

Soldering station

# WSD 81i

Maximum Flexibility

Time Saving and Cost Efficient

Easy Operation

Optimum Safety High Precision

Original **Weller**<sup>®</sup> Quality!



**Weller**<sup>®</sup>

# Work smarter.

## WSD 81i



### Wide Flexibility

- Compatible with 8 hand tools
- Easy tool change
- Comprehensive accessory range
- Best option for customisation



### Maximum time and Cost efficiency

- Low energy consumption
- Automatic energy saving mode
- Increased bit life
- Reduced running cost



### Faultless operation

- Ease of use with intuitive user interface
- Automatic tool recognition, no need to recalibrate for different tools
- Customised functions set on power unit (no external input required)
- No calibration required (IPC compliant)



### Absolute precision

- Utmost temperature accuracy
- Temperature lock
- Temperature offset function option
- Guaranteed process control



### Optimal safety

- 4 grounding options
- 24 volt operation of hand tools
- Ideal for use in EPA areas
- ESD safe
- High frequency technology is not used



■ **Easy operation**  
Integrated, automatic processes and fewer operating requirements. No calibration needed (IPC compliant).

■ **Rugged housing**  
Made from high quality, tough, antistatic materials and low wear plug and socket connectors.

■ **100% long-term performance**  
Platinum sensor technology gives precise temperature accuracy and control. Compared to other stations, the WSD81i offers temperature stability and accuracy without variation over time.

AS SIMPLE AS IT  
IS INGENIOUS!



Easy Operation  
95 W Power  
Absolute Perfection  
Original  
**Weller**<sup>®</sup>  
Quality!

1 soldering station  
with almost 1000 soldering  
**iron/tip combinations.**

WSP 80



WP 80



WP 65



MPR 80



WTA 50



## Made in Germany

The success story of Weller is built on the success factors of passion, innovative spirit, open-mindedness, German manufacturing and quality.

For over 50 years Weller has been passionately developing, designing, manufacturing and selling its products at its German location in the Swabian town of Besigheim. The Weller team of skilled and dedicated professionals manufactures high-quality soldering products in Germany using highly complex production processes. A number of employees have been with the company for many years and so are able to pass on their extensive experience and know-how to young and motivated co-workers. Weller products are developed in a customer-focused way and built to very high standards of quality.

Product innovations "Made in Germany" are the lifeblood of Weller's success. Weller soldering guns, temperature-controlled soldering irons, high-tech repair stations and solder fume extraction units are continuously updated to satisfy the requirements of the electrical industry.

Weller employs a tightly integrated quality management system to ensure the highest standards of product and service quality. The Weller system is audited by internationally recognised certification agencies and certified to the ISO 9001 international quality standard.

Consistent quality assurance, sustainable production and high development standards have made Weller the world market leader in manual soldering systems. "Made in Germany" is a seal of approval for the Weller name - a name synonymous with quality, reliability and innovative spirit. It symbolises the trust people place in products made in Germany and embodies the highest quality standards in the global market.

LR 21



FE 75



FE 80



With almost 1000 soldering iron/tip combinations, the WSD 81i soldering station offers you the ideal solution for any soldering task.

# WSD 81i

## Matching soldering irons

WSP 80 | WP 80 | WP 65 | MPR 80  
WTA 50 | LR 21 | FE 75 | FE 80

## Matching soldering tips

LT 1SC | LT 1SCNW | LT A | LT ASL  
LT B | LT BSL | LT H | LT HSL | LT C  
LT D | LT DLL | LT K | LT L | LT M  
LT HC 30° | LT ALX 30° | LT BX 30°  
LT AX 30° | LT 4X 30° | LT MX 30°

# Outstanding technology.

## WSD 81i specifications

Dimensions L x W x H	166 x 115 x 101 mm
Voltage options	230 V ~ 50/60 Hz 120 V ~ 60 Hz   100 V ~ 50/60 Hz
Power consumption	95 W
Protection class	I, antistatic housing III, soldering tool
Temperature range	50 - 450°C 150 - 850°F
Temperature accuracy	± 9°C
Temperature stability	± 2°C
Potential equalisation	3.5 mm jackplug socket on the base of the tool. (as-delivered condition: hard grounded, jack plug not inserted)



