST 45 w/ PS-90
	8007-0448 ST 45E w/ PS-90
	8007-0443 ST 45 PSO
	8007-0444 ST 45E PSO
Power Requirements:	97-127 VAC, 50/60 Hz, 90 Watts max.
	197-253 VAC, 50/60 Hz, 80 Watts max.
Dimensions:	104mm H x 130mm W x 152mm D (4.1" H x 5.1" W x 6.0" D)
Weight:	2.3 Kg (5 lbs.)
Tip to ground resistance:	2 ohms or less
Temperature Stability:	± 1.1 °C (± 2 °F) at idle tip temp.
Absolute Temperature Stability	Meets or exceeds ANSI-J-STD
Temperature Range:	176° to 482°C (350° to 900°F) nominal

An optional mounting bracket (P/N 1321-0609-P1) is available for the ST 25 & ST 45 to mount the power source under a work-bench or shelf, preserving precious bench top space.

✓ ST 45 shown with PS-90 Iron



▲ ST 45 FEATURES

- Digital control with LED display and keypad
- ∠ °C/°F display options
- ✓ Password temperature lockout
- ✓ Temperature Setback & Auto-Off
- ✓ User definable operating temperature range

CONDUCTIVE REWORK & AIR PENCIL POWER SOURCES

The ST 125 & ST 145 come standard with PACE's patented SNAPVAC desoldering technology to ensure quick, clean removal of solder from any through hole joint.

The HiFlo pump is so powerful that you

won't lose vacuum in continuous use applications when removing residual/excess solder from surface mount leads. The LoFlo pump is ideal for vacuum wands and for supplying slow moving,

low volume air streams for delicate micro/miniature applications such as when installing 0402s and 0201s!

The ST 125 is a single channel power source with pressure/vacuum capability. It is sold as a power source only so you can choose the right tools for your job! See Chart on Page 15 for compatible handpieces.

▲ ST 125 SPECIFICATIONS

Part Numbers	8007-0421 ST 125 (PSO)
	8007-0422 ST 125E (PSO)
Power Requirements:	97-127 VAC, 50/60 Hz, 120 Watts max.
	197-253 VAC, 50/60 Hz, 120 Watts max.
Dimensions:	134mm H x 264mm W x 204mm D (5.25" H x 10.4" W x 8" D)
Weight:	4.2Kg (9.25lbs.)
Tip to ground resistance:	2 ohms or less
Temperature Stability:	± 1.1 °C (± 2 °F) at idle tip temp.
Absolute Temperature Stability	Meets or exceeds ANSI-J-STD
Temperature Range:	176° to 482°C (350° to 900°F) nominal

ST 125 shown with SX-80 Sodr-X-Tractor



▲ ST 125 FEATURES

- ∠ Analog control
- ∠ °C/°F dial display options
- ✓ Temperature lockout
- ∠ Lo-Flo Pump
- ∠ Hi-Flo Pump with patented Snap-Vac Technology

The ST 145 is a fully programmable, single channel power source with pressure/vacuum capability. It is sold as a power source only so you can choose the right tools for your job! See Chart on Page 15 for compatible handpieces.

▲ ST 145 SPECIFICATIONS

Part Numbers	8007-0423 ST 145 (PSO)
	8007-0424 ST 145E (PSO)
Power Requirements:	97-127 VAC, 50/60 Hz, 120 Watts max.
	197-253 VAC, 50/60 Hz, 120 Watts max.
Dimensions:	134mm H x 260mm W x 248mm D (5.25" H x 10.25" W x 9.75" D)
Weight:	4.2Kg (9.25lbs.)
Tip to ground resistance:	2 ohms or less
Temperature Stability:	± 1.1 °C (± 2 °F) at idle tip temp.
Absolute Temperature Stability	Meets or exceeds ANSI-J-STD
Temperature Range:	176° to 482°C (350° to 900°F) nominal

■ ST 145 shown with SX-80 Sodr-X-Tractor



▲ ST 145 FEATURES

- Digital control with LED display and keypad
- ∠ °C/°F display options
- ∠ Password temperature lockout
- ✓ Temperature Setback & Auto-Off
- User definable operating temperature range
- ∠ Hi-Flo Pump with Patented Snap-Vac Technology
- ∠ Lo-Flo Pump

CONDUCTIVE SYSTEMS & POWER SOURCES

TEK-LINK

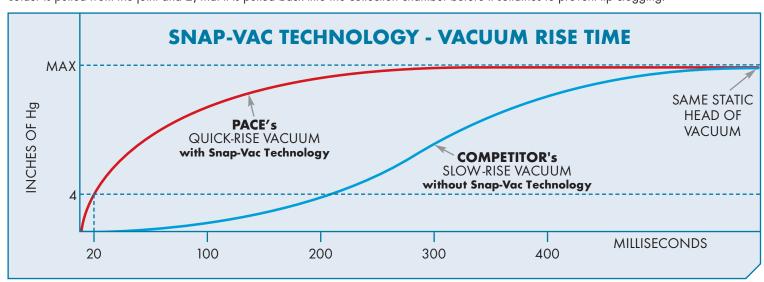
Tek-Link is a unique integration feature that gives maximum flexibility to conductive ST systems. Tek-Link allows the Hi-Flo pump in the ST 125/ST 145 to be activated by the handpiece switch while plugged into the ST 25/ST 45 system. For example, when a Tek-Link cable (1332-0252-P1) is installed between an ST25/45 and an ST125/145, handpieces that require airflow or vacuum from the Hi-Flo pump can be powered by the ST 25/ST 45 while the air connection is plugged into the Hi-Flo pump on the ST 125/ ST 145. Up to three single channel systems can be connected to one ST 125/ST 145 using Tek-Link with the optional Tek-Link Multiplex Box (6000-0286-P1)



Optional Teklink Multiplex Box

SNAP-VAC TECHNOLOGY

Snap-Vac technology is a patented feature that assures the fastest rise time when desoldering which ensures that 1) all of the molten solder is pulled from the joint and 2) that it is pulled back into the collection chamber before it solidifies to prevent tip clogging.



MAXIMIZING TIP LIFE...

PACE recommends the following practices to maximize tip life.

- 1. Always use the lowest possible temperatures while soldering. High temperatures cause tips to oxidize faster, which reduces heat transfer and damages the protective iron plating.
- 2. Avoid aggressive fluxes whenever possible. Aggressive fluxes erode tips faster; shortening their useful life.
- 3. Always use a properly sized tip for the work. Tips that are too small, will wear out faster and tips that are too large will wear unevenly which, in turn, will change the tip geometry rendering it useless.
- 4. Always tin tips when not in use and after cleaning on a damp sponge. A coating of solder will prevent oxidation from forming which causes tips to lose their tinning or wetting capability.
- 5. Always feed solder wire into the heated work, not the tip. Feeding solder directly into the tip will cause pin-holes in the tip and will cause the flux in the solder wire to be burned off before it can activate and prepare the surfaces being soldered.



Should tips lose their tinning or wetting capability, a tip cleaner such as Sodr-Tek's Tip-Brite may be used to restore them.

CONVECTIVE SYSTEMS

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. These systems use a pump to generate airflow that first passes through a heater, where it is warmed to the appropriate temperature, and then through a nozzle that "shapes" the air stream for the specific component. More than 75 different nozzles are available for Sodr-Tek

Systems! Convective systems are ideal for removing Surface Mount Components as they leave little residual solder on the PCB when compared to conductive techniques. They are also appropriate for installing leaded components with solder paste and for installing components without visible leads, such as BGAs, MLFs, LGAs, and LCCs. The ideal system and accessory items depend on the application, component sensitivity, component

type and other factors. For high mass applications and for components without visible leads, it is strongly recommended that a preheater and PCB holder be used in conjunction with the convective system to ensure thorough heating and to eliminate PCB damage and warping. Sodr-Tek is pleased to offer three systems to meet your exacting specifications. Please refer to the table below to assist with system selection.

▲ CONVECTIVE SYSTEM SELECTION CHART

Applications	ST 300	ST 325	ST 350
Standard Pitch Component Removal	⊿	4	4
Fine Pitch Component Removal	⊿	4	⊿
Standard Pitch Area Array Component Removal	⊿	4	⊿
Fine Pitch Area Array Component Removal			⊿
Standard Pitch Component Installation	⊿	4	⊿
Fine Pitch Component Installation			⊿
Standard Pitch Area Array Component Installation		4	4
Fine Pitch Area Array Component Installation			A







■ ST 350 Reflowing a BGA Component

CONVECTIVE SMT SYSTEMS

LOW COST HOT AIR REFLOW SYSTEM



▲ ST 300

▲ FEATURES

- ∠ Lockable Temperature and Airflow adjustment knobs
- Automatic shut off for safety
- ✓ Functional LED Indicator lights on front panel
- Quiet-Flo turbine blower reduces operating noise
- ∠ Hi-Flo Vacuum Pump for holding component securely
- ∠ Lo-Flo Vacuum Pump for component wand

system. The ST 300 can be used to remove any SMD and for installing components with a limited number of leads that can be positioned manually. The ST 300 is a self-contained system with analog (dial) controls for temperature and airflow. The heavy-duty, durable metal housing ensures years of service and the sloped face of the front panel is a standard feature for ease of use. Other ST systems can be stacked on to the ST 300 to preserve bench space.

