WR3M – Rework on the highest level

New Design

Weller has taken the rework station to the highest level; with the new WR3M.

The versatile repair station is specifically tailored to the needs and requirements of professional repairs to latest-technology electronic sub-assemblies in industrial production engineering and in the repair and laboratory fields.

3 independent tool channels

with automatic tool detection guarantee the simultaneous operation of 3 soldering tools.

Precise temperature control performance at the soldering tip is guaranteed by the digital control electrotechnology together with superior-quality sensor and heat-transfer technology. High-speed measured-value acquisition provides for maximum temperature precision and optimum dynamic temperature performance in load situations.

High-Speed Micro Tools

All Weller High-Speed Micro Tools such as the WMRP micro soldering pencil and the WMRT micro desoldering tweezers can be connected. But also extremely powerful accessories, such as the new HAP200 hot-air pencil, can be easily connected.

Hot-air pencil HAP200

The HAP 200 provides a directional hot air flow that is adjustable. Electronic temperature control from 150°F to 999°F. Different nozzles available as accessory. Finger switch controls adjustable pump. (For use with WR 3M only.)

HAP 200 Hot air pencil

USB port

The WR3M is equipped with a mini USB port. The extensive PC software supplied can be used to update the software on the control unit. Software for monitoring, parameterising and data logging is included in the software package.

Operation simplicity

The big LCD display allows clear information and simple handling.

Innovative special functions such as automatic channel changing, temperature preselection buttons for each channel, Factory Calibration Check.

Accessories

WRK Rework Set

The newly developed, innovative desoldering system facilitates soldering and desoldering of large SMT components up to 30 x 30 mm. The desoldering system can be connected to the additional vacuum channel (pick up) of the WR 3M.

WVP

Components can be easily and safely moved with the aid of the WVP vacuum pipette. The housing is antistatic and the vacuum nipples are available in 2 different sizes. The desoldering system can be connected to the additional vacuum channel (pick up) of the WR 3M.

WP 80 Soldering Iron, 80 W / 24 V

DXV80 Desoldering Iron 80 W / 24 V

DSX80 Desoldering Iron 80 W / 24 V (optional accessory)

Technical data

Dimensions:	L x W x H (inches): 10.75 x 9.25 x 4.02
Weight:	Approximately 14.8 lbs.
Power supply voltage:	120 VAC, 60 Hz
Power consumption:	400 Watts
EOS / ESD Properties	All Tool Handles, Cordsets and Air Flow are Static Free
Fuse:	4 Amp
Temperature control range:	Variable in (1) degree increments from 150°F – 999°F Controllable temperature range is tool-dependent
Temperature accuracy:	± 17°F (Average tip temperature can be offset ± 9°F at idle with no load)
Temperature stability:	± 9°F
Hot Air / Vacuum Pump (duty cycle: 30 seconds on, 30 seconds off)	Max. vacuum 0.7 bar Max. delivery rate 18 l/min Hot air max. 15 l/min
Vacuum Pick-up Pump (duty cycle: 60 seconds on, 30 seconds off)	Max. vacuum 0.5 bar Max. delivery rate 1.7 l/min

WR3M scope of delivery

Order No. WR3M
- WR3M repair station
- Adapter for HAP 200 hot-air pencil
- CD with USB software
- USB cable

WR3000M set scope of delivery

Order No. WR3M
- WR3M Repair Station
- HAP200 Hot-air pencil with WDH30 Safety rest
- DXV80 Desoldering iron with WDH40 Safety rest
- WP80 Soldering iron with WDH10T Stop + go Safety rest
- WVP Vacuum pick up
- WDC2 Dry cleaner
- Adapter for HAP200 Hot-air Pencil
- CD with use software
- USB cable
- Nozzle replacement tool
- 1.2mm and 3.0mm hot gas nozzles
- Nozzle adapter for HAP200
- 2.3mm and 2.5mm desoldering nozzles
- Desoldering cleaning tools, brush, and spare filters
- Color-coded clips for easy tool identification

SUPERIOR LEAD FREE PERFORMANCE

Weller®

WR 3M

Vac

Air

Pick Up

multi function

Made in Germany

WR3M – Innovation newly designed

- **3 tool channels with automatic tool detection**
- **Large LCD display**
- **Own vacuum channel for pick-up**
- **USB port**
- **Innovative special functions**
- **Comprehensive PC software**
- **All High-Speed Micro-Tools can be connected**
- **New powerful hot-air pencil**

Weller Flexibility

Refer to the matrix to make your choice of connecting tools for the WR3M.
(See Matrix page 26)

HAP200 Hot air pencil set

HAP200
0052711799

The HAP200, 200 W/24 V, provides a directional hot airflow that is adjustable and static-free. Electronically temperature controlled from 150°F to 999°F. Different nozzles available as accessories. Finger switch controls speed adjustable pump. Hot air pencil set, consisting of HAP 200 with finger switch, WDH 30 Safety rest for pencil, nozzle 1,2 mm and 3,0 mm, key and nutdriver for nozzle changing. For pencil only, order 0052711699.