# Powerful allrounder packages.

## WSD 81i sets



### WSD 81iSE set with WP 65 soldering iron and dry cleaner

- 8 connectable tools
- Uses Power-Response technology to give faster heat up and recovery up time
- Up-to 30% faster soldering rate than equivalent tools
- Up-to 30% time and energy saving

#### PUD 81i

Power unit, power consumption: 95W

#### WP 65

- For precision soldering up-to temperatures of 450°C
- Developed to reduce running costs
- Spring loaded element to maintain thermal contact with the tip
- Optimised sensor position
- 24 V operation, 65 W rated

#### WDH 10

Safety rest with brass wool dry cleaner

#### Set order number

T005 32 966 99  
T005 32 963 99 (UK)

### WSD 81i set with WSP 80 soldering iron and dry cleaner

- 8 connectable hand tools
- Uses Silver-Line technology
- Low cost to value ratio

#### PUD 81i

Power unit, power consumption: 95W

#### WSP 80

- Fast heat up to operating temperature and rapid recovery rate
- 80 W output
- Slim profile
- Widest range of tip profiles
- Temperature range 50°C to 450°C
- Hot tip replacement for continuous operation
- 24 V operation

#### WDH 10

Safety rest with brass wool dry cleaner

#### Set order number

T005 32 976 99  
T005 32 973 99 (UK)

### WSD 81i set with WSP 80 soldering iron and wet cleaner

- 8 connectable hand tools
- Uses Silver-Line technology
- Low cost to value ratio

#### PUD 81i

Power unit, power consumption: 95W

#### WSP 80

- Fast heat up to operating temperature and rapid recovery rate
- 80 W output
- Slim profile
- Widest range of tip profiles
- Temperature range 50°C to 450°C
- Hot tip replacement for continuous operation
- 24 V operation

#### KH 18

Safety rest with damp sponge cleaner

#### Set order number

T005 32 946 99  
T005 32 943 99 (UK)

# The key to perfect soldering results – Original Weller.

## WSD 81i accessories

### Connectable tools

#### Soldering iron

##### WSP 80

- Soldering tip temperature is reached quickly and precisely
- Slim design and high power output of 80 W
- Suitable for a wide range of applications from precision soldering to high-temperature soldering
- Fast and easy tip replacement
- Work can be continued immediately after changing soldering tips
- 80 W, 24 V with Silver-Line heating element technology

##### Order number

T005 29 163 99, with solder tip LT B  
T005 33 131 99, set with safety rest KH 25P



##### WP 80

- Tip-to-Grip soldering iron with a grip to soldering tip distance of only 40 mm
- ESD-safe and ergonomically designed soldering tool
- Ideal for precision soldering work, e.g. under microscopes, or high-temperature soldering
- Wide range of soldering tips
- 80 W, 24 V with Silver-Line heating technology

##### Order number

T005 29 163 99, with solder tip LT B  
T005 33 131 99, set with safety rest KH 25P



##### WP 65

- For precision high-temperature soldering
- Specially developed to reduce soldering follow-up costs
- Spring-loaded tip receptacle for constant thermal contact between heating elements and soldering tip
- Maximum performance through optimised sensor position
- Soldering tip temperature is reached quickly and precisely
- 65 W, 24 V with Power-Response technology

##### Order number

T005 29 215 99, with solder tip XNT A  
T005 29 216 99, set with safety rest WDH 10



##### MPR 80

- Maximum precision and extremely short heat-up time
- Ergonomic design and maximum performance
- For applications ranging from precision soldering to high-temperature soldering
- Large selection of soldering tips
- 80 W, 24 V

##### Order number

T005 29 163 99, with solder tip LT B  
T005 33 131 99, set with safety rest KH 25P



Only original accessories deliver perfect results



Weller original accessories offer 100% fitting accuracy, highest quality and safety, as well as extra-long life. Design for perfect interaction and maximum functionality.



