



Weller

#PowerfulTogether

One Bench. Fully Connected.

Complete nano soldering solutions – combining optics,
tools and accessories into one powerful system.

weller-tools.com

Challenges of Nano Soldering

As Electronics Shrink, Complexity Expands

As electronic assemblies continue to shrink in size and increase in complexity, nano-scale soldering presents significant challenges for operators and manufacturers alike. At this level, even the smallest deviation in control, visibility, safety or workflow can result in defects, rework, or compromised reliability.

Components are often smaller than a grain of sand, requiring extreme precision and consistent process control to ensure quality outcomes. For Weller, this represents a critical focus area—addressing not only the need for ultra-precise soldering tools, but also the broader workbench.

Control **PG.4**

Empowering operators with the precision and performance to master every connection.

Visibility **PG.28**

Bringing critical details into focus to unlock a new level of accuracy and confidence.

Safety **PG.36**

Creating protected workspaces where people, products, and performance can thrive.

Workflow **PG.42**

Connecting every tool and process to keep precision moving without interruption.

Explore Our Solutions



CONTROL

Precision You Can Trust

Nano soldering demands absolute precision. Even the smallest deviation in temperature or power delivery can impact quality and performance.

Weller solutions provide intelligent power control and active-tip technology, delivering fast thermal response and stable performance exactly where it matters. From pico to micro applications, operators gain full command over every connection—ensuring repeatable, high-quality results with maximum process confidence.



WT1M	WT2M	WX2	WXsmart
			
95 W 1-channel	150 W 2-channels	200 W 2-channels	300 W 2-channels

Nano Soldering Features & Benefits

Active Soldering Tip Technology	●	●	●	●
Fast Heat-up & Thermal Recovery	●	●	●	●
Compact bench footprint	●	●	●	●
Compatible with SMART Technology	-	-	-	●

Productivity & Flexibility

Single tool operation	●	●	●	●
Dual tool capability	-	●	●	●
Simultaneous tool use	-	●	●	●
Expanded tool compatibility	Limited	●	●	●
Multi-application workstation support	-	●	●	●

Smart Connectivity & Process Control

Intelligent smart tip recognition	-	-	-	●
Tip serial number traceability	-	-	-	●
Tip lock functionality	-	-	-	●
Calibration data storage	-	-	-	●
User & process control	-	-	-	●
Real-time data monitoring	-	-	-	●
IoT / network connectivity	-	-	-	●
Cybersecurity protection	-	-	-	●

Control

Visibility

Safety

Workflow

WXsmart Technology Line

The smartest and most connected soldering platform

The all-in-one WXsmart hand soldering platform offers maximum traceability and connectivity. As the most connected, controlled and secured hand soldering solution in the world, WXsmart is connecting the future of soldering! Explore the main benefits of WXsmart here:

The first all-in-one Soldering Station

WXair Module & Desoldering Module

Safety Rest

High Precision Temperature Measurement Device



Learn about the possibilities with WXsmart



CONNECT
Maximum connectivity, supporting IoT standards for full traceability with mobile-enabled, easy remote control access.



SMART
The all-in-one station acts as the brain of the workbench by consolidating all soldering applications into one station.



CONTROL
Total Process Control (TPC) to manage your complete soldering process from tip to station.



SAFE
The first system with built-in cyber-security to prevent costly downtimes.

Intelligent Soldering Tips & Tools



**TOTAL
PROCESS
CONTROL**

WXsmart Soldering Station & Kits



WXsmart Power Unit 300 W

Order No. T0053451299

The 2-Channel WXsmart (300W) is engineered for ultimate precision in the smallest applications.

- WXsmart 300W (2 Channels)

EXPLORE



WXS2010 Nano/Micro Soldering Kit

Order No. WXS2010

WXS2010 Nano/Micro Soldering Kit (300W) For every purpose. Optimized soldering set with 2 soldering tips for all nano and micro tasks in the electronics, medical and aerospace industries.

- WXsmart 300W (2 Channels)
- WXMPS MS Smart Nano/Micro Soldering Iron
- RTPS 004 S MS Smart Nano Tip
- RTMS 013 S MS Smart Nano Tip
- WSR 208 Safety Rest
- WCTH Cartridge Tip Holder

EXPLORE



WXS2021 Nano/Micro Rework Kit

Order No. WXS2021

WXS2010 Nano/Micro Rework Kit (300W) for every purpose. Optimized soldering set with 2 soldering tips and desoldering tools for all nano and micro tasks in the electronics, medical and aerospace industries.

- WXsmart 300W (2 Channels)
- WXMPS MS Smart Nano/Micro Soldering Iron
- RTPS 004 S MS Smart Nano Tip
- RTMS 013 S MS Smart Micro Tip
- WSR 208 Safety Rest
- WXMTS MS Smart Nano/Micro Tweezers
- RTWPS 002 S X Smart Nano Desoldering Tip
- RTWMS 030 K Smart Micro Desoldering Tip
- WCTH Cartridge Tip Holder

EXPLORE



Need maximum rework flexibility in a compact footprint?

The Weller WXair transforms your WXsmart or WX station into a complete all-in-one rework solution, combining hot air and vacuum desoldering capabilities, integrated air supply, and maximum flexibility in one compact system.



WXair Unit
Order No. T0053452299



WX Technology Line

One platform, up to every challenge

Weller WX stations are designed for high-reliability industries such as automotive, aerospace, and medical manufacturing. Built to support MIL-SPEC and IPC standards, they help protect sensitive components from electrical overstress when paired with Weller RT MS soldering tips.



USE AS BENCHTOP CONTROLLER

Integrated RS232 ports (RJ12) allow WX stations to be connected to and to control soldering fume extractors, pre-heat plates and programmable logic controllers (PLC). The connected tools feed back their parameters and status to the display.



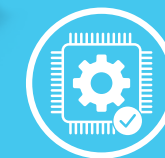
MULTIFUNCTIONAL USB PORT

Firmware updates and registration are quick and easy using USB sticks. User-friendly PC interface.



INTELLIGENT TOOL DETECTION

All connected tools and accessories are detected automatically by the stations and their name(s) shown on the display.



INTEGRATED PARAMETER MEMORY

Parameters such as standby temperatures, set temperature, Pre-Set temperatures and automatic switch-off time can easily be stored in the soldering iron. Parameters only need to be stored once; the soldering iron can then use them with any WX station.



Learn about the possibilities with WX Line

WX Soldering Station & Kits



WX2 Power Unit 200 W (255 W)

Order No. **WX2N**

The 2-Channel WX2 200 W (255 W) is engineered for ultimate precision in the smallest applications.