DSX80 Desoldering iron set and service kit

DSX80
0051318399

An 80 W/24 V desoldering iron for electronics rework. Electronically temperature controlled. Micro-finger switch controls quick-start, fast action vacuum pump. Different interchangeable tiplets are available as accessories. DSX80 set, consisting of DSX80 Desoldering iron, WDH30 Safety rest, cleaning tool, glass collector, two desoldering nozzles, gasket, anti-bloc paste, filter. For pencil only, order 0051319099.

WMRP Soldering pencil set for RT soldering tips

WMRP
0052919099

The RT soldering tips have an extremely short heat-up time. All component parts of the system, such as the sensor and heating element, are designed for optimum heat transfer. This ensures absolute efficiency in the utilization of the power provided by the supply unit. The recovery time is minimized. Changing soldering tips is quick, easy, and, most importantly, requires no tools. WMRP set, consisting of WMRP soldering pencil, RT3 soldering tip and WDH50 Safety rest. For pencil only, order 0052917199.

WP80 Micro Soldering pencil set

WP80
0052918199
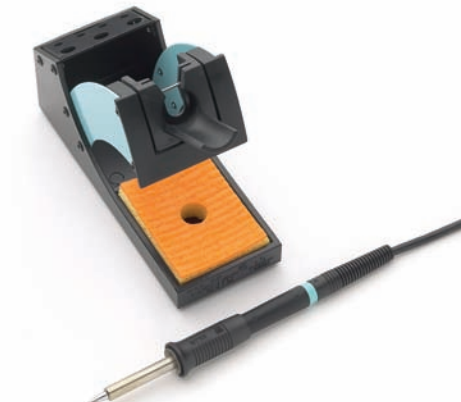
The 80 W micro soldering pencil WP80 persuades with its short tip-to-grip design, being of big advantage for work under microscopes. The distance from grip to the tip is 40 mm only. WP80 set, consisting of WP80 soldering pencil and WDH10 Safety rest. For pencil only, order 0052918099.

HAP1 Hot air pencil set

HAP1
0052711899

The HAP1, 100 W/24 V, provides a directional hot airflow that is adjustable and static-free. Electronically temperature controlled from 150°F to 999°F. Different nozzles available as accessories. Finger switch controls speed adjustable pump. Hot air pencil set, consisting of HAP1 with finger switch, WDH30 Safety rest for pencil, nozzle 1,2 and 3,0 mm, key and nutdriver for nozzle changing.
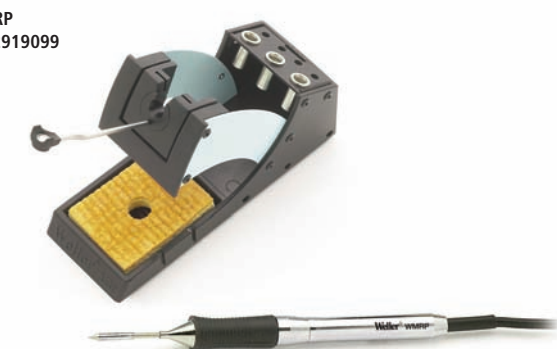
DXV80 Inline desoldering set

DXV80
0051318299

Connectable to all 80 W desoldering stations. Handle utilizes the replaceable solder collector to hold the extracted solder. Use off thred less DX nozzles. DXV80 set, consisting of DXV80 Desoldering iron, and WDH40 Safety rest for iron. For pencil only, order 0051318099.

WSP80 Micro soldering pencil set

WSP80
0052917899

A micro soldering pencil, 80 W/24 V. This soldering pencil can be universally used in all situations from extremely delicate soldering to those where there is a greater temperature requirement. WSP80 set, consisting of WSP80 Micro soldering pencil with WDH10 Safety rest. For pencil only, order WSP80.