Both cycle start and vacuum functions are

activated with conveniently located switches

on the handpiece. The ST 300 features the

Quiet-Flo turbine for close to silent operation.

The ST 300 is the simplest and least costly

Additionally, the system comes with the Lo-Flo pump and the vacuum wand (PV-65) for manipulating components manually. The capabilities of the ST 300 can be greatly enhanced when coupled with the ST 500, ST 525, or ST 550. Optional Nozzle Storage Rack 6019-0072-P1, holds 13 nozzles.



▲ ST 300 Front Panel

▲ SPECIFICATIONS

Part Numbers	8007-0427 ST 300
	8007-0428 ST 300E
Power Requirements:	97-127 VAC, 50/60 Hz, 575 Watts max.
	197-253 VAC, 50/60 Hz, 575 Watts max.
Dimensions:	134mm H x 245mm W x 264mm D (5.25" H x 10" W x 10.4" D)
Weight:	4.3Kg (9.5lbs.)
Temperature Control:	Closed loop temperature control
Temperature stability:	±9°C (± 15°F) at idle tip temp.
Temperature Range:	176° to 482°C (350° to 900°F) nominal
Airflow:	5-22 slpm

DO YOU HAVE TIME TO WASTE?

The handpeice features the only "Quick Fit Nozzle Adaptor" available anywhere. This unique feature allows nozzles to be fitted or replaced in a snap, without struggling with a screwdriver and hot heater.

Minutes with Competitor's inferior nozzle installation method







 Competitors inferior nozzle connecting method

Seconds with PACE's QuickFit Nozzle Adapter System







PACE's QuickFit Nozzle
Adaptor System

CONVECTIVE SMT SYSTEMS

DIGITAL PROGAMMABLE HOT AIR REFLOW SYSTEM

The ST 325 is a digital, self-contained system that is fully programmable and can be used to remove or install surface mount components when individual or multiple operations are to be run. From the front panel, the system can be used in either manual or "timed" modes. Manual mode means that the system generates heated airflow when the cycle button is pressed; when it is pressed a second time the system shuts off. "Timed" modes allow the operator to create up to 20 "Profiles" that consist of time and temperatures parameters to ensure process control and repeatability. Both cycle start and vacuum functions are activated with conveniently located switches on the handpiece.

The ST 325 comes standard with one K-type thermo-couple input that can be used to monitor the thermal environment at the work site with optional software. The system also comes with the Lo-Flo pump and the vacuum wand (PV-65) for manipulating components manually. The heavy-duty, durable metal housing ensures years of service and the sloped face of the front panel is a standard feature for ease of use. Other ST systems can be stacked on to the ST 325 to preserve bench

space. The capabilities of the ST 325 can The system can install standard BGA be used to remove or install just about any packages when fitted with the ST 500, ST type of standard pitch surface mount 525 or ST 550, ST 450 or ST 400, and component when the optional Pocket PC, PC, coupled with the or laptop software. ST 500, ST 525, Area array components or ST 550. are aligned using a proven, reliable template method When additional that is easy to use. programming capability is required, such as 4 zone profile creation, an optional software package is available that can be used with a Pocket PC, PC, or laptop (1199-0019-P1). The optional software package further allows the ST 325 to control the ST 450 Preheater when bottom side heating of the PCB is required. Once the 4 zone profiles have been created with the software, they can be downloaded to the ST 325 and can be run WITHOUT

ST 325 Front Pane

■ FEATURES

- Multi-level password lock-out prevents unauthorized changes
- ∠ User definable temperature zone
- Audible countdown timer for end of cycle indication in the Timed and Program modes
- On-screen display of parameters (temperature, time) during operation
- ✓ Store and recall up to 20 profiles
 (40 with optional software)
- Quiet-Flo turbine blower offers nearly silent operation
- Hi-Flo Vacuum Pump for holding component securely
- Lo-Flo Vacuum Pump for component wand

▲ SPECIFICATIONS

connected!

the Pocket PC, PC, or laptop being

8007-0429 ST 325
8007-0432 ST 325E
97-127 VAC, 50/60 Hz, 575 Watts max.
197-253 VAC, 50/60 Hz, 575 Watts max.
134mm H x 245mm W x 264mm D (5.25" H x 10" W x 10.4" D)
4.5Kg (9.9lbs.)
Closed loop, digital temperature control
±9°C (± 15°F) at idle tip temp.
176° to 482°C (350° to 900°F) nominal
5-22 slpm

Patented, Adjustable, Spring Loaded Vacuum Pik - The handpiece is fitted with an adjustable, spring loaded vacuum pik to lift components from the PCB and to hold the component in the nozzle during alignment. The "give" in the spring loading is set, but the absolute position of the vacuum pik is adjustable over a 1.5" length.



Patented, Adjustable, Spring Loaded vacuum Pik

CONVECTIVE SMT SYSTEMS

ST 350 CONVECTIVE REWORK CENTER

The ST 350 is the ultimate in cost effective, programmable, convective rework equipment. No other system on the market at the same price level can compete! The system is completely self-contained and is capable of installing virtually any type of surface mount component. The system is ideal for service centers, prototyping shops, low volume production or remanufacturing centers that want to purchase a single piece of equipment that can handle just about anything!

The ST 350 has all of the process control built into the unit and boasts digital controls for temperature, time, and airflow. The electronic controls are fully integrated and are simple to use and program to meet your needs, unlike the "off the shelf PID control modules" used on competitive equipment. This means that you can "set it and forget it" instead of being tied to the unit to perform tasks during the process which can be more than 6 minutes long! Your time can be better spent preparing for the next operation than waiting to activate non-intergrated control modules.

From the front panel, the system can be used in either manual or "timed" modes. Manual mode means that the system generates airflow when the cycle button is pressed the first time. When pressed a second time, the system shuts off. "Timed" modes allow the operator to set up "Profiles" that consist of time and temperature parameters to ensure process control and repeatability. All of the interface controls for the ST 350 are also located in a remote control box that can be placed on either side of the unit for maximum convenience to the operator.



CONVECTIVE SMT SYSTEMS

The reflow head features Theta rotation for alignment, Z axis motion as well as Y axis motion so the reflow head can be moved safely out of the way so it doesn't interfere with the operator's ability to see while the component land site is being dressed, cleaned, or inspected. The standard PCB holder is capable of holding a PCB that is 457mm X 457mm (18" x 18") and has micrometer adjustments in the X and Y directions for easy alignment.

The ST 350 features the Quiet-Flo turbine and has one K-type thermo-couple input that can be used to monitor the thermal environment at the work site with optional software. Additionally, the system comes standard with the Lo-Flo pump and the vacuum wand (PV-65) for manipulating components manually.

When additional programming capability is required, such as 4 zone profile creation for area array components, an optional software package is available that can be used with a Pocket PC, PC, or laptop (1199-0019-P1). The optional software package further allows the ST 350 to control the ST 450 Preheater when bottom side heating of the PCB is required. Up to three preheaters (any combination of ST 400s and ST 450s) can be placed under the PCB holder. After 4 zone profiles have been created with the optional software, they can be downloaded to the ST 350 and can be run WITHOUT the Pocket PC, PC, or laptop being connected! Area array components are aligned using a proven, reliable template method that is easy to use.

▲ SPECIFICATIONS

Part Numbers	8007-0437 ST 350
	8007-0438 ST 350E
Power Requirements:	97-127 VAC, 50/60 Hz, <i>575</i> Watts max.
	197-253 VAC, 50/60 Hz, 575 Watts max.
Dimensions:	578mm H x 930mm W x 665mm D (22.75" H x 36.75" W x 26.25" D)
Weight:	26.4Kg (58lbs.)
Temperature Control:	Closed loop, digital temperature control
Temperature Stability:	±9°C (± 15°F) at idle tip temp.
Temperature Range:	176° to 482°C (350° to 900°F) nominal
Airflow:	5-22 slpm

▲ FEATURES

- ✓ Multi-level password lock-out prevents unauthorized changes
- ✓ User definable temperature zone
- ∠ Audible countdown timer for end of cycle indication in the Timed and Program modes
- ✓ Store and recall up to 20 profiles (40 with optional software)
- ✓ Quiet-Flo turbine blower offers nearly silent operation
- ✓ On-screen display of parameters (temperature, time) during operation
- ✓ Integrated PCB holder with micrometer adjustments.

FEATURED ITEMS





Reflow head moves back and out of the way to give you clear PCB access for board prep and clean up.





Fast and repeatable nozzle height adjustment with mechanical stop for consistency of process.



▲ ST 350



PACE UNIQUE FEATURE (Twist)
Simple coplanarity adjustment allows
for extract nozzle adjustment, much
better than fixed head systems.





PACE UNIQUE FEATURE
Simple coplanarity adjustment allows
for extract nozzle adjustment, much
better than fixed head systems.