### LR 21

- For universal use with a wide selection of tips
- Excellent dynamic temperature response through integrated platinum temperature sensor and high-performance heating element
- 50 W, 24 V

#### Order number

T005 25 106 99, with solder tip LT M  
T005 29 187 99, set with safety rest WDH 30



### WTA 50

- For desoldering SMD components
- 2 heating elements each with a separate temperature sensor ensures identical temperatures on both shanks
- 2 x 25 W, 24 V

#### Order number

T005 13 171 99, with solder tip set WTA 1  
T005 33 133 99, set with safety rest AK 51



## Direct fume extraction soldering iron

### FE 75

- Soldering iron with integrated solder fume extractor for standard soldering tasks
- Unpleasant and hazardous vapours are extracted directly at the soldering tip
- No affect on soldering tip temperature
- 80 W, 24 V

#### Order number

T005 29 166 99, with solder tip LT B  
T005 33 151 99, set with safety rest KH 30



### FE 80

- Soldering iron with integrated solder fume extractor for energy-intensive soldering work
- Unpleasant and hazardous vapours are extracted directly at the soldering tip
- No affect on soldering tip temperature
- 80 W, 24 V

#### Order number

T005 26 162 99, with solder tip HT B and funnel for safety rest  
Please order safety rest separately: T005 15 152 99, WDH 30



## Heating plate

### WHP 80

- Preheating of electronic modules
- Reduced risk of heat damage to components
- Ideal for ceramic and multilayer components
- Heated area 80 x 50 mm
- Temperature range 50°C – 200°C
- 80 W, 24 V

#### Order number

T005 27 028 99



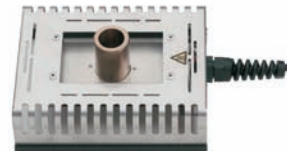
## Solder bath

### WSB 80

- Preparation of soldering components, e.g. in order to remove foreign solder particles from wire ends or IC connecting wires
- Temperature range 50°C – 450°C
- Inner Ø 20 mm, depth 25 mm
- Stainless steel tray to guard against dripping solder residue
- 80 W, 24 V

#### Order number

T005 27 040 99



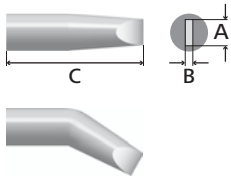
You can find matching soldering tips and other accessories online or in our main catalogue.











[www.weller-tools.com](http://www.weller-tools.com)











For information and details about solder fume extraction, please visit [www.weller-tools.com](http://www.weller-tools.com)

# Best performance. Best price. Best selection. **LT tips for WP/ WSP 80 soldering irons.**

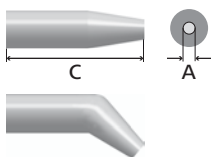
Chisel tip













LT	Ø a mm	b mm	c mm	Order-no.
 LT 1SC	0.4	0.15	15.0	T005 44 494 99 T005 44 494 10
 LT 1SCNW	0.3	0.1	15.0	T005 44 497 99
 LT A	1.6	0.7	12.5	T005 44 440 99 T005 44 440 10 T005 44 403 11
 LT ASL	1.6	0.45	12.5	T005 44 516 99 T005 44 516 11
 LT B	2.4	0.8	12.5	T005 44 405 99 T005 44 405 10 T005 44 405 11
 LT BSL	2.4	0.45	12.5	T005 44 517 99 T005 44 517 11
 LT H	0.8	0.4	12.5	T005 44 437 99 T005 44 437 10 T005 44 412 11
 LT HSL	0.8	0.4	12.5	T005 44 518 99 T005 44 518 11
 LT C	3.2	0.8	12.5	T005 44 407 99 T005 44 407 10 T005 44 407 11
 LT D	4.6	0.8	12.5	T005 44 409 99 T005 44 409 10 T005 44 409 11

Type	Ø a mm	b mm	c mm	Order-no.
 LT DLL	4.6	1.2	12.5	T005 44 448 99 T005 44 448 10
 LT K	1.2	0.4	20.0	T005 44 438 99 T005 44 438 10 T005 44 413 11
 LT L	2.0	1.0	20.0	T005 44 414 99 T005 44 414 10 T005 44 414 11
 LT M	3.2	1.2	20.0	T005 44 415 99 T005 44 415 10 T005 44 415 11
 LT HX 30°	0.8	0.4	17.5	T005 44 420 99 T005 44 420 11
 LT ALX 30°	1.6	0.7	17.5	T005 44 443 99 T005 44 443 10
 LT BX 30°	2.4	0.8	17.5	T005 44 442 99 T005 44 442 10
 LT AX 30°	1.6	0.8	14.1	T005 44 427 99 T005 44 427 10
 LT 4X 30°	1.2	0.4	17.2	T005 44 428 99 T005 44 428 10
 LT MX 30°	3.2	1.2	20.0	T005 44 469 99