MPR80 Peritronic soldering pencil set

MPR80
0053313199

An 80 W Antistatic Peritronic soldering pencil that gives all-round vision when making intricate connections. Antistatic cord and handle. Electronically temperature controlled. Consists of MPR80 Peritronic soldering iron and KH25P Safety rest.

Weller Flexibility

Refer to the matrix to make your choice of connecting tools for the WR3M.
(See Matrix page 26)

WMPT Micro soldering pencil set with stop + go stand

WMP
0053315999

The 65 W micro pencil is up to the task with superior performance for both heat-up and thermal efficiency. Suitable to handle all micro components and fine pitch tasks. The WMP provides an extremely short tip-to-grip distance. The heater is integrated into the handle. When the tip wears out the heating element goes on. WMP set consisting of WMP micro soldering pencil and WDH20T Safety rest with Stop + Go function for WMP. For pencil with WDH20 stand, order 0052917999. For pencil only, order WMP.

WSP150 Soldering iron set

WSP150
0052918999
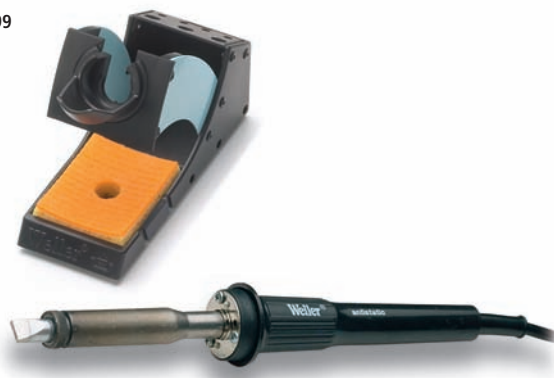
The WSP150, 150 W/24 V, soldering iron was specially developed for soldering tasks with extremely high heat requirements. The 150 W heater power combined with optimal transfer of heat to the soldering tip guarantees the high performance capability of the soldering pencil. WSP150 set, consisting of WSP150 Soldering pencil, WDH30 Safety rest for iron. For pencil only, order 0052917099.

WMRT Tweezers set

WMRT
0051317399

The new WMRT desoldering tweezers 80 W/24 V enable with their twin parallel adjusted tiplets a significant precise and desoldering of very small SMD components. Placed in the Safety rest WDH60 the tips are automatically switched off for increasing endurance. For tweezers only, order 0051317299.

WTA50 Tweezers set

WTA50
0053313399

The tweezers are used to desolder SMD components. The tweezers have two moveable heating elements. WTA50 set, consisting of WTA50 Tweezers, AK51 Safety rest for Tweezers. For tweezers only, order 0051317199.

Weller Flexibility

Refer to the matrix to make your choice of connecting tools for the WR3M.
(See Matrix page 26)

WSB80 Solder Bath

WSB80
0052704099
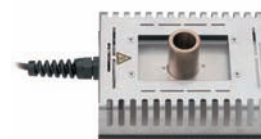
The WSB80 is a very useful rework preparation tool. The solder bath is temperature controlled continuously from 150°F to 850°F via an existing 80 W power unit (sold separately). The solder bath can be used to tin wire ends and clean leads of all extraneous solder particles in preparation for reworking. (Usable with lead free solder.) Compatible with WD1, WD1M, WD2, WD2M, WRS3000, or WR3M power units.

WHP80 (80 W/24 V) Preheating Plate

WHP80
0052702899
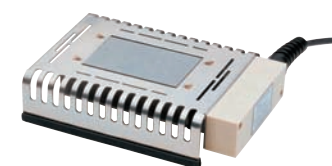
With a heating surface of 80 x 50 mm, for preheating IC boards prior to micro rework. Compatible with WD1, WD1M, WD2, WD2M, WRS3000, or WR3M power units.

WVP Vacuum Pick-Up

WVP Vacuum pick-up
0052918499

Vacuum pick-up for easy manually handling of SMD components. The housing is antistatic. The vacuum nipples are available in two different sizes.

WSB150 Solder Bath

WSB150
0052704299

The WSB150 solder bath is optimally suited to tin coating and preparation of soldering components. It has a temperature range of 150°F – 999°F with heat output of 150 W. To guard against dripping solder residue, the solder bath is placed in a V2A tray, supplied as an optional extra. (Usable with lead free solder.) Compatible with WD2, WD2M, or WR3M power units.

