

Weller®

# Performance by Design

New Dimension  
in Hand Soldering



**COOPER** Hand Tools

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Refer to the matrix to make your choice of connecting tools for the stations.

Tool	Station					
		 WD 1000	 WD 1	 WD 2	 WD 1M	 WD 2M
	WSP 80/FE Micro soldering pencil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WMRP Soldering pencil for RT soldering tips				<input type="checkbox"/>	<input type="checkbox"/>
	WMRT Micro Desoldering Tweezers				<input type="checkbox"/>	<input type="checkbox"/>
	WMP Micro soldering pencil 65 W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MPR 80 Antistatic peritronic soldering pencil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LR 82 Soldering iron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WSP 150 Soldering iron			<input type="checkbox"/>		<input type="checkbox"/>
	WTA 50 Tweezer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WST 20 Thermal wire stripper with support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WHP 80 Preheating plate (80 W/24 V)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WSB 80 Solder bath	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WSB 150 Solder bath			<input type="checkbox"/>		<input type="checkbox"/>
	FE 80 Soldering iron 80 W/24 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	FE 75 Soldering iron set 80 W/24 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Microprocessor-controlled Soldering

## WD 1 / WD 1000 / WD 2

The microprocessor-controlled soldering station WD 1 / WD 1000 is part of a generation of devices which were developed for industrial production technology, including repair and laboratory areas.

The microprocessor-controlled soldering station WD 2 has dual ports. A modern ergonomic design is characteristic for these new Weller stations.



### Operation simplicity

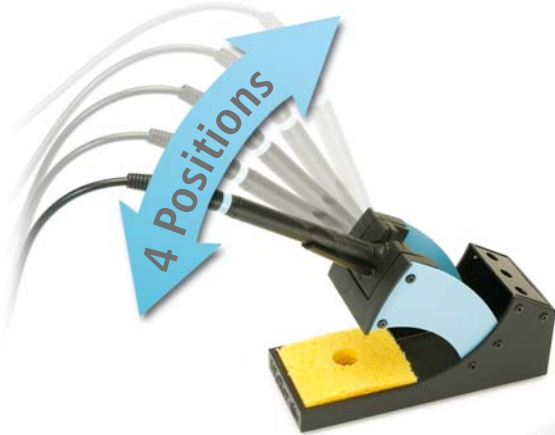
- The big LCD display allows clear information and simple handling.
- Three fixed temperatures can be assigned with the temperature buttons. You can set the temperatures value as desired.
- The antistatic design of the safety rest of the WD 1000 has got four different settings.
- You can extend the functional diversity of this unit with a USB interface for ISO application for calibration, configuration and precise measured values.

### Functionality

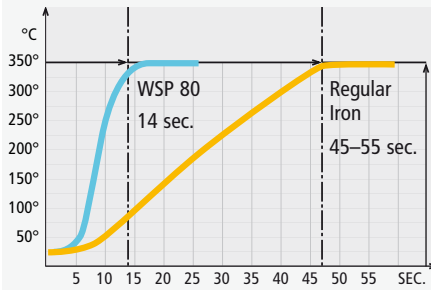
The following settings are possible without any accessory unit: custom-designed calibration function, programmable temperature decrease (setback), interlock functions and remote ID for ISO applications.

### Quality standard

Various potential balancing options and an antistatic design of the control unit and soldering tools add to the high quality standard.



## Heating-up period



## Automatic recognition

The soldering tools themselves are recognised automatically by the new Weller stations and the corresponding control parameter assigned. This means that re-calibration can usually be avoided.

## Additional function of WD 2

The WD 2 has the ability to control two 80 W soldering irons at the same time or one soldering iron of 150 W.

## Temperature accuracy

- Top temperature accuracy and optimised, dynamic temperature behaviour when under stress is achieved by fast and precise measured value recording in the closed control loop.
- Digital control electronics and high-quality sensor and heat transmission technology in the soldering tool guarantee precise temperature control behaviour at the soldering tip.



# Control unit WD 1

## Technical data WD 1

Dimensions:	134 x 108 x 147 mm (l x w x h)
Mains voltage:	230 V / 50 Hz
Power input:	95 W
Protection class:	I (control unit), III (soldering iron)
Temperature control:	150°F – 850°F (50°C – 450°C)
Temperature accuracy:	±17°F (± 9°C)
Temperature stability:	±9°F (± 5°C)
Leak resistance of soldering tip:	< 2 Ω
(Tip to ground)	
Leak voltage of soldering tip:	< 2 mV
(Tip to ground)	



## Scope of supply WD 1

- 005 34 006 99 WD 1 Control unit 80 W, 230 V
  - Mains cable
  - Operation instruction
  - Safety information
  - Jack plug