- WX2 200 W (255 W) (2 Channels)



WX2022 Nano/Pico Soldering Kit

Order No. **WX2022N**

WX2022 Nano/Micro Soldering Kit for every purpose. Optimized soldering set with a nano soldering tip for all pico (nano) tasks in the electronics, medical and aerospace industries.

- WX2 200 W (255 W) (2 Channels)
- WXP MS Nano Soldering Iron
- RTP 004 S MS Nano Tip
- WSR 208 Safety Rest
- 4-1/4" Straight Very Pointed Tip Precision Tweezers
- SAC M1 Solder Wire, Ø 0,2mm, 10g



WXR3 Rework Station Three Channels. Endless Possibilities.

The WXR3 is a state-of-the-art 3 channel rework system with 600 Watts of total power. It can be used for all applications using the compliment of WX series soldering irons, desoldering irons and hot air pencil. It is totally self-contained with 2 internal Pumps providing the source for hot air, vacuum & Pick-up. The intelligent power management function allows the available power to be distributed to the connected tools as required up to a total of 600 W.



Recommended tool for nano soldering: **WXPP MS Set**
Recommended tool for desoldering: **WXDV 120 Set**
Recommended tool for hot air: **WXHAP 200 Set**

WT Performance Line

Choose Simplicity In Hand Soldering

Experience the WT1M and WT2M soldering stations as true workhorses, designed to elevate your productivity. Building on the functionality of the WT performance line, these models offer expanded compatibility with Active Nano Tools, making them ideal for precision soldering tasks and intricate work.



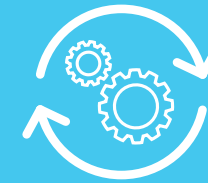
FAST HEAT-UP TIMES

New Active Heating Technology (cartridge) with only 3 seconds proven heating time and minimized downtime.



SMART & HEALTHY WORKBENCH

All in one station: from nano to larger micro soldering applications and rework, paired with ZeroSmog Guard Filtration unit.



WELLER ECOSYSTEM

Unmatched flexibility – with more than 10 tools, including desoldering tweezers and seamless integration with tips and tools.

Active tip technology

Integrated heating and sensing at the tip enables ultra-fast response with up to 3-second heat-up, delivering stable thermal control and high-efficiency energy transfer for nano and micro soldering precision.



Learn about the possibilities with WT Line

WT Line Soldering Station & Kits



WT1M Power Unit, 95 W

Order No. WT1M

The 1-Channel Power Unit 95 W is engineered for ultimate precision in the smallest applications.

- WT1M Power Unit 95 W (1 Channel)

EXPLORE



WT1011M Nano Soldering Kit

Order No. WT1011M

The 1-Channel Nano 95 W Soldering Kit is engineered for ultimate precision in the smallest applications.

- WT1M Power Unit 95 W (1 Channel)
- RTP 004 S MS Nano/Pico Soldering Tip
- WTPP MS Soldering Iron
- WSR 205 Safety Rest

EXPLORE



WT2M Power Unit, 150 W

Order No. WT2M

WT2M Dual-Channel Power Unit 150 W delivers fast-heating performance in a compact design, ideal for nano to micro soldering applications.

- WT2M Power Unit 150 W (2 Channels)

EXPLORE



WT2022M Nano/Micro Rework Soldering Kit

Order No. WT2022M

WT2M Dual-Channel Soldering Station 150 W delivers fast-heating performance with Weller RTP and RTM tips in a compact design, ideal for nano to micro soldering applications.

- WT2M Power Unit 150 W (2 Channels)
- WTPP MS Nano Soldering Iron
- WTMP MS Micro Soldering Iron
- RTP 004 S MS Nano Soldering Tip
- RTM 013 S MS Micro Soldering Tip
- WSR 205 Safety Rest
- WSR 205 Safety Rest

EXPLORE



Boost your soldering performance: Weller Active Tip Technology

Active Heating Technology

This technology features heating elements and sensors integrated directly into the soldering tip cartridge. This design enables fastest temperature adjustments and ensures optimal power delivery directly at the solder joint.

MIL-SPEC / IPC standard

The new RT Active soldering tips are fully compliant with IPC industry standards. The MS versions are MIL-SPEC compliant (IPC industry standards – TM-650 2.5.33).

Fast, tool-less and hassle-free tip change

The patented grip and tip design allows for tip change without any additional tool.



Low cost-in-use

The RT lines of tips provide maximum protection to the printed circuit board and the component, to achieve the best results and to keep operating costs as low as possible.



Find your perfect active soldering tip



Find your perfect SMART soldering tip



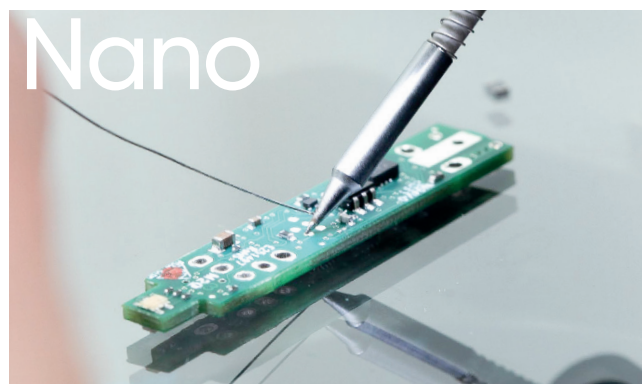
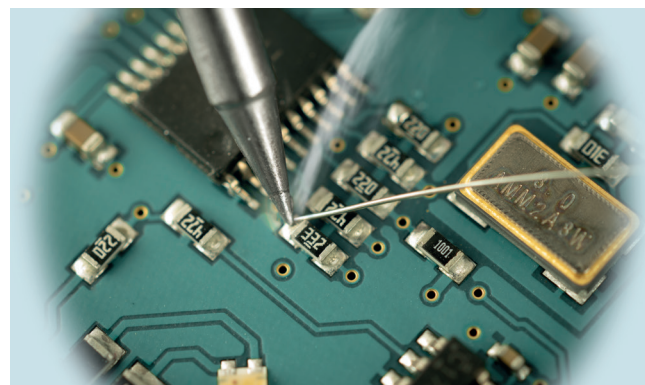
Station Compatibility					
WT Line Stations	●	-	-	●	-
WX Line Stations	-	●	-	-	-
WXsmart Stations	-	●	●	-	●
Nano Compatibility					
3 Second Heat Up Time	●	●	●	-	-
5 Second Heat Up Time	-	-	-	●	●
MIL-SPEC / IPC standard	●	●	●	●	●
Tool-less Tip Change	●	●	●	●	●
Smart Connectivity & Process					
Intelligent tip recognition	-	-	●	-	●
Unique tip serial number	-	-	●	-	●
Tip lock functionality	-	-	●	-	●
Calibration data storage	-	-	●	-	●
User & process control	-	-	●	-	●



Smart RT Irons Advantages

- Easy tool identification with Visual Processs Control
- Intelligent tool detection protects from defaults
- Save individual soldering processes with integrated parameter
- Smart Soldering tip allows tip recognition & datastorage on the tip like calibration dates, offset values & production date.