■ BGA alignment is easy with PACE's proven template alignment method.



▲ ST 350 holding QFP component



▲ ST 350 holding BGA component

CONVECTIVE SYSTEM NOZZLES

THESE NOZZLES ARE FOR USE WITH THE ST 300, ST 325 & ST 350

BGA NOZZLES	COMPONENT	BGA SIZE (NOMINAL)	PART NUMBER
	BGA-204/225/256/	27mm x 27mm (1.1" x 1.1")	4028-5001
	272/292/320/324		
	BGA-169/168	23mm x 23mm (0.91" x 0.91")	4028-5002
	BGA-313/352	35mm x 35mm (1.38" x 1.38")	4028-5003
	BGA-144	13mm x 13mm (0.51" x 0.51")	4028-5004
	BGA-121/196	15mm x 15mm (0.59" x 0.59")	4028-5005
	BGA-86	16.25mm x 17.75mm (0.64" x 0.70")	4028-5006
	BGA-68	13.45mm x 14.97mm (0.53" x 0.59")	4028-5007
	BGA-32	10.42mm x 10.42mm (0.41" x 0.41")	4028-5008
	BGA-40/44	11.97mm x 13.21mm (0.47" x 0.52")	4028-5009
	BGA-18	8.64mm x 8.90mm (0.34" x 0.35")	4028-5010
	BGA-292/357/361	25mm x 25mm (0.99" x 0.99")	4028-5011
	BGA-421/432/736	40mm x 40mm (1.57" x 1.57")	4028-5012
	BGA-560	42.5mm x 42.5mm (1.67" x 1.67")	4028-5013
	BGA-240/304/432	31 mm x 31 mm (1.22" x 1.22")	4028-5014
	BGA-256	17mm x 17mm (0.67" x 0.67")	4028-5015
	BGA-252/255/256	21 mm × 21 mm (0.83" × 0.83")	4028-5016
	BGA (Short Adpt.)	21 mm × 21 mm (0.83" × 0.83")	4028-5017
	BGA-479/493/584	37.5mm x 37.5mm (1.48" x 1.48")	4028-5018
	BGA-96/121	19mm x 19mm (0.75" x 0.75")	4028-5019
	BGA-240/324	32mm x 32mm (1.26" x 1.26")	4028-5020
	BGA-256/400	29mm x 29mm (1.14" x 1.14")	4028-5021
	BGA-100	16mm x 16mm (0.63" x 0.63")	4028-5022
	BGA-119	22mm x 14mm (0.87" x 0.55")	4028-5023
	BGA-169	19.25mm x 19.25mm (0.76" x 0.76")	4028-5024
	BGA-196	18.5mm x 18.5mm (0.73" x 0.73")	4028-5025
	BGA-240	26.4mm x 26.4mm (1.04" x 1.04")	4028-5026
	BGA-256	30mm x 30mm (1.18" x 1.18")	4028-5027
	BGA-475	25mm x 32.3mm (0.98" x 1.27")	4028-5028
	BGA-521	43mm x 43mm (1.69" x 1.69")	4028-5029
	BGA-540	44mm x 44mm (1.73" x 1.73")	4028-5030
	BGA-625	32.5mm x 32.5mm (1.28" x 1.28")	4028-5031
	BGA-169	22mm x 22mm (0.87" x .87")	4028-5032
	BGA-361	33mm x 33mm (1.29" x 1.29")	4028-5033
	BGA-720	47.5mm x 47.5mm (1.87" x 1.87")	4028-5034
	BGA-303	21 mm x 25mm (0.83" x 0.98")	4028-5035
	BGA (Short Adpt.)	17mm x 17mm (0.67" x 0.67")	4028-5036
	BGA (Small Cup)	21 mm × 21 mm (0.83" × 0.83")	4028-5037
	Micro BGA-48	7.75mm x 5.6mm (0.31" x 0.22")	4028-5501
	Micro BGA-48	7.85mm x 6.40mm (0.31" x 0.25")	4028-5502

Cannot find the right nozzle for your application?

CONVECTIVE SYSTEM NOZZLES

PATTERN NOZZLES	COMPONENT TYPE	JET SPACING	JET LENGTH	PART NUMBER
	SOIC- 8 (JEDEC)	4.1 mm (0.16")	6.1mm (0.24")	4028-4001
	SOIC-14/16 (JEDEC)	4.1 mm (0.16")	10.9mm (0.43")	4028-4002
	SOICL-16 (JEDEC)	7.9mm (0.31")	10.9mm (0.43")	4028-4003
The state of the s	SOICL-20 (JEDEC)	7.9mm (0.31")	13.5mm (0.53")	4028-4004
	SOICL-24 (JEDEC)	7.9mm (0.31")	16mm (0.63")	4028-4005
	SOICL-28 (JEDEC)	7.9mm (0.31")	18.5mm (0.73")	4028-4006
	SOICL-32 (JEDEC)	11.68mm (0.46")	20.83mm (0.82")	4028-4007
	TSOP-48 (Type I)	18.6mm (0.734")	18.6mm (0.734")	4028-4505
	TSOP-32/40/44/50 (Type II)	10.4mm (0.41")	21.35mm (0.84")	4028-4506
SINGLE JET NOZZLES	SHAPE OF JET TUBE	NOZZLE SIZE (NOMINAL))	PART NUMBER
	Curved, Round	3.0mm diameter (0.1" diam	neter)	4028-1001
	Curved, Round	5.0mm diameter (0.2" diam	ieter)	4028-1002
(4)	Curved, Round	8.0mm diameter (0.3" diam	ieter)	4028-1003
	Straight, Round	3.0mm diameter (0.01" diar	meter)	4028-1011
	Straight, Round	5.0mm diameter (0.2" diam	neter)	4028-1012
	Straight, Round	8.0mm diameter (0.3" diam	ieter)	4028-1013
	Flat Jet	13.21 mm length (0.52")		4028-1021
	Flat Jet	23.37mm length (0.92")		4028-1022
BOX NOZZLES	COMPONENT TYPE	NOZZLE SIZE (NOMINAL))	PART NUMBER
	PLCC	32.5mm x 46.5mm (" x ")		4028-1501
	PLCC-18 (Non Baffled)	8.5mm x 12.1mm (0.34" x (0.48")	4028-2001
	PLCC-20 (Non Baffled)	10.2mm x 10.2mm (0.40" x	(0.40")	4028-2002
	PLCC-28 (Non Baffled)	12.8mm x 12.8mm (0.50" x	: 0.50")	4028-2003
45	PLCC-32 (Non Baffled)	12.8mm x 15.3mm (0.50" x	0.60")	4028-2004
	PLCC-44 (Non Baffled)	17.9mm x 17.9mm (0.70" x	(0.70")	4028-2005
	PLCC-52	20.4mm x 20.4mm (0.80" >	× 0.80")	4028-2006
	PLCC-68	25.5mm x 25.5mm (1.01" x	: 1.01")	4028-2007
	PLCC-84	30.6mm x 30.6mm (1.20")	x 1.20")	4028-2008
=	PLCC-100	38.9mm x 38.9mm (1.53" x	c 1.53")	4028-2009
	QFP-80/100	18.1mm x 24.1mm (0.71" x	(0.95")	4028-2501
	QFP-64/80 (Non Baffled)	17.0mm x 17.0mm (0.67" x	0.67")	4028-2502
	QFP-132	26.9mm x 26.9mm (1.06" x	(1.06")	4028-2503
	QFP-160	31.9mm x 31.9mm (1.26" x	1.26")	4028-2504
	QFP-208	31.5mm x 31.5mm (1.24" x	1.24"")	4028-2505
	QFP-240	34.6mm x 34.6mm (1.36" >	< 1.36")	4028-2506
		23.5mm x 23.5mm (" x ")		4028-2507
	BQFP-100	` '		
	BQFP-84	20.9mm x 20.9mm (" x ")		4028-2508
		<u> </u>	x 1.07")	4028-2508 4028-2602
	BQFP-84	20.9mm x 20.9mm (" x ")		
	BQFP-84 BQFP-132	20.9mm x 20.9mm (" x ") 27.1mm x 27.1mm (1.07" x	× 0.453")	4028-2602

Give us a call, we make custom nozzles!