Round tip

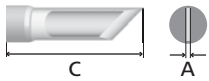




Type	Ø a mm	c mm	Order-no.
 LT 1S	0.2	15.0	T005 44 436 99 T005 44 402 10
 LT 1SNW	0.1	15.0	T005 44 496 99
 LT 1SA	0.5	15.0	T005 44 488 99
 LT 1	0.25	13.0	T005 44 435 99 T005 44 435 10 T005 44 401 11
 LT 1LNW	0.1	25.4	T005 44 498 99

Type	Ø a mm	c mm	Order-no.
 LT 1A	0.5	13.0	T005 44 489 99 T005 44 489 10 T005 44 489 11
 LT AS	1.6	12.5	T005 44 404 99 T005 44 404 10 T005 44 404 11
 LT CS	3.2	12.5	T005 44 411 99 T005 44 411 10
 LT 1SLX 30°	0.4	22.0	T005 44 426 99 T005 44 426 10
 LT 1X 30°	0.4	13.0	T005 44 425 99 T005 44 425 10

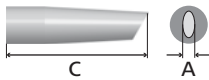









### Knife tip









Type	Ø a mm	c mm	Order-no.
LT KN 	2.0	16.5	T005 44 479 99 T005 44 479 10
LT KN5L 45° 	2.0	16.5	T005 44 519 99

### Bevelled tip









Type	a mm	c mm	Order-no.
LT 4 45° 	1.2	15.0	T005 44 439 99 T005 44 439 10 T005 44 421 11
LT F 45° 	1.2	12.5	T005 44 408 99 T005 44 408 10 T005 44 408 11
LT AA 60° 	1.6	12.5	T005 44 487 99 T005 44 487 10
LT BB 60° 	2.4	17.0	T005 44 444 99 T005 44 444 10
LT BB 45° 	2.4	17.0	T005 44 484 99
LT CC 60° 	3.2	17.0	T005 44 445 99 T005 44 445 10
LT CC 45° 	3.2	17.0	T005 44 485 99

Type	a mm	c mm	Order-no.
LT DD 45° 	4.0	20.0	T005 44 478 99 T005 44 478 10
LT DD 45° 	4.6	17.0	T005 44 486 99 T005 44 486 10 T005 44 486 11
LT 11CP 45° 	1.2	15.0	T005 44 421 71
LT 22CP 45° 	2.0	20.0	T005 44 408 73
LT 33CP 45° 	3.0	20.0	T005 44 408 77
LT 44CP 45° 	4.0	20.0	T005 44 408 81

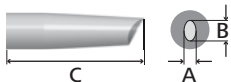
### Conical tip


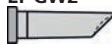


Type	Ø a mm	c mm	Order-no.
LT 1L 	0.2	25.4	T005 44 423 99 T005 44 423 10 T005 44 423 11
LT 1LW 	0.1	25.4	T005 44 498 99
LT 5 	0.4	21.0	T005 44 406 99 T005 44 406 10 T005 44 406 11

Type	Ø a mm	c mm	Order-no.
LT T 	0.6	13.0	T005 44 482 99 T005 44 482 10 T005 44 482 11
LT O 	0.8	17.0	T005 44 481 99 T005 44 515 10
LT 1LX 35° 	0.2	25.4	T005 44 424 99 T005 44 424 10 T005 44 424 11

### Solder depot



Type	Ø a mm	b mm	c mm	Order-no.
LT GW1 	2.3	3.2	17.8	T005 44 410 99 T005 44 410 10 T005 44 410 11
LT GW2 	3.5	4.8	17.8	T005 44 511 99 T005 44 511 10

**Pack quantity**

- T005XXXXX99 = 1 Piece
- T005XXXXX10 = 10 Pieces
- T005XXXXX11 = 100 Pieces



- For universal applications
- Effective heat transfer
- Wide range of soldering tips
- High-quality heating element core
- Soldering tip with minimal material usage (cost saving)

A wide selection of additional soldering tips is available for all soldering irons.

[www.weller-tools.com](http://www.weller-tools.com)

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# Weller®

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