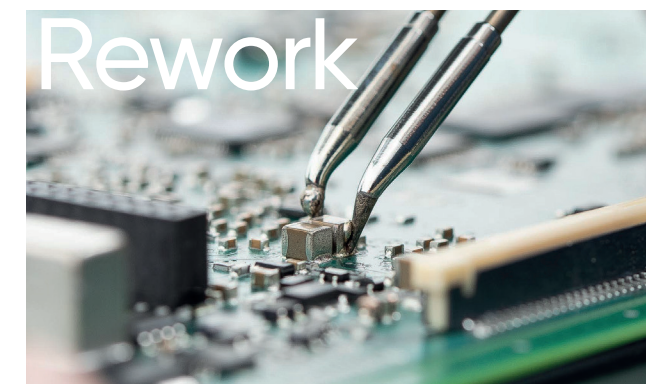
Active Heating Technology in any application: Nano, Micro or Desoldering



Made for the smallest precision applications in

- Aerospace
- Electronics
- Sensors
- Medical devices
- Military
- Automotive

All Weller active MS (military standard) soldering tips are fully compliant with IPC industry standards (IPC-TM-650, Method 2.5.33 – Measurement of Electrical Overstress from Soldering Hand Tools) and are also MIL-SPEC compliant. The active tip line provides maximum protection to the printed circuit board and the components you are soldering.

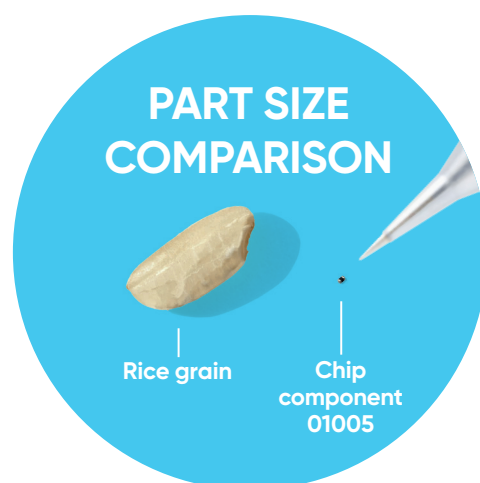


Versatile performance across micro and standard components, covering the widest range of applications in

- Aerospace
- Electronics
- Sensors
- Medical devices
- Military
- Automotive

Made for very small and large size applications in

- Nano and micro desoldering
- SMD rework of chip components Rework of small to medium SOPs
- Detailed work under a microscope and rework



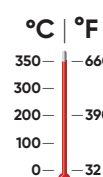
RTP Nano Tips

NANO SOLDERING APPLICATIONS

Component size

XS to **S**

XS: Very small, up to 1.25 mm
S: Small, 0.8 – 1.6 mm



Heat up time
3 sec

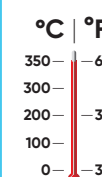
RTM Micro Tips

MICRO SOLDERING APPLICATIONS

Component size

M to **L**

M: Medium, 1.0 – 3.0 mm
L: Large, requires higher energy



Heat up time
5 sec

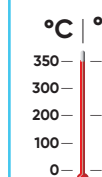
Desoldering Tweezers

VERSATILE DESOLDERING AND REWORK APPLICATIONS

Component size

XS to **L**

XS: Very small, up to 1.25 mm
L: Large, requires higher energy



Heat up time
5 sec

SMART Nano soldering

RTPS Smart Nano Tips

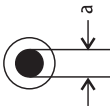
Military standard compliant
(IPC industry standards – TM-650 2.5.33)

Chisel



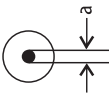
Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 002 S MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.2 / 0.1 0.008 / 0.004	T0050111199
RTPS 002 S NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.2 / 0.1 0.008 / 0.004	T0050111299
RTPS 004 S MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.4 / 0.2 0.016 / 0.008	T0050111399
RTPS 008 S MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.8 / 0.3 0.031 / 0.012	T0050111499
RTPS 010 S MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	1.0 / 0.3 0.039 / 0.012	T0050111599
RTPS 013 S MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	1.3 / 0.3 0.051 / 0.012	T0050111699

Bevel Cut



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 004 B MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.4 0.016	T0050110999
RTPS 012 B MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	1.2 0.047	T0050111099

Conical



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 001 C MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	17.9 0.705	0.1 0.004	T0050110399

For Use With Soldering irons

WXMPS MS
40 W



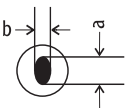
Soldering Stations

WXsmart
2 Channels



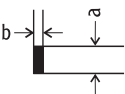
Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 001 C NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	17.9 0.705	0.1 0.004	T0050110499
RTPS 002 C MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.2 0.008	T0050110599
RTPS 004 C MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	16.3 0.642	0.4 0.016	T0050110699
RTPS 001 C X MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	20.6 0.811	0.1 0.004	T0050110799
RTPS 002 C X MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	20.6 0.811	0.2 0.008	T0050110899

Gullwing



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 020 G MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	15.9 0.626	1.3 / 2.1 0.051 / 0.083	T0050112099

Knife



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTPS 010 K MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	15.9 0.626	1.0 / 0.2 0.039 / 0.008	T0050111799
RTPS 010 K NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	15.9 0.626	1.0 / 0.2 0.039 / 0.008	T0050111899
RTPS 025 K MS	MIL-SPEC VERSION AVAILABLE	40	WXMPS MS	WSR 208	17.3 0.681	2.5 / 0.3 0.098 / 0.012	T0050111999

Nano soldering – RTP Nano Tips

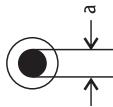
Military standard compliant
(IPC industry standards – TM-650 2.5.33)