STENCILS for Area Array Components

COMPONENT STENCILING - Stencils require Universal Bracket Kit, 6993-0248

OPTIONAL STENCILS	PART NUMBER	OPTIONAL STENCILS	PART NUMBER
Stencil, 11 mm x 8mm x 88	1011-0088-P1	Stencil, 40mm x 40mm x 520	1040-0520-P1
Stencil, 11 mm x 8mm x 69	1011-0069-P1	Stencil, 40mm x 40mm x 596	1040-0596-P1
Stencil, 11 mm x 8mm x 72	1011-0072-P1	Stencil, 40mm x 40mm x 680	1040-0680-P1
Stencil, 12mm x 12mm x 144	1012-0144-P1	Stencil, 16.5mm x 8mm x 52	1016-0052-P1
Stencil, 12mm x 12mm x 160	1012-0160-P1	Stencil, 11.4mm x 5.1mm x 22	1011-0022-P1
Stencil, 13mm x 13mm x 144	1013-0144-P1	Stencil, 33mm x 33mm x 503	1033-0503-P1
Stencil, 13mm x 13mm x 64	1013-0064-P1	Stencil, 16mm x 16mm x 209	1016-0209-P1
Stencil, 15mm x 15mm x 156	1015-0156-P1	Stencil, 14mm x 22mm x 119	1014-0119-P1
Stencil, 15mm x 15mm x 160	1015-0160-P1	Stencil, 42.5mm x 32.5mm x 824	1042-0824-P1
Stencil, 15mm x 15mm x 196	1015-0196-P1	Stencil, 32.5mm x 25mm x 474	1032-04 <i>7</i> 4-P1
Stencil, 17mm x 17mm x 208	1017-0208-P1	Stencil, 4mm x 4mm x 16	1004-0016-P1
Stencil, 17mm x 17mm x 256	1017-0256-P1	Stencil, 4mm x 4mm x 20	1004-0020-P1
Stencil, 19mm x 19mm x 52	1023-0052-P1	Stencil, 5mm x 4mm x 24	1005-0024-P1
Stencil, 19mm x 19mm x 225	1023-0052-1 1 1023-0256-P1	Stencil, 4mm x 4mm x 24	1004-0024-P1
Stencil, 19mm x 19mm x 163	1023-0163-P1	Stencil, 4mm x 4mm x 28	1004-0024-F1
Stencil, 19mm x 19mm x 289	1023-0289-P1		1032-0624-P1
Stencil, 23mm x 23mm x 169	1023-0169-P1	Stencil, 32.5mm x 32.5mm x 624 Stencil, 32.5mm x 32.5mm x 937	1032-0824-F1 1032-0937-P1
Stencil, 23mm x 23mm x 192	1023-0192-P1		
Stencil, 23mm x 23mm x 288		Stencil, 31 mm x 31 mm x 304	1031-0304-P1
Stencil, 23mm x 23mm x 324	1023-0288-P1	Stencil, 8mm x 8mm x 64	1008-0064-P1
<u>'</u>	1023-0324-P1	Stencil, 31 mm x 31 mm x 316	1031-0316-P1
Stencil, 23 mm x 23 mm x 208	1023-0208-P1	Stencil, 31 mm x 31 mm x 329	1031-0329-P1
Stencil, 23mm x 23mm x 256	1023-0256-P1	Stencil, 15mm x 13mm x 165	1015-0165-P1
Stencil, 23mm x 23mm x 484	1023-0484-P1	Stencil, 8mm x 10mm x 48	1008-0048-P1
Stencil, 25mm x 25mm x 357	1025-0357-P1	Stencil, 5mm x 5mm x 32	1005-0032-P1
Stencil, 25mm x 25mm x 360	1025-0360-P1	Stencil, PLCC 28	1012-0028-P1
Stencil, 25mm x 25mm x 413	1025-0413-P1	Stencil, 15mm x 15mm x 148	1015-0148-P1
Stencil, 27mm x 27mm x 352	1027-0352-P1	Stencil, 9mm x 9mm x 56	1009-0056-P1
Stencil, 27mm x 27mm x 316	1027-0316-P1	Stencil, 9mm x 9mm x 64	1009-0064-P1
Stencil, 27mm x 27mm x 225	1027-0225-P1	Stencil, 6mm x 5mm x 32	1006-0032-P1
Stencil, 27mm x 27mm x 256	1027-0256-P1	Stencil, 24mm x 24mm x 241	1024-0241-P1
Stencil, 27mm x 27mm x 272	1027-0272-P1	Stencil, 10mm x 10mm x 64LCC	1010-0064-P1
Stencil, 27mm x 27mm x 292	1027-0292-P1	Stencil, 10mm x 10mm x 128	1010-0128-P1
Stencil, 27mm x 27mm x 324	1027-0324-P1	Stencil, 6mm x 6mm x 40	1006-0040-P1
Stencil, 27mm x 27mm x 328	1027-0328-P1	Stencil, 10mm x 10mm x 151	1010-0151-P1
Stencil, 27mm x 27mm x 336	1027-0336-P1	Stencil, 7mm x 7mm x 32	1007-0032-P1
Stencil, 27mm x 27mm x 672	1027-0672-P1	Stencil, 21 mm x 21 mm x 156	1021-0156-P1
Stencil, 27mm x 27mm x 676	1027-0676-P1	Stencil, 7mm x 7mm x 48	1007-0048-P1
Stencil, 35mm x 35mm x 388	1035-0388-P1	Stencil, 7mm x 7mm x 49	1007-0049-P1
Stencil, 35mm x 35mm x 456	1035-0456-P1	Stencil, 14mm x 8mm x 63	1014-0063-P1
Stencil, 35mm x 35mm x 313	1035-0313-P1	Stencil, 7mm x 7mm x 113	1007-0113-P1
Stencil, 35mm x 35mm x 352	1035-0352-P1	Stencil, 16mm x 8mm x 60	1016-0060-P1
Stencil, 35mm x 35mm x 480	1035-0480-P1	Stencil, 45mm x 45mm x 600	1045-0600-P1
Stencil, 35mm x 35mm x 580	1035-0580-P1	Stencil, 45mm x 45mm x 731	1045-0731-P1
Stencil, 40mm x 40mm x 432	1040-0432-P1	Stencil, 42.5mm x 42.5mm x 560	1042-0560-P1
Stencil, 40mm x 40mm x 503	1040-0503-P1		

REBALLING KITS

BGA REBALLING KITS

REBALLING KIT	PART NUMBER	REBALLING KIT	PART NUMBER	REBALLING KIT	PART NUMBER
Kit, Reballer BGA 36	4017-0001-P1	Kit, Reballer UBGA 256	4017-0038-P1	Kit, Reballer BGA 560	4017-0074-P1
Kit, Reballer BGA 40	4017-0002-P1	Kit, Reballer BGA 256	4017-0039-P1	Kit, Reballer SBGA 560	4017-0075-P1
Kit, Reballer FPBGA 44	4017-0003-P1	Kit, Reballer BGA 257	4017-0040-P1	Kit, Reballer BGA 564	4017-0076-P1
Kit, Reballer UBGA 46-33MB	4017-0004-P1	Kit, Reballer PBGA 272	4017-0041-P1	Kit, Reballer CBGA 575	4017-0077-P1
Kit, Reballer UBGA 46-16MB	4017-0005-P1	Kit, Reballer BGA 272	4017-0042-P1	Kit, Reballer PBGA 600	4017-0078-P1
Kit, Reballer BGA 48	4017-0008-P1	Kit, Reballer BGA 292	4017-0043-P1	Kit, Reballer SBGA 600	4017-0079-P1
Kit, Reballer UBGA 62	4017-0009-P1	Kit, Reballer BGA 304	4017-0044-P1	Kit, Reballer TBGA 696	4017-0080-P1
Kit, Reballer FPBGA 64	4017-0010-P1	Kit, Reballer BGA 313 4	017-0046-P1	Kit, Reballer BGA 100	4017-0081-P1
Kit, Reballer FPBGA 69	4017-0011-P1	Kit, Reballer BGA 320	4017-0047-P1	Kit, Reballer LFBGA 100	4017-0082-P1
Kit, Reballer BGA 69	4017-0012-P1	Kit, Reballer TFBGA 324	4017-0048-P1	Kit, Reballer TFBGA 48	4017-0083-P1
Kit, Reballer FPBGA 72	4017-0013-P1	Kit, Reballer BGA 325	4017-0049-P1	Kit, Reballer BGA 233	4017-0084-P1
Kit, Reballer LFPBGA 84	4017-0014-P1	Kit, Reballer BGA 348	4017-0050-P1	Kit, Reballer TFBGA 64	4017-0085-P1
Kit, Reballer BGA 100	4017-0015-P1	Kit, Reballer BGA 352	4017-0051-P1	Kit, Reballer BGA 177	4017-0086-P1
Kit, Reballer BGA 108	4017-0016-P1	Kit, Reballer SPBGA 352	4017-0052-P1	Kit, Reballer BGA 169/2	4017-0087-P1
Kit, Reballer BGA 119	4017-0017-P1	Kit, Reballer SBGA 352	4017-0053-P1	Kit, Reballer LFBGA 80	4017-0088-P1
Kit, Reballer BGA 131	4017-0018-P1	Kit, Reballer TBGA 352	4017-0054-P1	Kit, Reballer TFBGA 48	4017-0089-P1
Kit, Reballer BGA 144	4017-0019-P1	Kit, Reballer BGA 356	4017-0055-P1	Kit, Reballer TFBGA 64	4017-0090-P1
Kit, Reballer UBGA 144	4017-0021-P1	Kit, Reballer PBGA 357	4017-0056-P1	Kit, Reballer LFBGA 64	4017-0091-P1
Kit, Reballer BGA 168	4017-0022-P1	Kit, Reballer CBGA 360	4017-0058-P1	Kit, Reballer LFBGA 144	4017-0092-P1
Kit, Reballer BGA 169	4017-0023-P1	Kit, Reballer BGA 388	4017-0059-P1	Kit, Reballer LFBGA 132	4017-0093-P1
Kit, Reballer BGA 180	4017-0024-P1	Kit, Reballer BGA 400	4017-0060-P1	Kit, Reballer TFBGA 168	4017-0094-P1
Kit, Reballer TBGA 192	4017-0025-P1	Kit, Reballer BGA 404	4017-0061-P1	Kit, Reballer TFBGA 100	4017-0095-P1
Kit, Reballer BGA 192	4017-0026-P1	Kit, Reballer BGA 421	4017-0062-P1	Kit, Reballer LFBGA 120	4017-0096-P1
Kit, Reballer CBGA 196	4017-0027-P1	Kit, Reballer BGA 428	4017-0063-P1	Kit, Reballer TFBGA 320	4017-0097-P1
Kit, Reballer UBGA 196	4017-0028-P1	Kit, Reballer PBGA 432	4017-0064-P1	Kit, Reballer BGA 241	4017-0098-P1
Kit, Reballer BGA 208	4017-0029-P1	Kit, Reballer BGA 452	4017-0066-P1	Kit, Reballer BGA 113	4017-0099-P1
Kit, Reballer BGA 216	4017-0030-P1	Kit, Reballer BGA 456	4017-0067-P1	Kit, Reballer BGA 153	4017-0100-P1
Kit, Reballer BGA 217	4017-0031-P1	Kit, Reballer TBGA 480	4017-0068-P1	Kit, Reballer SBGA 652	4017-0101-P1
Kit, Reballer BGA 225	4017-0033-P1	Kit, Reballer BGA 480	4017-0069-P1	Solder Spheres, .020 diameter	6993-0231-P1
Kit, Reballer BGA 255	4017-0034-P1	Kit, Reballer BGA 492	4017-0070-P1	Solder Spheres, .025 diameter	6993-0232-P1
Kit, Reballer SBGA 256	4017-0035-P1	Kit, Reballer TBGA 500	4017-0071-P1	Solder Spheres, .030 diameter	6993-0233-P1
Kit, Reballer TBGA 256	4017-0036-P1	Kit, Reballer BGA 548	4017-0072-P1		
Kit, Reballer CBGA 256	4017-0037-P1	Kit, Reballer BGA 553	4017-0073-P1		