WRK Chip Removal Kit

WRK Chip kit
0051515599
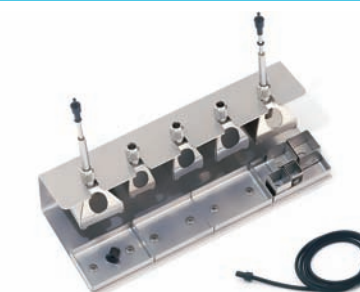
Innovative desoldering system to solder and desolder SMD components up to the size of 30 x 30 mm. Connectable to the additional vacuum channel of the WR3M.

Hot Air Nozzles

for hot air pencil HAP1 and HAP200

HAP1 (page 10)

HAP200 (page 10)

x
y

Adapter
Order No. 0058761728

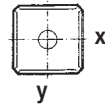|		Description	Dimensions (mm) x y	Type	Order No.
		Hot air nozzle four sides heated with hot plate	18.0 x 18.0 16.0 x 16.0 12.0 x 12.0	Q10 SK769B SK709	0058727785 0058727816 0058727812
		Hot air nozzle four sides heated with hot plate	12.5 x 15.0	Q08	0058727783
		Hot air nozzle four sides heated with hot plate	15.0 x 10.0	Q06	0058727780
		Hot air nozzle four sides heated with hot plate	6.0 x 9.0	Q04	0058727778
		Hot air nozzle four sides heated with hot plate	6.0 x 6.5	Q02	0058727777
		Hot air nozzles two sides heated with hot plate	10.0 x 18.0	D10	0058727784
		Hot air nozzle two sides heated with hot plate	15.0 x 10.0	D08	0058727781
		Hot air nozzle two sides heated with hot plate	10.0 x 13.0	D06	0058727782
		Hot air nozzle two sides heated with hot plate	10.5 x 10.5	D04	0058727779

Hot Air Nozzles

for hot air pencil HAP1 and HAP200

HAP1 (page 10)

HAP200 (page 10)

x
y
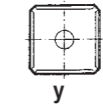
Adapter
Order No. 0058761728

		Description	Dimensions (mm) x y	Type	Order No.
		Flat nozzle	12.0 x 1.5	F06	0058727772
		Flat nozzle	10.5 x 1.5	F04	0058727773
		Flat nozzle	8.0 x 1.5	F02	0058727774
		Round nozzle long straight	Ø 2.0	R10	0058727787
		Round nozzle long bent	Ø 2.0	R08	0058727786
		Round nozzle	Ø 3.0	R06	0058727822
		Round nozzle	Ø 1.2	R04	0058727821
		Round nozzle	Ø 0.8	R02	0058727823
		Dual nozzle	Ø 1.5 x 10.0	FD4	0058727775
		Dual nozzle	Ø 1.5 x 8.0	FD2	0058727776

Nozzles

Threadless nozzles for desoldering iron
DSX80 and DXV80

The new X series nozzle feature a threadless fixture system whereby the nozzle is inserted into the head and locked into place by apllying a 1/4 turn. This feature allows the nozzles to be quickly and easily exchanged and also improves the rate of thermal transfer from the head to the nozzle.

DSX80 (page 10)

DXV80 (page 10)

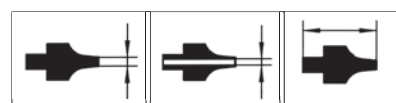|	Model	Description	mm	mm	mm	Order No.
	DX110	Nozzle	1.9	0.7	23	0051314099
	DX111	Nozzle	2.5	0.7	23	0051314199
	DX112	Nozzle	2.3	1.0	23	0051314299
	DX113	Nozzle	2.5	1.2	23	0051314399
	DX113HM	Nozzle with improved thermal transfer	2.5	1.2	23	0051315099
	DX114	Nozzle	3.3	1.8	23	0051314499
	DX115	Nozzle	1.9	0.7	23	0051314599
	DX116	Nozzle	2.7	1.2	29	0051314699
	DX117	Nozzle	2.9	1.5	23	0051314799
	DX118	Nozzle	1.5	0.7	23	0051314899
	DX119	Needle Tiplet with not wettable stainless steel tube for removal of solder bridges in connection with hot air pencil	1.1	0.7	31	0051315199
	DX120	Nozzle without inside tube, for cleaning of SMD pads	2.5	1.1	22	0051315299
	Conus insert	cleaning tool				0058706794

Soldering Tips

Plug-in adjusted Soldering Tip Set for WMRT

WMRT (page 12)