Chisel



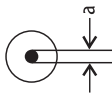
Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 002 S MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.2 / 0.1 0.008 / 0.004	T0050102199
RTP 002 S NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.2 / 0.1 0.008 / 0.004	T0050102299
RTP 004 S MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.4 / 0.2 0.016 / 0.008	T0050102399
RTP 008 S MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.8 / 0.3 0.031 / 0.012	T0050102499
RTP 010 S MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	1.0 / 0.3 0.039 / 0.012	T0050102599
RTP 013 S MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	1.3 / 0.3 0.051 / 0.012	T0050102699

Bevel Cut



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 004 B MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.4 0.016	T0050101999
RTP 012 B MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	1.2 0.047	T0050102099

Conical



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 001 C MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	17.9 0.705	0.1 0.004	T0050101399

For Use With Soldering irons

WTPP MS
40 W



WXPP MS
40 W

Soldering Stations



WT1M
1 Channel



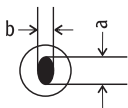
WT1M
2 Channels



WX2
2 Channels

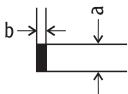
Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 001 C NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	17.9 0.705	0.1 0.004	T0050101499
RTP 002 C MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.2 0.008	T0050101599
RTP 004 C MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	16.3 0.642	0.4 0.016	T0050101699
RTP 001 C X MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	20.6 0.811	0.1 0.004	T0050101799
RTP 002 C X MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	20.6 0.811	0.2 0.008	T0050101899

Gullwing



Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 020 G MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	15.9 0.626	1.3 / 2.1 0.051 / 0.083	T0050103099

Knife



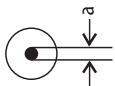
Model		Watt	Soldering Iron	Safety Rests	Length (mm) (inch.)	a / b (mm) (inch.)	Order No.
RTP 010 K MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	15.9 0.626	1.0 / 0.2 0.039 / 0.008	T0050102799
RTP 010 K NW MS non wettable	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	15.9 0.626	1.0 / 0.2 0.039 / 0.008	T0050102899
RTP 025 K MS	MIL-SPEC VERSION AVAILABLE	40	WTPP MS WXPP MS	WSR 205 WSR 208	17.3 0.681	2.5 / 0.3 0.098 / 0.012	T0050102999

SMART Nano Desoldering – RTWPS Nano Tweezers

Military standard compliant
(IPC industry standards – TM-650 2.5.33)

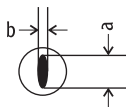


Conical Bent



Model		Watt	Soldering Iron	Safety Rests	a / b (mm) (inch.)	Order No.
RTWPS 001 C MS	 MIL-SPEC VERSION AVAILABLE	2 x 40	WTMT WXMTS	WSR 210	ø 0,1 ø 0.004	T0050115499
RTWPS 001 C X HM	 MIL-SPEC VERSION AVAILABLE	2 x 40	WTMT WXMTS	WSR 210	ø 0,1 ø 0.004	T0050115599

Chisel Bent



Model		Watt	Soldering Iron	Safety Rests	a / b (mm) (inch.)	Order No.
RTWPS 002 S X	 MIL-SPEC VERSION AVAILABLE	2 x 40	WTMT WXMTS	WSR 210	0,2 x 0,1 0.008 x 0.004	T0050115699
RTWPS 002 S X HM	 MIL-SPEC VERSION AVAILABLE	2 x 40	WTMT WXMTS	WSR 210	0,2 x 0,1 0.008 x 0.004	T0050115799



Automatic Tip Cleaner

Versatile. Efficient.
Powerful Cleaning.

The versatile WATC100 cleans soldering tips and tweezers in a second without spilling any debris on your workbench. The life of your soldering tip will be enhanced, and soldering results will be of higher quality and consistency because of better heat transfer from the tip to the components.





Tip Cleaner
with metal brushes
Order No. WATC100M



Tip Cleaner
with fibre brushes
Order No. WATC100F



BEFORE



JUST ONE SECOND



AFTER

VISIBILITY

See What Matters

Precision begins with clarity. At the nano level, operators must see every detail to work accurately and efficiently.

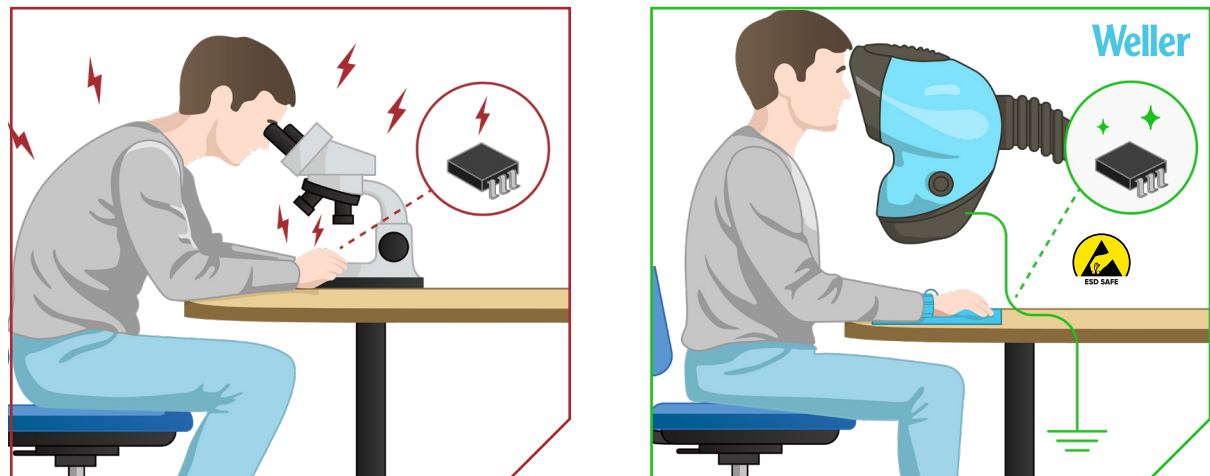
The Weller microscope ecosystem enhances inspection and execution with clear, natural viewing and optimized ergonomics. Improved visibility enables better alignment, greater accuracy, and reduced operator strain—empowering users to perform complex tasks with confidence and consistency.