# Performace by Design



## Accessories WD 1 / WD 1000:

005 29 178 99	WSP 80 Soldering iron set
005 33 131 99	MPR 80 Soldering iron set
005 33 113 99	LR 82 Soldering iron set
005 29 179 99	WMP Soldering iron set
005 33 133 99	Desoldering set WTA 50
005 27 028 99	Pre-heating plate WHP 80
WPHT	WPHT Switching holder (WMP)
005 31 185 99	USB Extension module
005 15 144 99	Switching holder WPH 81T (WSP 80)

## Scope of supply WD 1000

- 005 34 026 99 WD 1000
  - consists of:
  - 005 34 006 99 WD 1 Control unit 80 W, 230 V
  - 005 29 161 99 WSP 80 Soldering iron with soldering tip LTB

This soldering pencil can be used universally in all situations from extremely delicate soldering to those where more power is required. The WSP 80 have an extremely short heating up time.
  - 005 15 121 99 WDH 10 Comfort safety rest

The antistatic design of the comfort safety rest has got four different settings. The funnel insert for the soldering iron can be moved to an ergonomically favourable position without the use of tools. Areas have been provided on the rear side for depositing the soldering tip. The pedestal plate of the rest contains a sponge insert for cleaning the soldering tips.
  - Mains cable
  - Operation instruction
  - Safety information
  - Jack plug

## Dual output control unit WD 2

### Technical data WD 2 Dual output soldering station

Dimensions:	134 x 108 x 147 mm (l x w x h)
Mains voltage:	230 V / 50 Hz
Power input:	160 W
Protection class:	I (control unit), III (soldering iron)
Temperature control:	150°F – 850°F (50°C – 450°C)
Temperature accuracy:	±17°F (± 9°C)
Temperature stability:	±9°F (± 5°C)
Leak resistance of soldering tip:	< 2 Ω
(Tip to ground)	
Leak voltage of soldering tip:	< 2 mV
(Tip to ground)	



### Scope of supply WD 2

- 005 34 046 99 WD 2 Dual output control unit 160 W, 230 V
- Mains cable
- Operation instruction
- Safety information
- Jack plug

## New Dimension in Hand Soldering

### Accessories WD 2

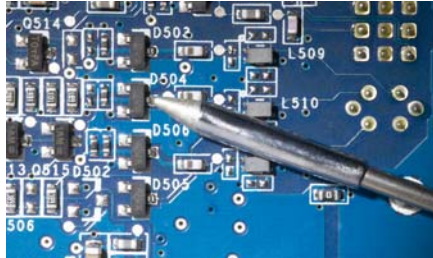
005 29 178 99	WSP 80 Soldering iron set
005 33 131 99	MPR 80 Soldering iron set
005 33 113 99	LR 82 Soldering iron set
005 33 135 99	WSP 150 Soldering iron set
005 29 179 99	WMP Soldering iron set
005 33 133 99	WTA 50 Desoldering set
005 27 028 99	WHP 80 Pre-heating plate
WPHT	WPHT Switching holder (WMP)
005 15 144 99	WPH 81T Switching holder (WSP 80)
005 27 040 99	WSB 80 Solder bath
005 27 042 99	WSB 150 Solder bath
005 31 185 99	USB Extension module



WMP Soldering iron set



# Multifunction soldering stations WD 1M and WD 2M with High Speed Regulation for Micro soldering tools



The Weller WD 1M and WD 2M Multifunction devices are designed for special soldering tasks in the industrial manufacturing and repair service. The WD 2M control unit has dual outputs. The USB interface allows various ISO applications and the control of the station via external PC.

## High Speed Regulation

Characteristic for the electronic soldering stations WD 1M and WD 2M is the additionally included High Speed Regulation. The High Speed Regulation enables the use of the micro tools WMRP and WMRT. In addition further Weller standard tools are applicable.

## Operation simplicity

- The big LCD display allows clear information and simple handling.
- Three fixed temperatures can be assigned with the temperature buttons. You can set the temperatures value as desired.

## Functionality

The following settings are possible without any accessory unit: custom-designed calibration function, programmable temperature decrease (setback), interlock functions and remote ID for ISO applications.



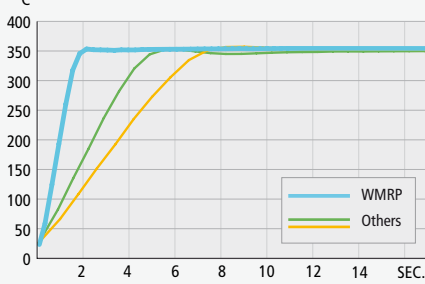
## USB interface in series

- The devices are in series equipped with a USB interface. The USB Interface allows exact data logging and various ISO applications.
- There is the possibility of control of the station via external PC.
- The software is available free of charge.