	Type	Description	Width A	Thickness B	Order No.
	RTW 1	Tip set bent 45°	Ø 0.4mm		0054465199
	RTW 2	Tip set bent 45°, Chisel	0.7mm	0.4mm	0054465299
	RTW 3	Tip set bent 45°, Chisel	3mm	1.0mm	0054465399
	RTW 4	Tip set bent 45°, Chisel	6mm	1.0mm	0054465499

Soldering Tips

Soldering tips for WMRP

WMRP (page 10)

	Type	Description	Width A	Thickness B	Order No.
	RT1	Needle tip	Ø 0.2mm		0054460199
	RT1SC	Chisel	0.4mm	0.15mm	0054461299
	RT2	Round tip slim	Ø 0.8mm		0054460299
	RT3	Chisel tip	1.3mm	0.4mm	0054460399
	RT4	Chisel tip	1.5mm	0.4mm	0054460499
	RT5	Chisel tip bent 30°	0.8mm	0.4mm	0054460599
	RT6	Round tip 45° sloped	1.2mm		0054460699
	RT7	Knife tip 45° sloped	2.2mm		0054460799
	RT8	Chisel tip	2.2mm	0.4mm	0054460899
	RT9	Chisel tip	0.8mm	0.4mm	0054460999
	RT10GW	Gull wing	1.2mm	2.0mm	0054461099
	RT11	Chisel tip	3.6mm	0.9mm	0054461199
		Type K Thermocouple Assembly	1.5mm	0.4mm	K1101

Use only Weller® soldering tips. The use of non-Weller® components may void product warranty if the non-Weller® component causes damage to the unit.

Soldering Tips

for WSP80, WP80 and MPR80

WSP80 (page 11)   WP80 (page 10)   MPR80 (page 11)

	Type	Description	Width A	Thickness B	Length	Order No.
	LT 1SC	Chisel	0.4mm	0.14mm	15.0mm	LT1SC
	LT H	Chisel	0.8mm	0.4mm	13.5mm	LTH
	LT A	Chisel	1.6mm	0.7mm	13.5mm	LTA
	LT B	Chisel	2.4mm	0.8mm	13.5mm	LTB
	LT C	Chisel	3.2mm	0.8mm	13.5mm	LTC
	LT D	Chisel	4.6mm	0.8mm	13.5mm	LTD
	LT K	Chisel long	1.2mm	0.4mm	21.0mm	LTK
	LT L	Chisel long	2.0mm	1.0mm	21.0mm	LTL
	LT M	Chisel long	3.2mm	1.2mm	21.0mm	LTM
	LT HX	Chisel bent	0.8mm	0.4mm	18.0mm	LTHX
	LT ALX	Chisel bent	1.6mm	0.7mm	18.0mm	LTALX
	LT BX	Chisel bent	2.4mm	0.8mm	18.0mm	LTBX
	LT AX	Chisel bent	1.6mm	0.8mm	13.5mm	LTAX
	LT 4X	Chisel bent 30°	Ø 1.2mm	0.4mm	16.5mm	LT4X
	LT 1S	Round slim	Ø 0.2mm		15.0mm	LT1S
	LT 1SA		Ø 0.5mm		16.0mm	LT1SA
	LT 1A		Ø 0.5mm		14.0mm	LT1A
	LT 1	Round	Ø 0.25mm		14.0mm	LT1
	LT AS	Round	Ø 1.6mm		13.5mm	LTAS
	LT CS	Round	Ø 3.2mm		13.5mm	LTCS
	LT 1SLX	Round slim bent 30°	Ø 2.0mm	Ø 0.4mm	20.5mm	LT1SLX
	LT 1X	Round bent 30°	Ø 0.4mm		12.5mm	LT1X
	LT 4	Round sloped 45° slim	Ø 1.2mm		15.0mm	LT4
	LT F	Round sloped 45°	Ø 1.2mm		13.5mm	LTF
	LT BB	Round sloped 45° long	2.4mm	4.0mm	18.0mm	LTBB
	LT CC	Round sloped 45° long	3.2mm	6.0mm	18.0mm	LTCC

All Weller "Longlife" tips are designed for working with leadfree application

Use only Weller® soldering tips. The use of non-Weller® components may void product warranty if the non-Weller® component causes damage to the unit.