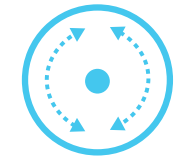


PRISMA MICROSCOPE VS OTHERS

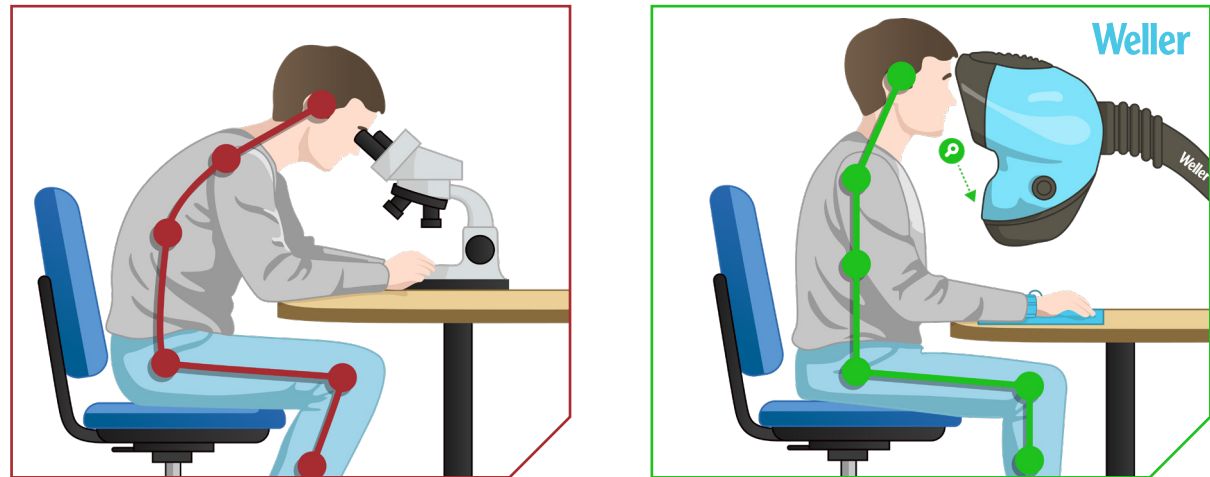


ESD-SAFE PROTECTION
At nano scale, even minor static discharge can damage sensitive electronics. An ESD-safe microscope prevents electrostatic stress during every step—supporting safe handling, reducing defects, and protecting long-term reliability.





ERGONOMIC, COMFORTABLE DESIGN
Adjustable universal arm and viewing position allow for long, comfortable sessions





Hands-free visual inspection—inspect the PCB with a simple shift of your eyes, without moving your head.

Control

Visibility

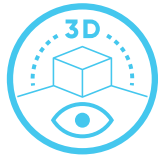
Safety

Workflow

PRISMA Microscope ESD

A New Dimension of Inspection and Precision Soldering

The Weller PRISMA Microscope is built for Nano-soldering and professional electronics work, delivering precise, clear 3D viewing for every component. ESD-safe design protects sensitive electronics, while the ergonomic arm and wide field of view keep you comfortable and efficient throughout long soldering and inspection sessions. Adaptable lens system and reliable construction ensure consistent, high-quality results in any professional workspace.



CRYSTAL-CLEAR 3D STEREO VIEWING

True 3D stereo viewing reveals the full height, position, and shape of components with exceptional clarity. This natural depth perception enables more precise inspection and confident handling in nano-soldering tasks.

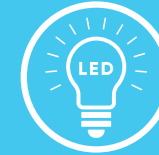


Learn about the possibilities with PRISMA Microscope



WIDE FIELD OF VIEW

Inspect efficiently with a large viewing area for complex PCBs



BRIGHT 7000K LED ILLUMINATION

Sharp, natural light ensures accurate work on tiny components

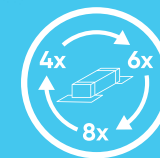


ESD-SAFE PROTECTION

Protect sensitive electronics from electrostatic damage during every task



Knob for adjusting eye distance



MODULAR & INTERCHANGEABLE LENS

Easily adapt lenses for any nano-soldering project.



ERGONOMIC, COMFORTABLE DESIGN

Adjustable universal arm and viewing position allow for long, comfortable sessions

Making the Invisible, Visible



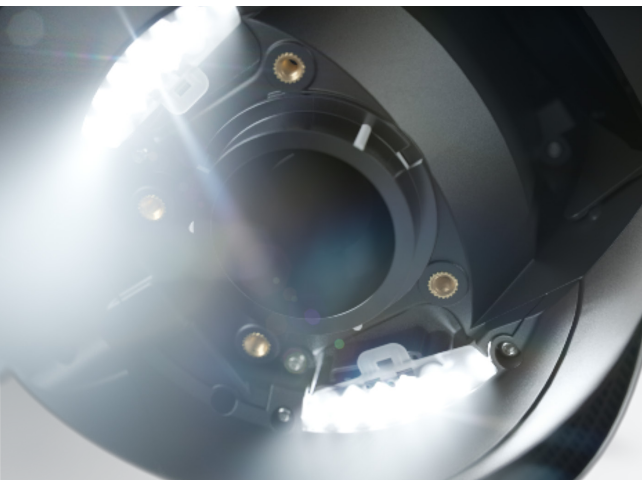
WIDE FIELD OF VIEW

The wide field of view allows efficient inspection of complex PCBs without constant repositioning. This improves workflow, reduces fatigue, and supports precise, high-output operations even with glasses



ERGONOMIC, COMFORTABLE DESIGN

Adjustable universal arm and viewing position allow for long, comfortable sessions



7000K LED ILLUMINATION

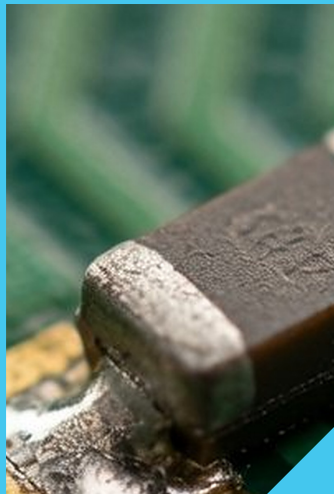
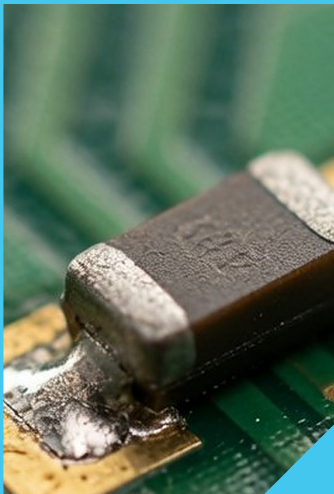
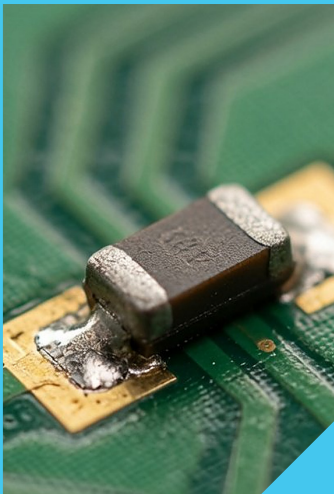
Bright 7000K LED illumination provides sharp, natural light for accurate work on the smallest components. Consistent visibility ensures reliable inspection and soldering results at every step.