PREHEATERS

ALL PREHEATERS CAN BE USED AS STAND ALONE OR INTEGRATED WITH SYSTEMS.

Preheating allows for the use of significantly lower and safer temperatures when conductive or convective tools are used for component installation or removals.

Preheating is also required when installing area array components and large leaded devices. The application of heat from the bottom side of the PCB serves several functions: 1) it keeps the PCB from twisting

or warping, 2) it maintains the planarity of the rework site, 3) it warms the PCB so heat applied by the top heater is not drawn away from the rework site, and 4) it ensures that homogenous temperatures across the package and PCB are maintained, allowing the use of safe, low temperatures for the top heater.



The ST 400 is an analog, closed loop, temperature controlled radiant 400 W pre heater. The heating area is 140mm

x 140mm (5.5" x 5.5"). This preheater

the most penetrating and even heating

available. The ST 400 can be used

as a stand-alone unit with either the

ST 525/ST 550 PCB holder or can be

used with the ST 300, ST 325, or ST 350.

is ideal for heavy PCBs and for area array

applications as the medium wave IR delivers

▲ SPECIFICATIONS

Part Numbers	8007-0427 ST 400
	8007-0428 ST 400E
Power Requirements:	97-127 VAC, 50/60 Hz or, 425 Watts max.
	197-253 VAC, 50/60 Hz 425 Watts max.
Dimensions:	105mm H x 178mm W x 318mm D (4.1" H x 7" W x 12.5" D)
Weight:	2.3Kg (5lbs.)
Temperature Stability:	\pm 3 °C (\pm 5 °F) at idle tip temp.
Absolute Temperature Stability:	Meets or exceeds ANSI-J-STD
Temperature Range:	37-205°C (100-400°F)

The ST 450 is an analog, closed loop, temperature controlled convective 1500 W preheater. The heating area is 140 mm x $140 \text{mm} (5.5\text{"} \times 5.5\text{"})$. This preheater is ideal for applications where focused hot air is desirable or where cooling air is required

after the application of heat such as area array applications. Additionally, the nature of hot air allows heat to get into those hard to reach places all too common on today's electronics.



"air wash" nozzles can be attached to focus the heat where it is needed. The ST 450 can be used as a stand-alone unit with either the ST 525/ST 550 PCB holder or can be used with the ST 300, ST 325, or ST 350. When used with the ST 325/ST 350 (with the optional software package) the heater activity of the ST 450 can be controlled through the ST 325 or ST 350. The ST 450 is completely self-contained and when in cooling mode, the airflow is increased

to 50 cfm

The ST 450 can be used as is, or one of 3

▲ SPECIFICATIONS

Part Numbers	8007-0433 ST 450
	8007-0434 ST 450E
Power Requirements:	97-127 VAC, 50/60 Hz or, 1500 Watts max.
	197-253 VAC, 50/60 Hz 1500 Watts max.
Dimensions:	105mm H x 178mm W x 318mm D (4.1" H x 7" W x 12.5" D)
Weight:	2.4Kg (5.3lbs.)
Temperature Stability:	\pm 3 °C (\pm 5 °F) at idle tip temp.
Absolute Temperature Stability:	Meets or exceeds ANSI-J-STD
Temperature Range:	37-205°C (100-400°F)
Heating Airflow	35 cfm
Cooling Airflow	50 cfm
Focus Nozzle Part Numbers	4048-0001-P1 1.5" Square Nozzle
	4048-0002-P1 3" Square Nozzle
	4048-0003-P1 4.5" Square Nozzle

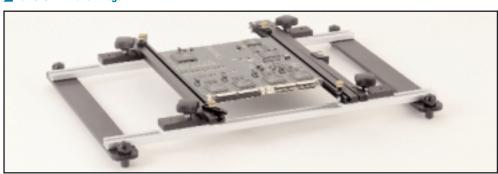
FIXTURES AND PCB HOLDERS

▲ ST 500 adjustable Z-Axis platform

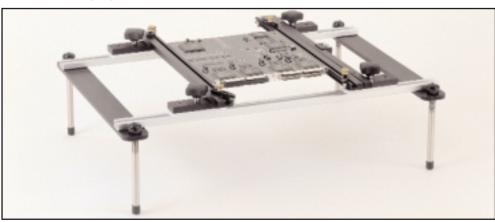


When using convective hand tools, such as the ST 300 and ST 325, it is often helpful to place the handpiece into a fixture that has the ability to control the z axis movement when trying to align or place a component. The ST 500 is an adjustable Z-Axis platform that accepts the handpiece from either the ST 300 or ST 325. The heat award on the handpiece is replaced with a "swivel ring" which is placed on the ST 500. The swivel ring allows the handpiece to be adjusted for planarity to the PCB being worked on. The ST 500 features a sturdy, extruded base that will accommodate either the ST 400 or ST 450 preheater and can also be used with either of the PCB holders (ST 525 or ST 550).

▲ ST 525 with Short Legs



▲ ST 550 with Long Legs



▲ SPECIFICATIONS

Free Standing PCB Holders	6993-0258-P1 ST 500
Part Numbers	6993-0253-P1 ST 525
	6993-0254-P1 ST 550
ST 525 holds PCB's up to:	305mm X 305 mm (12" x 12")
ST 550 holds PCB's up to:	460mm X 460 mm (18" X 18")
Capabilities:	Both come with short legs for bench-top use and with extended
	legs for use with either the ST 400 or ST 450 preheaters.

If you prefer your work to be angled, use two long legs in the back and 2 short legs in the front! These fixtures are ideal for prep-work, cutting leads, soldering, desoldering, inspection, and testing. Both feature spring loaded rails with cocking mechanism for easy PCB removal and insertion. A very flexible system can be created by combining the ST 500 with either PCB holder and the ST 300/ST 325 and the ST 400/ST 450.







DISPENSING

The ST 600 is a shop air based paste dispenser with advanced features at an unbeatable price! No more messing around with inaccurate manual dispensing methods that leave patchy deposits or that rely on "eye balling" the correct volume being deposited.

The ST 600 is a top of the line dispenser with precision dispensing capabilities such as variable air pressure, repeatable measured

pulses, variable timed dispensing, and vacuum pull back to eliminate the mess caused from fluids leaking out of your existing dispensing equipment. Let's be honest, when fluids are dispensed inconsistently or erratically, it causes a lot of extra work for the service technician because the PCB has to be cleaned before trying again and with most of today's PCBs having vias, good luck cleaning them out

quickly! The ST 600 comes standard with a unique finger switch that fits most syringes which allows you to easily coordinate dispensing activity with what your hand is doing without using the foot pedal! Of course, if you prefer the foot pedal approach, this comes standard with the system.