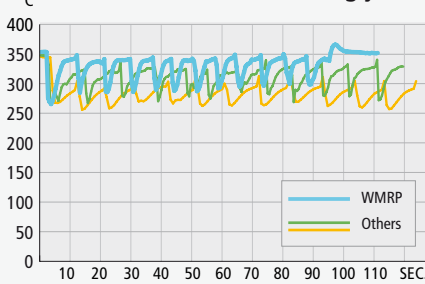




**Heat-up time of Weller WMRP**



**Benchmark test – 12 soldering joints**



## Automatic recognition

The soldering tools themselves are recognised automatically by the WD 1M and WD 2M stations and the corresponding control parameter assigned. This means that recalibration can usually be avoided.

## Additional function of WD 2M

A simultaneous use of 2 soldering tools up to 80 Watt is possible with the WD 2M. When using a soldering tool with 150W, the second channel will automatically be switched OFF.



# Control unit WD 1M



## Scope of supply WD 1M

- 005 34 066 99 WD 1M Control unit 80 W, 230 V for Micro soldering iron WMRP und Micro desoldering tweezers WMRT with USB-interface
  - Mains cable
  - Operation instruction
  - Safety information
  - Jack plug

Soldering tools have to be ordered separately

## Technical data WD 1M

Dimensions:	134 x 108 x 147 mm (l x w x h)
Mains voltage:	230 V / 50 Hz
Power input:	95 W
Protection class:	I (control unit), III (soldering iron)
Temperature control:	150°F – 850°F (50°C – 450°C)
Temperature accuracy:	±17°F (± 9°C)
Temperature stability:	±9°F (± 5°C)
Leak resistance of soldering tip:	< 2 Ω
(Tip to ground)	
Leak voltage of soldering tip:	< 2 mV
(Tip to ground)	
potential-free plug (factory set hard grounded)	

# Performace by Design

## Purchase Order Proposal: WD 1M Control unit

005 29 171 99	WMRP Micro soldering iron for RT soldering tips
005 15 146 99	WMRH Switching holder RT tip (see page 12)
	or
005 13 173 99	WMRT Micro desoldering tweezers with rest



## Dual output control unit WD 2M



### Scope of supply WD 2M

- 005 34 106 99 WD 2M, 2 Channel Power Unit digital 160 W, 230 V for Micro soldering iron WMRP und Micro desoldering tweezers WMRT with USB-interface

- Mains cable
- Jack plug
- Operation instruction
- Safety information

Soldering Tools to be ordered separately

### Technical data WD 2M

Dimensions:	134 x 108 x 147 mm (l x w x h)
Mains voltage:	230 V / 50/60 Hz
Power input:	160 W
Protection class:	I (control unit), III (soldering iron)
Temperature control:	150°F – 850°F (50°C – 450°C)
Temperature accuracy:	±17°F (± 9°C)
Temperature stability:	±9°F (± 5°C)
Leak resistance of soldering tip:	< 2 Ω
(Tip to ground)	
Leak voltage of soldering tip:	< 2 mV
(Tip to ground)	
potential-free plug (factory set hard grounded)	



## New Dimension in Hand Soldering



### Purchase Order Proposal: WD 2M power unit

005 29 171 99	WMRP micro soldering iron for RT soldering tips
005 15 146 99	WMRH Stop+Go stand
	or
005 13 173 99	micro tweezers with WMRTH Stop+Go stand

# WMRP soldering pencil for RT soldering tips

The WMRP soldering pencil has 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.


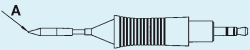
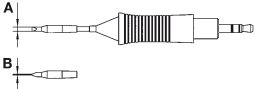
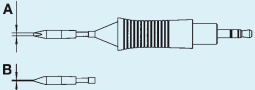
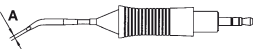
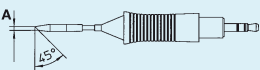

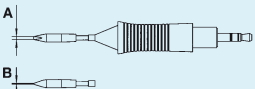


## RT series soldering tips for the WMRP micro soldering pencil



RT series soldering tips are specially designed for microsoldering tasks and microscope workstations. Of course, they can also be used with lead-free solder. Changing soldering tips is quick, easy

and, most importantly, requires no tools. Just pull out the old one, push in the new one, and continue soldering. Thanks to its short heat-up time, the soldering pencil is ready to use again right away!