BASE WINDOW

Hands-free visual inspection — you can check the PCB just by moving your eyes, without shifting your head

What magnification is right for your task at hand?



4x Lens

Best for > 1.0 mm components and general PCB inspection where broader field of view and ease of handling are most important.

6x Lens

Best for 0.5 – 1.0 mm components, balancing magnification and working distance for accurate solder joint inspection and placement checks.

8x Lens

Best for < 0.5 mm components, ideal for high-density PCBs and fine-pitch soldering where maximum detail and defect detection are critical.

PRISMA Microscope & Accessories



PRISMA MICROSCOPE ESD

Order No. T0051406599

The new Weller PRISMA Microscope delivers exceptional clarity and precision for nano to macro soldering applications, helping professionals see every detail with complete confidence.

- Microscope head (with LED array)
- Universal arm
- 4x Magnification Lens
- Power Supply Adapter

Dimensions L x W x H	605 mm x 454 mm x 320 mm / 23.82 inch x 17.87 inch x 12.60 inch
Weight	4.5 kg / 23.85 Lb
Input Power	9 V
Power consumption	5 W
Illumination Brightness	9.400 lux
Illumination Color Temperature	~7000K
Illumination Lifetime	10,000 h

EXPLORE



4x Lens

Order No. T0051406999

Best for > 1.0 mm components and general PCB inspection where broader field of view and ease of handling are most important.

Working Distance	96 mm 3.780 in
Field of View	27.5 mm 1.083 in



6x Lens

Order No. T0051407099

Best for 0.5 – 1.0 mm components, balancing magnification and working distance for accurate solder joint inspection and placement checks.

Working Distance	73 mm 2.874 in
Field of View	19.2 mm 0.756 in

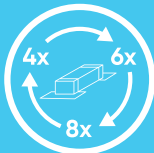
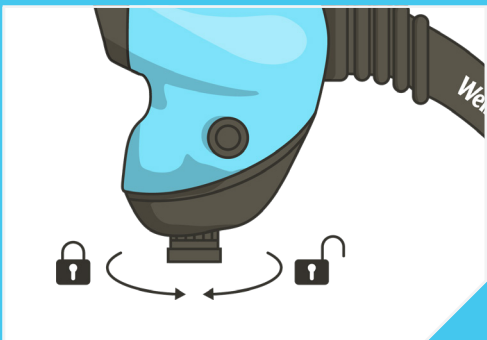


8x Lens

Order No. T0051407199

Best for < 0.5 mm components, ideal for high-density PCBs and fine-pitch soldering where maximum detail and defect detection are critical.

Working Distance	58.5 mm 2.303 in
Field of View	14.3 mm 0.536 in



MODULAR & INTERCHANGEABLE LENS

Easily adapt lenses for any nano-soldering project.

SAFETY

Protection Built Into the Process

Clean air is essential for both operator safety and process quality. Weller filtration solutions capture soldering fumes at the source, creating a safer and more productive workspace.

At the nano scale, even minor static discharge can damage sensitive components. Weller ESD-safe tools and workstations protect electronics from electrostatic damage, helping ensure reliable, high-quality results.

Find your perfect fume extraction unit



ZeroSmog Shield Pro ZeroSmog Guard Light ZeroSmog Guard ZeroSmog Guard 2

Features				
Users	1	1	1	2
Maximum Capacity	32 (m³/h)	100 (m³/h)	100 (m³/h)	200 (m³/h)
Maximum Vacuum	490 PA/V	2700 PA/V	2700 PA/V	2250 PA/V
Noise Level dB(A)	< 50	< 50	< 50	< 55
24/7 Run Time	–	●	●	●
Easy filter change	●	●	●	●
Easy reach switch	●	●	●	●
Filter Status Indication	–	–	●	●
Pre-filter ePM1-75%	–	●	●	●
Particle EPA H10	●	–	–	–
Particle HEPA H13	–	●	●	●
Gas Filtration media	Activated Carbon	Activated Carbon	Activated Carbon & KMnO₄	Activated Carbon & KMnO₄
Communication with soldering stations	WT, WX, WXsmart	–	WT, WX, WXsmart	WT, WX, WXsmart
Adjustable suction	●	–	●	●
Remote switch	–	–	○	○
Compatible Extraction Hoses Easy Click 60	–	○	○	○

● included ○ optional – not available

Control

Visibility

Safety

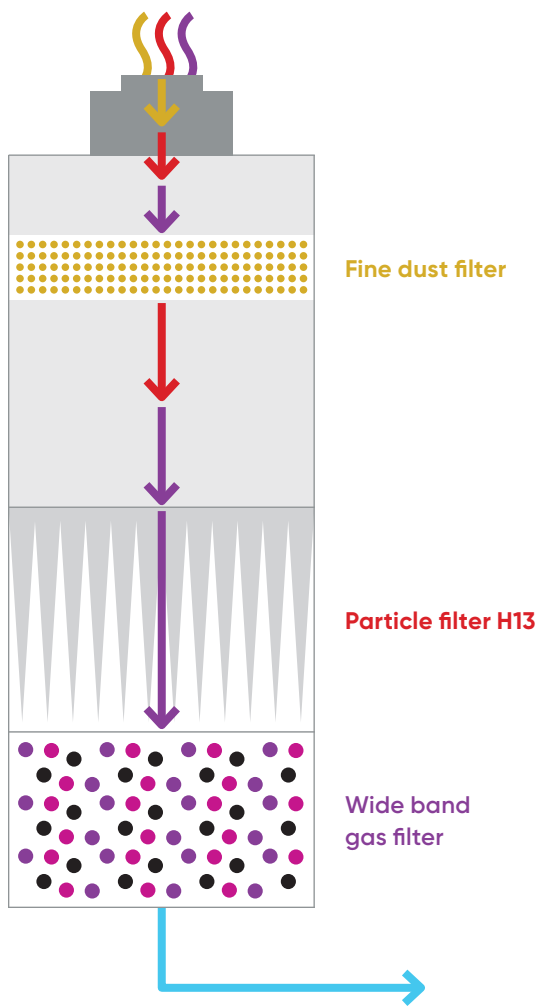
Workflow

Why is fume extraction so important?

Switching to lead-free soldering is indeed a more environmentally friendly choice, as it reduces the use of harmful lead. However, lead-free soldering also presents challenges: it generates more breathable airborne particles. This increase is due to higher working temperatures and the additional flux required during the process.