The ST 600 is ideal for applying solder paste, gel fluxes, underfill, potting compounds, or epoxies. Regardless of generous or micro-dot application, the ST 600 will increase your productivity and reduce waste! The ST 600 can be used as a stand alone system and can also be integrated into the ST 350 for the ultimate in convective rework systems!

▲ SPECIFICATIONS

Part Numbers	8007-0439 ST 600	
	8007-0440 ST 600E	
Power Requirements:	97-127 VAC, 50/60 Hz, 90 Watts max.	
	197-253 VAC, 50/60 Hz, 80 Watts max.	
Dimensions:	76mm H x 254mm W x 208mm D (3" H x 10" W x 8.15" D)	
Weight:	2.5Kg (5.5lbs.)	
Air pressure requirements:	50-80 PSI	

▲ ST 600 integrated with ST 350



▲ ST 600 shown with unique finger switch operation



DISPENSING CONSUMABLES

Dispensing consumable products include syringe needles in multiple gauges, plastic tapered tips, syringe adapters, and barrel stoppers.

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
1125-0001-P10	Needle, SS,14GA,0.5"	1125-0020-P50	Needle, SS,18GA,.1"	1125-0033-P10	Tip, Plastic,Taper,20GA
1125-0001-P50	Needle, SS, 14GA, 0.5"	1125-0021-P10	Needle, SS, 19GA,. 1"	1125-0033-P50	Tip, Plastic,Taper,20GA
1125-0002-P10	Needle, SS, 15GA, 0.5"	1125-0021-P10	Needle, SS,20GA,.1"	1125-0034-P10	Tip, Plastic,Taper,22GA
1125-0002-P50	Needle, SS, 15GA, 0.5"	1125-0021-P50	Needle, SS, 19GA,. 1"	1125-0034-P50	Tip, Plastic,Taper,22GA
1125-0003-P10	Needle, SS, 16GA, 0.5"	1125-0021-P50	Needle, SS,20GA,.1"	1125-0035-P1	Adapter,syringe,5cc
1125-0003-P50	Needle, SS, 16GA, 0.5"	1125-0022-P10	Needle, SS,21GA,.1"	1125-0036-P1	Adapter,syringe, 10cc
1125-0004-P10	Needle, SS,17GA,0.5"	1125-0022-P5	Needle, SS,21GA,.1"	1125-003 <i>7-</i> P1	Adapter,syringe,30cc
1125-0004-P50	Needle, SS, 17GA, 0.5"	01125-0023-P10	Needle, SS,22GA,.1"	1125-0038-P5	Barrel & Stopper,5cc, 5 pack
1125-0005-P10	Needle, SS,18GA,0.5"	1125-0023-P50	Needle, SS,22GA,.1"	1125-0038-P10	Barrel & Stopper,5cc, 10 pack
1125-0005-P50	Needle, SS,18GA,0.5"	1125-0024-P10	Needle, SS,23GA,.1"	1125-0039-P5	Barrel & Stopper, 10cc, 5 pack
1125-0006-P10	Needle, SS, 19GA, 0.5"	1125-0024-P50	Needle, SS,23GA,.1"	1125-0039-P10	Barrel & Stopper, 10cc, 10 pack
1125-0006-P50	Needle, SS, 19GA, 0.5"	1125-0025-P10	Needle, SS,24GA,.1"	1125-0040-P5	Barrel & Stopper,30cc, 5 pack
1125-0007-P10	Needle, SS,20GA,0.5"	1125-0025-P50	Needle, SS,24GA,.1"	1125-0040-P10	Barrel & Stopper,30cc,10 pack
1125-0007-P50	Needle, SS,20GA0,.5"	1125-0026-P10	Needle, SS,25GA,.1"	1125-0067-P5	Luer Lock Tip Cap, Pack 5
1125-0008-P10	Needle, SS,21GA,0.5"	1125-0026-P50	Needle, SS,25GA,.1"	1125-0067-P10	Luer Lock Tip Cap, Pack 10
1125-0008-P50	Needle, SS,21GA,0.5"	1125-0027-P10	Needle, SS,26GA,.1"	1125-0068-P5	Flex Cap for Taper Tip Pack 5
1125-0009-P10	Needle, SS,22GA,0.5"	1125-002 <i>7</i> -P50	Needle, SS,26GA,.1"	1125-0068-P10	Flex Cap for Taper Tip Pack 10
1125-0009-P50	Needle, SS,22GA,0.5"	1125-0028-P10	Needle, SS,27GA,.1"	1125-0069-P5	Needle Cover Cap, Pack 5
1125-0010-P10	Needle, SS,23GA,0.5"	1125-0028-P50	Needle, SS,27GA,.1"	1125-0069-P10	Needle Cover Cap, Pack 10
1125-0010-P50	Needle, SS,23GA,0.5"	1125-0029-P10	Needle, SS,30GA,.1"	1125-0070-P5	3cc Manual Syringe, Pack 5
1125-0011-P10	Needle, SS,24GA,0.5"	1125-0029-P50	Needle, SS,30GA,.1"	1125-0070-P10	3cc Manual Syringe, Pack 10
1125-0011-P50	Needle, SS,24GA,0.5"	1125-0030-P10	Tip, Plastic,Taper, 14GA	1125-0071-P5	5cc Manual Syringe, Pack 5
1125-0012-P10	Needle, SS,25GA,0.5"	1125-0030-P50	Tip, Plastic,Taper, 14GA	1125-0071-P10	5cc Manual Syringe, Pack 10
1125-0012-P50	Needle, SS,25GA,0.5"	1125-0031-P10	Tip, Plastic,Taper, 16GA	1125-0072-P5	10cc Manual Syringe, Pack 5
1125-0013-P10	Needle, SS,26GA,0.5"	1125-0031-P50	Tip, Plastic,Taper, 16GA	1125-0072-P10	10cc Manual Syringe, Pack 10
1125-0013-P50	Needle, SS,26GA,0.5"	1125-0032-P10	Tip, Plastic,Taper, 18GA	1125-0073-P5	1 cc Manual Syringe, Pack 5
1125-0014-P10	Needle, SS,27GA,0.5"	1125-0032-P50	Tip, Plastic,Taper, 18GA	1125-0073-P10	1 cc Manual Syringe, Pack 10
1125-0014-P50	Needle, SS,27GA,0.5"				
1125-0015-P10	Needle, SS,30GA,0.5"				10
1125-0015-P50	Needle, SS,30GA,0.5"			The Man	



▲ Dispensing Nozzels

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1125-0016-P10

1125-0016-P50

1125-0017-P10

1125-0017-P50

1125-0018-P10

1125-0018-P50

1125-0019-P10

1125-0019-P50

1125-0020-P10

Needle, SS, 14GA,. 1"

Needle, SS, 14GA,. 1"

Needle, SS, 15GA,.1"

Needle, SS, 15GA,.1"

Needle, SS, 16GA,. 1"

Needle, SS, 16GA,.1"

Needle, SS,17GA,.1"

Needle, SS, 17GA,.1"

Needle, SS, 18GA,. 1"

FUME EXTRACTION

WHY IS FUME EXTRACTION NEEDED?

It's a fact... hazardous fumes in the working environment result in increased absenteeism, employee turnover, worker's compensation claims and lost productivity. Medical research has confirmed an increased incidence of occupational asthma, chronic bronchitis, allergic reactions, contact dermatitis and other health related effects associated with exposure to flux fumes. The substances in flux fumes are regulated by international health and safety agencies and many have been designated as Occupational Sensitizers which means that exposure should be eliminated or reduced to as low levels as possible. 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.

▲ FACT: Exposure to Solder Fumes Leads to Respiratory illness

When rosin-based or rosin-containing fluxes are heated, a substance called colophony is produced, which is one of the major courses of occupational asthma. In order to reduce exposure to colophony, rosin-based fluxes have been exchanged for no-clean or synthetic fluxes that contain no rosin or very low percentages. While this reduces or eliminates exposure to colophony, new chemical irritants may be introduced into the work place, many of which pose a more substantial threat to workers. Over 95% of the total fume products from rosin-based fluxes are in the form of particulates. Chemical exposure from flux fume varies

widely and is dependent on the chemical composition of the flux. Non-rosin or low-rosin fluxes use chemically aggressive substances such as acids, solvents, or alcohols in place of rosin to improve the cleaning action of the flux. **This is also true for Lead Free solders.** Exposure to these substances is also recognized as hazardous and when flux is heated, the resultant chemical by-products can be even more hazardous. Additionally, the use of cleaners, solvents or adhesives, which are common in electronic soldering applications, expose workers to chemical hazards.



PARTICULATE INHALATION RANGE

SOLDER/FLUX FUME

COAL DUST

TOBACCO SMOKE

CARBON BLACK

POLLENS

STANFORD RESEARCH
INSTITUTE, CALIFORNIA

BACTERIA

D.0001 0.001 0.01 0.1 1 10 100

PARTICLE SIZE IN MICRONS

The human body has been designed with defense mechanisms such as nasal passageways lined with mucus that will collect larger particles through a process known as impaction and ciliated breathing passageways to remove foreign substances from the main airways of the lungs. Flux fumes contain high levels of respirable particles (less than 3.5 microns in diameter similar in size to cigarette smoke) that can bypass these natural defense mechanisms, and deposit themselves in the gas-exchange region of the lungs, thereby posing the greatest exposure hazard.