	Model	Description	Width A	Thickness B	Order No.
	RT 1	Needle tip	—	—	005 44 601 99
	RT 2	Point tip	Ø 0,4 mm	—	005 44 602 99
	RT 3	Chisel shape, straight	1,3 mm	0,4 mm	005 44 603 99
	RT 4	Chisel shape, straight	1,5 mm	0,4 mm	005 44 604 99
	RT 5	Chisel shape, bent, 30°	0,8 mm	0,4 mm	005 44 605 99
	RT 6	Round shape, beveled, 45°	Ø 1,2 mm	—	005 44 605 99
	RT 7	Knife tip, 45°	2,2 mm	—	005 44 607 99
	RT 8	Chisel shape	2,2 mm	0,4 mm	005 44 608 99



# WMRT Micro Desoldering Tweezers for WD 1M, WD 2M

The new WMRT desoldering tweezers enables with its twin parallel adjusted tiptlets a significant precise de- and soldering of very small SMD components. The high speed regulation of the stations WD 1M, WD 2M drives these tweezers. Placed in the rest WMRTH the tips are automatically switched off for increasing endurance.

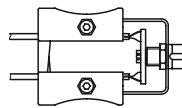



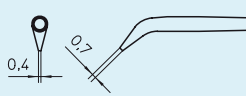

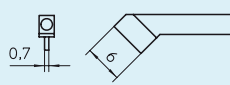
## Scope of supply WMRT

- 005 13 172 99 WMRT micro tweezers with tip set RTW 2
- 005 15 146 99 WMRTH Stop+Go stand for WMRT



## Plug-in adjusted Soldering Tip Set for WMRT



	Model	Description	Dimensions		Order No.
	RTW 1	Tip set	0,2 mm	45°	005 44 651 99
	RTW 2	Tip set	0,7 x 0,4 mm	45°	005 44 652 99
	RTW 3	Tip set	3 x 0,7 mm	45°	005 44 653 99
	RTW 4	Tip set	6 x 0,7 mm	45°	005 44 654 99

# Weller flexibility

Refer to the matrix on page 3 to make your choice of connecting tools for the stations.

## LR 82 Antistatic soldering iron

LR 82  
005 33 113 99



An 80 W/24 V soldering iron for high mass soldering. Dual sensor, electronically temperature controlled. LR 82 set, consisting of LR 82 Antistatic soldering iron, KH 27 Support for iron.

## MPR 80 Antistatic Peritronic soldering pencil

MPR 80  
005 33 131 99



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 MPR 80 Antistatic and KH 25P Support.

## WSP 80 Micro soldering pencil

WSP 80  
005 29 161 99



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. WSP 80 set, consisting of WSP 80 Micro soldering pencil with WPH 80 Support.

## WMP Micro soldering pencil

WMP  
005 33 155 99



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 wear out the heating element goes on. WMP set consisting of WMP micro soldering pencil and WPHM holder for WMP.

## WSP 150 Soldering iron

WSP 150  
005 33 135 99



The WSP 150, 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 iron bit guarantee the high performance capability of the soldering iron. WSP 150 set, consisting of WSP 150 Soldering iron, KH 27 Support for iron.

## WMRP soldering pencil for RT soldering tips

WMRP  
005 29 171 99



The WMRP soldering pencil has 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.

## WST 20 Thermal wire stripper with support

WST 20  
005 25 030 99



The WST 20, 50 W/24 V, copes with all known thermoelastic plastics. Adjustable for a stripping length up to 30 mm. Additional blades available for stripping flat cables and shrinking.

## WST 82 Thermal wire stripper with support

The WST 82 is the 80 W equipment of the WST 20. Adjustable for a stripping length up to 30 mm. Additional blades available for stripping flat cables and shrinking.

## WTA 50 Tweezer

WTA 50  
005 33 133 99



This tweezer is used to desolder SMD components. The tweezer has two moveable heating elements. WTA 50 set, consisting of WTA 50 Tweezer, AK 51 Support for Tweezer.

## WMRT Micro Desoldering Tweezers

WMRT  
005 13 172 99



The new WMRT desoldering tweezers enables with its twin parallel adjusted tiptlets a significant precise de- and soldering of very small SMD components. The high speed regulation of the stations WD 1M, WD 2M drives this tweezers. Placed in the rest WMRTH the tips are automatically switched off for increasing endurance.

## WSB 80 Solder bath

WSB 80  
005 27 040 99



The WSB 80 is a very useful rework preparation tool. The solder bath is temperature controlled continuously from 50°C to 450°C via an existing 80 W power source. The solder bath can be used to tin wire ends and clean leads of all extraneous solder particles in preparation for reworking. (Usable for lead free solder.)

## WHP 80 (80 W/24 V) Preheating plate

WHP 80  
005 27 028 99



With a heating surface of 80 x 50 mm, they preheat IC boards prior to micro rework.

## WSB 150 Solder bath

WSB 150  
005 27 042 99



The WSB 150 solder bath is optimally suited to tin coating and preparation of soldering components. It has a temperature range of 50°C–550°C with heat output of 150 W, making the WSB solder bath an ideal accessory to the Weller WSD 150 soldering station. To guard against dripping solder residue, the solder bath is placed in a V2A tray, supplied as an optional extra. (Usable for lead free solder.)



## COOPER Hand Tools

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