Today, using the correct safety equipment is essential to remove these hazardous substances effectively. Fine particles are more dangerous than larger ones, as they can reach the alveoli in the lungs and potentially block airways. A fume extraction unit is crucial in this process, capturing particles and gases and recirculating cleaned air back into the workspace. This approach not only protects workers' health but also conserves energy and reduces HVAC costs.

- The smaller the particles, the deeper they penetrate the respiratory system, increasing health risks.
- The tiniest particles can even pass through the alveoli into the bloodstream, underscoring the importance of proper filtration.



The before/after effect on a small mesh shows the degree of pollution after 90 minutes of soldering.



What health risks can develop?

- Dermatitis
- Nosebleed
- Acne
- Headache
- Eye irritation
- Sinonasal cancer
- Sore throat
- Respiratory damage
- Occupational asthma



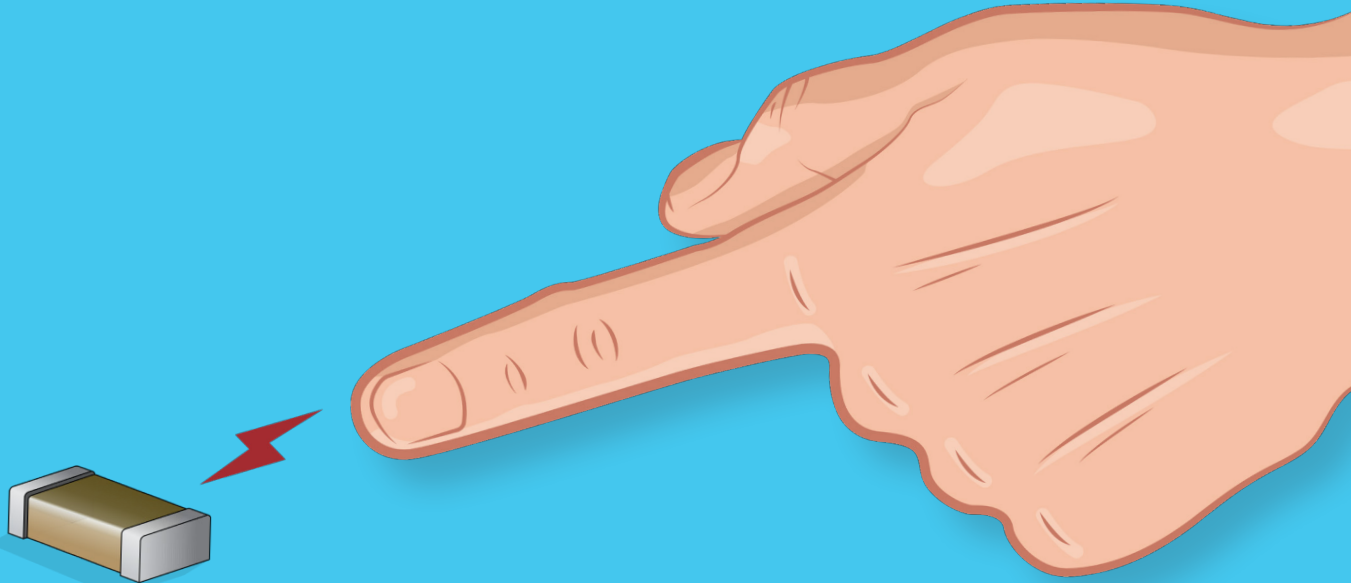
ONE ECOSYSTEM

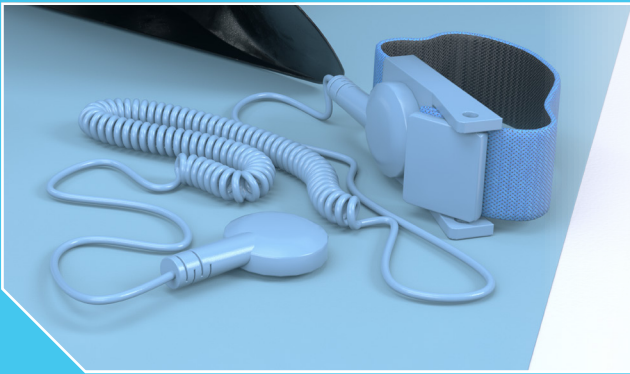
Weller provides a complete ESD-safe workstation solution, helping protect sensitive electronics while ensuring precision, quality, and reliability.



Nano Precision Demands ESD Protection

As electronic components continue to shrink, they become increasingly vulnerable to electrostatic discharge. An ESD event too small for a person to feel can permanently damage nano-scale devices, leading to hidden failures and reduced product reliability. An ESD-safe workstation provides the controlled environment needed to protect sensitive components throughout the entire soldering process.



A photograph of the ESD Soldering MAT, which is a blue, flexible, and coiled mat used for ESD protection during soldering.

Need a Static-Safe Work Surface?
Check Out Our ESD Soldering MAT



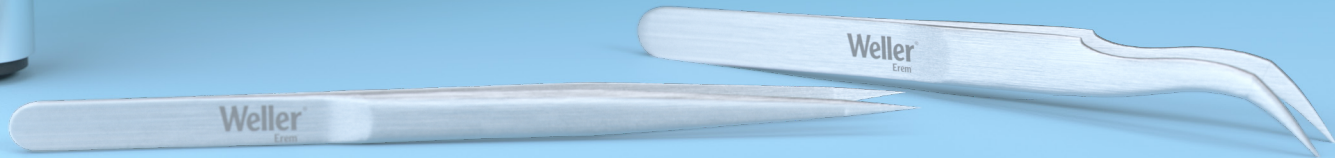
WORKFLOW

Designed for Performance

Efficiency at the workbench is critical to maintaining productivity and quality. Disruptions, unnecessary movement, or poorly integrated tools can slow down even the most skilled operators.

Weller's ecosystem is designed to create a seamless workflow—from soldering tools to accessories and workstation solutions. By optimizing organization, tool interaction, and process flow, it enables faster execution, reduced interruption, and a more consistent production environment.

Weller
Erem



WELLER EREM

Weller Erem precision tools provide the accuracy, control, and ESD-safe performance needed to handle delicate nano-scale components with confidence, ensuring quality and reliability throughout the assembly process.

LEARN MORE



SOLDER WIRE

Weller solder wire delivers consistent wetting, reliable flow, and high-quality solder joints, providing the precision and process control required for today's demanding nano-scale electronics assembly applications.