▲ FACT: Material Safety Data Sheets for Fluxes Recommend the Use of Local Exhaust Ventilation Systems

The Health effects caused by exposure to flux fumes tend to be forms of respiratory illness and contact dermatitis. However, since the components of flux fume are often designated as occupational sensitizers, chronic or prolonged exposure increases the severity of health effects. PACE Fume Extraction is a key element in protecting workers from being exposed to flux fume!

FUME EXTRACTION

The Sodr-Tek bench-top FX 50 fume exhauster is designed to remove solder flux fumes and other workplace fumes from the operator's breathing zone. Harmful fumes are drawn through an activated carbon impregnated foam filter.



FX 50

- **▲ FEATURES**
- ∠ High airflow fan
- ✓ Simple filter change out
- Variable mounting with pre-drilled holes
- ✓ Three height adjustments
- ∠ Easy swivel action
- Compact
- Portable
- Includes three filters

▲ SPECIFICATIONS

Power Requirements:	Part No. 8884-0920 - 115 VAC, 50/60 Hz, 17 Watts
	Part No. 8884-0925 - 230 VAC, 50/60 Hz, 17 Watts
Airflow with filter:	60m³/h (35CFM)
Dimensions:	220mm (8.7") Wide x 270mm (10.6") High x 168mm (6.6")Deep
Weight:	1591 g (3.5lbs.)
Exhauster housing:	Static Safe Plastic
Activated-carbon	
impregnated foam filter:	130mm (5.1") Wide x 130mm (5.1") High x 68mm (0.4") Deep
Replacement filter:	Part No. 8883-0200-P5 - Package of Five Filters

The Arm-Evac 50 is a unique, portable, cost-effective, bench-top fume extractor that provides wide area fume extraction or highly efficient source capture at up to two points using the optional arm attachment. The Arm-Evac 50 features operator adjustable airflow, quiet operation and a wide variety of filter options to meet the needs of virtually any application.

▲ FEATURES

- ✓ Operator Adjustable Airflow
- ✓ Plenum or Arm Extraction
- ✓ Static Safe
- ✓ Four Levels of Fume Filtration
- ✓ Filter Condition Monitoring
- ✓ Incorporates utility platform

▲ SPECIFICATIONS



Arm-Evac 50



▲ Arm-Evac 50 with Optional Dual Arm Attachment

Unit:	Arm-Evac 50 - 8889-0050
Power Requirements:	115 or 230 VAC, 50/60 Hz
Size:	215mm (8.5") H x 330mm (13.0") W x 315mm (12.5") D
Weight:	6 Kg (13 lbs.)
Sound Level*:	54 dBA
Standard Inlets:	One laminar flow, plenum inlet
Flow Rate:	Adjustable: 152 m3/h (90 cfm) max with Plenum
	One Arm Adjustable: 84.5 m3/h (45 cfm) max
	Two Arms Adjustable: 60 m3/h (30 cfm) max per arm
System Options:	Dual Arm Accessory - 8886-0055
Standard Filters:	Pre-Filter - 8883-0125-P5
	General Purpose Filter - 8883-0280
Filtration Options:	Clean room Filter - 8883-0290**
	Adhesive Filter - 8883-0295 * *
	Economy Filter - 8883-0300-P5 * *
	* Airfless and a size level are a seried

* Airflow and noise level are nominal numbers and will vary based on voltage

** Pre-filter also required.

FUME EXTRACTION

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 includes a brushless motor and the housing is made of heavy duty, 20 gauge steel. One inlet cap is provided to seal the unused inlet if only one flex arm is used.

▲ Arm-Evac 105



▲ SPECIFICATIONS

Unit:	Arm-Evac 105 - 8888-0110	
	Arm-Evac 105E - 8888-0105	
Power Requirements:	115 VAC, 60 Hz	
	230 VAC, 50 Hz	
Dimensions:	500mm (19.6")H x 290mm (11.5")W x 290mm (11.5")D	
Weight:	11.5 Kg (25.3 pounds)	
Sound Level*:	55 dBA	
Number of Inlets:	Two 75 mm (3")	
General Purpose Filter:	Single Inlet: 220 m3/h (130 cfm);	
	Dual Inlet: 118 m3/h (70 cfm) per inlet	
Clean room Filter:	Single Inlet: 187 m3/h (110 cfm);	
	Dual Inlet: 105 m3/h (62 cfm) per inlet	
# of Collection Accessories:	Two 75mm (3") Flex Arms	
Maximum Duct Run:	2.5m (8') per inlet	
Standard Filters:	Pre-Filter - 8883-0111-P5	
	General Purpose Filter - 8883-0931	
Filtration Options:	Clean room Filter - 8883-0921 *	
	Adhesive Filter - 8883-0951 *	
	Extended Life Filter - 8883-0936**	
	Economy Filter - 8883-0871 *	

^{*}Pre-filter also required **Requires Extended life Pre-Filter - 8883-0938-P10

▲ FILTER SELECTION CHART

	Pre-Filter	High Capacity Pre-Filter	Economy Filter	General Purpose Filter	Clean Room Filter	High Capacity Filter	Adhesive Filter
FX 50	N/A	N/A	883-0200-P5	N/A	N/A	N/A	N/A
Arm-Evac 50	8883-0125-P5	N/A	8883-0300-P5	8883-0280	8883-0290	N/A	8883-0295
Arm-Evac 105	8883-0111-P5	8883-0938-P10*	8883-0871	8883-0931	8883-0921	8883-0936*	8883-0951

^{*} High Capacity Pre-Filters must be used in combination with a High Capacity Filter. When Filters need to be replaced, simply remove them from the Fume Extractor and replace with a new one. Disposal of filters should be done in compliance with local environmental regulations

ESD Safe Flex-Arm (P/N 8886-0750) - The most SPECIFICATIONS versatile and economical collection accessory.

▲ ESD Safe Flex Arm



ESD Rating:	Surface Resistivity: 1.00E3 Ohm
	Volume Resistivity: <6.00E2 Ohm-cm
Length:	915mm (36")
Diameter:	75mm (3")
Mounting:	Directly onto Fume Extractor
	or uses optional Bench Mounting Bracket
Standard Endpiece:	Round

ESD Safe Flex-Arm Quick-Mount Bench Mounting Bracket Kit (P/N 8886-0745) allows the ESD Safe Flex-Arm to be mounted virtually anywhere. Quick Mount clamp allows for arm and bracket to be repositioned in seconds. Kit includes 25m (8') of 75mm (3") ESD Safe flexible hose. ***BEST VALUE*** ESD Safe Flex-Arm Kit (8886-0765) contains everything needed to mount an ESD Safe Flex-Arm to a workbench. The kit includes: (1) ESD Safe Flex-Arm (P/N 8886-0750) and (1) Quick-Mount Bench Mounting Bracket Kit (P/N 8886-0745).

SODR-TEK MATERIALS

SODR-TEK MATERIALS	PART NUMBER	FLUX CORE	CORE SIZE	PACKAGE SIZE
All purpose Electrical Rosin Core Solder 60/40 .031 dia	1125-0042-P1	44	58	8 oz
All purpose Electrical No-Clean Core Solder 60/40, .031 dia	1125-0043-P1	245	66	8 oz
All purpose Electrical Rosin Core Solder 60/40, .5 dia	1125-0063-P1	44	58	8 oz
All purpose Electrical No-Clean Core Solder 60/40, .5 dia	1125-0064-P1	245	66	8 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Rosin Core .031 Dia	1125-0044-P1	44	58	8 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Rosin Core .050 Dia	1125-004 <i>5</i> -P1	44	58	8 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Acid Core .031 Dia	1125-0046-P1	Acid	66	8 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Acid Core .050 Dia	1125-004 <i>7-</i> P1	Acid	66	8 oz
All purpose Electrical Rosin Core Solder 60/40, .31 dia	1125-0048-P1	44	58	4 oz
All purpose Electrical No-Clean Core Solder 60/40, .31 dia	1125-0049-P1	245	66	4 oz
All purpose Electrical Rosin Core Solder 60/40, .5 dia	1125-0065-P1	44	58	4 oz
All purpose Electrical No-Clean Core Solder 60/40, .5 dia	1125-0066-P1	245	66	4 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Rosin Core .031 Dia	1125-0050-P1	44	58	4 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Rosin Core .050 Dia	1125-0051-P1	44	58	4 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Acid Core .031 Dia	1125-0052-P1	Acid	66	4 oz
Sn96.5/Ag3/Cu0.5 Lead Free solder wire Acid Core .050 Dia	1125-0053-P1	Acid	66	4 oz
Flux applicator Brushes	1125-0054-P5			Pack of 5
SP 30 Acid Flux Paste	1125-0055-P1			2 Oz
SP-44 Rosin Flux Paste	1125-0056-P1			2 Oz
Flux Pen 951	1125-0059-P1			Pen
Flux Pen 186	1125-0060-P1			Pen
TSF-6522 No Clean Gel Flux	1125-0061-P1			35g syringe
TSF-6805 Water Soluble Gel Flux	1125-0062-P1			35g syringe
Tip-Brite, lead free tip tinner	1120-0016-P1			0.7 oz

Flux Definition 44 = Active Rosin Flux 245 = No Clean Flux Acid = Acid Based Flux	Core Definition 58 = 1.1% 66 = 2.2%	
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SOLDER WICK DESOLDERING BRAID

Sodr-Tek Desoldering braid is 100% copper and has a fine braid design to promote strong capillary action to remove residual solder completely. Sodr-Tek Desoldering Braid removes up to four times more solder than the conventional wick and extracts solder much faster than competitive braids. The residue left behind is halide free and non-conductive so it does not have to be cleaned off the PCB. Sodr-Tek Desoldering Braids are available in a wide variety of sizes, with rosin and no clean fluxes, and with or without anti-static bobbins. Try our Desoldering Braids today and you'll see the difference immediately!