Soldering Tips

for WSP80, WP80 and MPR80

SUPERIOR LEAD FREE PERFORMANCE

WSP80 (page 11)   WP80 (page 10)   MPR80 (page 11)

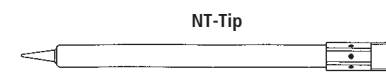|		Type	Description	Width A	Thickness B	Length	Order No.
		LT 1L	Conical long	Ø 0.2mm		26.4mm	LT1L
		LT S	Conical long	Ø 0.4mm		21.0mm	LTS
		LT 1LX	Conical long bent	Ø 0.2mm		26.4mm	LT1LX
		LT GW	Gull wing 45°	Ø 2.3mm	3.2mm	18.8mm	LTGW
		LT KN	Knife tip	6.2mm		16.0mm	LTKN
			Type K Thermocouple Assembly	2.4mm	0.8mm	13.5mm	K181
			Type K Thermocouple Assembly for WP80	2.4mm	0.8mm	13.5mm	K111

All Weller "Longlife" tips are designed for working with leadfree application

Use only Weller® soldering tips. The use of non-Weller® components may void product warranty if the non-Weller® component causes damage to the unit.

SMT soldering tip for reworks on SMT compontents

	Type	Description	Width A	Thickness B	Length C	Order No.
	LT SMT01	Blade	10.4mm	0.6mm	7.1mm	LTSMT01
	LT SMT02	Blade	16.8mm	0.6mm	7.1mm	LTSMT02
	LT SMT03	Blade	20.8mm	0.6mm	7.1mm	LTSMT03

Soldering Tips

for micro soldering pencil WMP

SUPERIOR LEAD FREE PERFORMANCE

WMP (page 11)

NT-Tip

		Description	Width A	Thickness B	Length C	Type/Order No.
		Chisel tip	0.4mm	0.15mm	14.0mm	NT1SC
			0.8mm	0.4mm	8.4mm	NTH
			1.2mm	0.4mm	8.4mm	NTK
			1.6mm	0.4mm	9.5mm	NTA
			1.6mm	0.4mm	7.4mm	NT6
			2.4mm	0.8mm	7.8mm	NTB
			3.2mm	0.8mm	8.2mm	NTC
			4.0mm	0.8mm	8.6mm	NTD
		Chisel tip, bent	1.6mm	0.4mm	8.2mm	NTAX
		Round tip, bent 45°	Ø 0.4mm		8.6mm	NT1X
		Round tip	Ø 0.25mm	–	7.4mm	NT1
		Round tip slim	Ø 0.25mm	–	8.5mm	NT1S
		Round tip, sloped 45°	Ø 1.2mm	–	9.9mm	NT4
		Gull wing	2.0mm	3.0mm	13.4mm	NTGW
		Type K Thermocouple Assembly	2.4mm	0.8mm	7.8mm	K191

Use only Weller® soldering tips. The use of non-Weller® components may void product warranty if the non-Weller® component causes damage to the unit.

Soldering Tips

for soldering iron WSP150

WSP150 (page 11)

	Type	Description	Width A	Thickness B	Order No.
	LHT C	Chisel	3.2mm	1.2mm	0054445599
	LHT D		5.0mm	1.8mm	0054445299
	LHT E		7.0mm	1.8mm	0054445199
	LHT F		9.3mm	1.8mm	0054445099
	LHT DX	Chisel bent	5mm	2mm	0054446299
	LHT EX		7mm	2mm	0054446199
	LHT FX		9mm	2mm	0054446099
	LHT D 45°	Sloped 45° for solar panel production	5mm	–	0054445699

Use only Weller® soldering tips. The use of non-Weller® components may void product warranty if the non-Weller® component causes damage to the unit.

Additional Safety Rests

Safety rests with Stop+Go Function

The safety rests with Stop+Go function have an integrated micro switch which is activated when the soldering iron is picked up or put down. The operator can decide between an immediate or delayed (20 min) temperature reduction (SETBACK) to 150°C (300°F) and program the power unit accordingly. For digital Soldering units only.

WMPT Soldering Set (0053315999)

Consisting of WMP Soldering Iron and WDH 20T Safety rest with Stop + Go function.

Standard Safety rests

complete with sponge

WDH10 (0051512199)

Safety rest for WP80 Micro soldering pencil and WSP80 Micro soldering pencil

WDH20 (0051512299)

Safety rest for WMP Micro soldering pencil

WDH30 (0051515299)

Safety rest for HAP200 Hot air pencil, HAP1 Hot air pencil, DSX80 Desoldering iron, and WSP150 Soldering iron