LEARN MORE



WELLER EREM

Feel The Difference.

The Proven Choice. Everytime.

Manufactured with uncompromising Swiss quality, and created especially for healthcare, Weller Erem® tools are built to last. The signature high-performance cutters set the industry standard by providing over 1 million consistent precise and accurate movements.

With state-of-the-art advanced features like Magic Spring™, High-Precision Screw Joint, and Maximum Opening Stop Technology, Weller Erem Precision Tools provide the longest durability, highest precision and best quality on the planet.

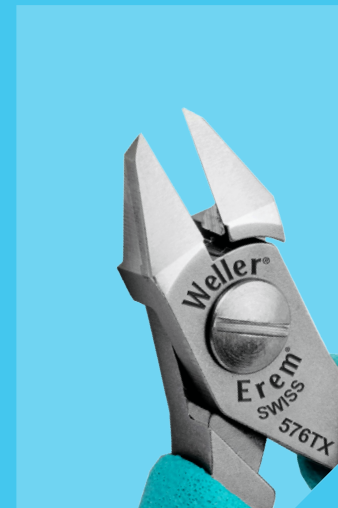


Learn about the possibilities with Weller Erem



Swiss
Made

Weller Erem products are made and manufactured with uncompromising Swiss quality, created to be strong, durable, sharp and precise



THE PERFECT CUT

Strong, sharp and precise - every time

Weller Erem Cutters are designed to be strong, durable and sharp, having the highest precision available.



BUILT TO LAST

The longest lasting durability on the planet

Weller Erem Pliers are designed to ensure an accurate and sure grip every time.



THE PERFECT COMBINATION

Precision, design, symmetry and balance

Weller Erem has a wide range of Tweezers, each designed to be strong, comfortable and precise.



WSW SOLDER WIRE

The Perfect Solder Joint

Designed to enhance the quality of all your soldering jobs, Weller WSW increases productivity, and optimizes your soldering performance. With a guaranteed 100% continuous flux core, combined with pure first metal melting, WSW enables long-term, highly durable solder joints.

EXPLORE



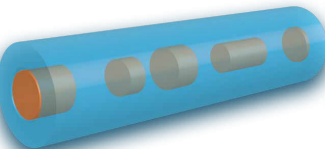
FIRST METAL MELTING

First melting of metals (no recycled material) ensures consistent high quality and lowest contamination in the alloy.

ALLOY

Optimized micro-alloyed solder wire alloy to minimize oxidation of the soldering tip. More efficient, precise soldering and consistent high quality solder joints while extending tip life and reducing costs.

Standard Flux Core



Air pockets and high variance in flux content

100% FLUX CORE

Weller WSW Solder Wires have a 100% continuous flux core without any kind of air inclusions. The soldering process is not interrupted and the solder joint reaches a different another level of quality and long-term stability.

ROSIN

Homogeneous distribution of the activators within the resin ensures a uniform soldering result and the long-term reliability of the flux residues.



PERFORMANCE & PRODUCTIVITY

Optimized performance with a guaranteed and consistent 100% continuous flux core



QUALITY SOLDER JOINTS

Long-term, highly durable solder joints that will not crack, even on difficult surfaces



LOW TOTAL COST OF OWNERSHIP

Up to 70% less reduced tip consumption and provide a low total cost of ownership by saving labor time & resources due a higher productivity



TIP WETTING

Fast and homogeneous wetting due to 100% continuous flux core



REDUCED SPLASH

Increased direct user safety as well as workplace cleanliness



FLOW & HEAT PERFORMANCE

Patented alloys guarantee optimal results

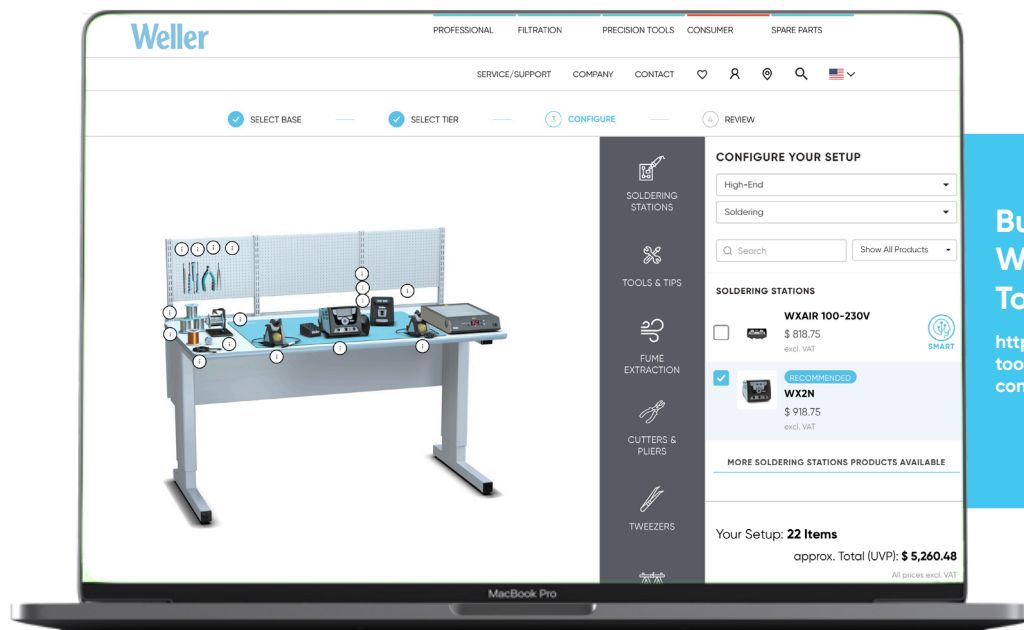


MAXIMUM FLEXIBILITY

Wide range of alloys and fluxes as well as various wire diameters

Build Your Ultimate Workbench

Design a complete workbench tailored to your process—from soldering and inspection to filtration and ESD protection with the Weller configurator.



Build Your
Workbench
Today

<https://www.weller-tools.com/us/en/configurator#step/1>

Germany

Weller Tools GmbH
Carl-Benz-Straße 2
74354 Besigheim

Tel: +49 (0) 7143 580-0
Fax: +49 (0) 7143 580-108

USA

Apex Tool Group, LLC
1000 Lufkin Road
Apex, NC 27539 USA

Tel: +1 (919) 387 0099
Fax: +1 (919) 387 2614

China

Apex Tool Group
Room 302A, NO 177 Bilbo Road
Shanghai 201203

Tel: +86 (21) 60880288
Fax: +86 (21) 60880289