ТҮРЕ	DESCRIPTION	PART NUMBER
Advanced Wick,	2701, 10 ft, .035" wide, fine braid, white bobbin	1243-0008-P1
Advanced Wick,	2701, 25 ft, .035" wide, fine braid, white bobbin	1243-0009-P1
Advanced Wick,	2701, 5 ft, .035" wide, fine braid, white bobbin	1243-0010-P1
Advanced Wick,	2702, 10 ft, .055" wide, fine braid, yellow bobbin	1243-0011-P1
Advanced Wick,	2702, 25 ft, .055" wide, fine braid, yellow bobbin	1243-0012-P1
Advanced Wick,	2702, 5 ft, .055" wide, fine braid, yellow bobbin	1243-0013-P1
Advanced Wick,	2703, 10 ft, .075" wide, fine braid, green bobbin	1243-0014-P1
Advanced Wick,	2703, 25 ft, .075" wide, fine braid, green bobbin	1243-0015-P1
Advanced Wick,	2703, 5 ft, .075" wide, fine braid, green bobbin	1243-0016-P1
Advanced Wick,	2704, 10 ft, .098" wide, fine braid, blue bobbin	1243-0017-P1
Advanced Wick,	2704, 25 ft, .098" wide, fine braid, blue bobbin	1243-0018-P1
Advanced Wick,	2704, 5 ft, .098" wide, fine braid, blue bobbin	1243-0019-P1
Advanced Wick,	2705, 5 ft, .130" wide, fine braid, brown bobbin	1243-0020-P1
Advanced Wick,	2705, 10 ft, .130" wide, fine braid, brown bobbin	1243-0021-P1
Advanced Wick,	2705, 25 ft, .130" wide, fine braid, brown bobbin	1243-0022-P1
Advanced Wick,	2706, 10 ft, .193" wide, fine braid, red bobbin	1243-0023-P1
Advanced Wick,	2706, 25 ft, .193" wide, fine braid, red bobbin	1243-0024-P1
Advanced Wick,	2708, 10 ft, .035" wide, white anti static bobbin	1243-0025-P1
Advanced Wick,	2708, 25 ft, .035" wide, white anti static bobbin	1243-0026-P1
Advanced Wick,	2708, 5 ft, .035" wide, white anti static bobbin	1243-0027-P1
Advanced Wick,	2709, 10 ft, .055" wide, yellow anti static bobbin	1243-0028-P1
Advanced Wick,	2709, 25 ft, .055" wide, yellow anti static bobbin	1243-0029-P1
Advanced Wick,	2709, 5 ft, .055" wide, yellow anti static bobbin	1243-0030-P1
Advanced Wick,	2710, 10 ft, .075" wide, green anti static bobbin	1243-0031-P1
Advanced Wick,	2710, 5 ft, .075" wide, green anti static bobbin	1243-0032-P1
Advanced Wick,	2710, 25 ft, .075" wide, green anti static bobbin	1243-0033-P1
Advanced Wick,	2711, 10 ft, .098" wide, blue anti static bobbin	1243-0034-P1
Advanced Wick,	2711, 25 ft, .098" wide, blue anti static bobbin	1243-0035-P1
Advanced Wick,	2711, 5 ft, .098" wide, blue anti static bobbin	1243-0036-P1
Advanced Wick,	2712, 10 ft, .130" wide, brown anti static bobbin	1243-0037-P1
Advanced Wick,	2712, 25 ft, .130" wide, brown anti static bobbin	1243-0038-P1
Advanced Wick,	2712, 5 ft, .130" wide, brown anti static bobbin	1243-0039-P1
Advanced Wick,	2713, 25 ft, .193" wide, red anti static bobbin	1243-0040-P1
Advanced Wick,	2713, 5 ft, .193" wide, red bobbin	1243-0041-P1

SOLDER WICK DESOLDERING BRAID

ТҮРЕ	DESCRIPTION	PART NUMBER
No-Clean Wick,	2714, 10 ft, .035" wide, white bobbin	1243-0042-P1
No-Clean Wick,	2714, 25 ft, .035" wide, white bobbin	1243-0043-P1
No-Clean Wick,	2714, 5 ft, .035" wide, white bobbin	1243-0044-P1
No-Clean Wick,	2715, 10 ft, .055" wide, yellow bobbin	1243-0045-P1
No-Clean Wick,	2715, 25 ft, .055" wide, yellow bobbin	1243-0046-P1
No-Clean Wick,	2715, 5 ft, .055" wide, yellow bobbin	1243-004 <i>7</i> -P1
No-Clean Wick,	2716, 10 ft, .075" wide, green bobbin	1243-0048-P1
No-Clean Wick,	2716, 25 ft, .075" wide, green bobbin	1243-0049-P1
No-Clean Wick,	2716, 5 ft, .075" wide, fine green bobbin	1243-0050-P1
No-Clean Wick,	2717, 10 ft, .098" wide, blue bobbin	1243-0051-P1
No-Clean Wick,	2717, 25 ft, .098" wide, blue bobbin	1243-0052-P1
No-Clean Wick,	2717, 5 ft, .098" wide, blue bobbin	1243-0053-P1
No-Clean Wick,	2720, 10 ft, .035" wide, anti static white bobbin	1243-0054-P1
No-Clean Wick,	2720, 25 ft, .035" wide, anti static white bobbin	1243-0055-P1
No-Clean Wick,	2720, 5 ft, .035" wide, anti static white bobbin	1243-0056-P1
No-Clean Wick,	2721, 10 ft, .055" wide, anti static yellow bobbin	1243-005 <i>7</i> -P1
No-Clean Wick,	2721, 25 ft, .055" wide, anti static yellow bobbin	1243-0058-P1
No-Clean Wick,	2721, 5 ft, .055" wide, anti static yellow bobbin	1243-0059-P1
No-Clean Wick,	2722, 10 ft, .075" wide, anti static green bobbin	1243-0060-P1
No-Clean Wick,	2722, 25 ft, .075" wide, anti static green bobbin	1243-0061-P1
No-Clean Wick,	2722, 5 ft, .075" wide, fine anti static green bobbin	1243-0062-P1
No-Clean Wick,	2723, 10 ft, .098" wide, anti static blue bobbin	1243-0063-P1
No-Clean Wick,	2723, 25 ft, .098" wide, anti static blue bobbin	1243-0064-P1
No-Clean Wick,	2723, 5 ft, .098" wide, anti static blue bobbin	1243-0065-P1
No-Clean Wick,	2724, 10 ft, .130" wide, anti static brown bobbin	1243-0066-P1
No-Clean Wick,	2724, 25 ft, .130" wide, anti static brown bobbin	1243-0067-P1
No-Clean Wick,	2724, 5 ft, . 130" wide, anti static brown bobbin	1243-0068-P1

▲ Bobbin Styles



APPLICATIONS SUPPORT & TRAINING

PACE offers the most advanced operator training courses available. There are five standard, four day courses and six 2-day courses to choose from, or we can customize a course to meet your specific needs. The Standard 4 day courses are:

High Reliability Through-Hole Soldering and Rework (Standard Through-Hole)

Mixed Technology Rework & Repair (Standard Through -Hole and SMT)

Multi-Layer and Flexible Circuit Repair

PCT 400

Surface Mount Assembly Rework & Repair (Standard SMT)

PCT 500

Advanced Surface Mount Rework & Repair (BGA and Fine Pitch)



APPLICATION SUPPORT

PACE offers valuable application support services to Sodr-Tek customers. If you ever find yourself in a situation where you need assistance with how to use a piece of equipment, how to install or remove a component, or how to incorporate lead free solders into your processes, simply call PACE's applications support department and we'll provide you with the tools and information you need at no charge! For component installations and removals, we will provide you with a detailed set of work instructions with images to take you through the process step by step.

Need more help?

Call our applications support department and we will walk you through the process. When you purchase Sodr-Tek you get much more than the best equipment, you gain a partner to support your technical needs.

OUR MOST POPULAR CONFIGURATIONS AND BENCHTOP SYSTEMS

With Sodr-Tek you can create the exact system configuration to meet your needs! Common sample configurations are shown below.















