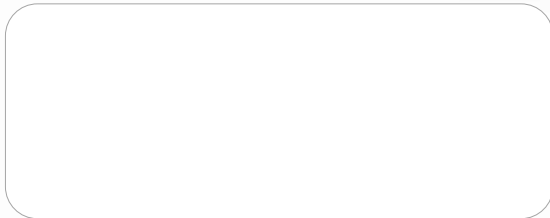




# High-Precision Tools for Medical Device Manufacturing



# Side cutters and tip cutters

## FOR CRITICAL APPLICATIONS

For further information please see:  
<https://www.weller-tools.com/professional/USA/us/Home/Erem>

### Built-in Weller-Erem Magic Spring

The Magic Spring system used in Weller-Erem precision tools is unique. It is integral to the cutting head and provides a constant closing and re-opening force.

It is highly reliable, makes the tools easy to use and reduces operator fatigue.

- Reduce costs thanks to long life
- Constant spring force
- Guarantees more than 1 million operations

### High-precision screw joint

This self locking screw joint system gives a smooth cutting and opening action and ensures that there is no blade overlap or play.

- Smooth jaw action with no play
- Smooth cutting operation with no jaw overlapping

### Induction-hardened cutting edges

The cutting blades of Weller-Erem cutters are hardened to Rockwell 63-65 HRc by an induction-heating process.

- High durability, thanks to special material selection



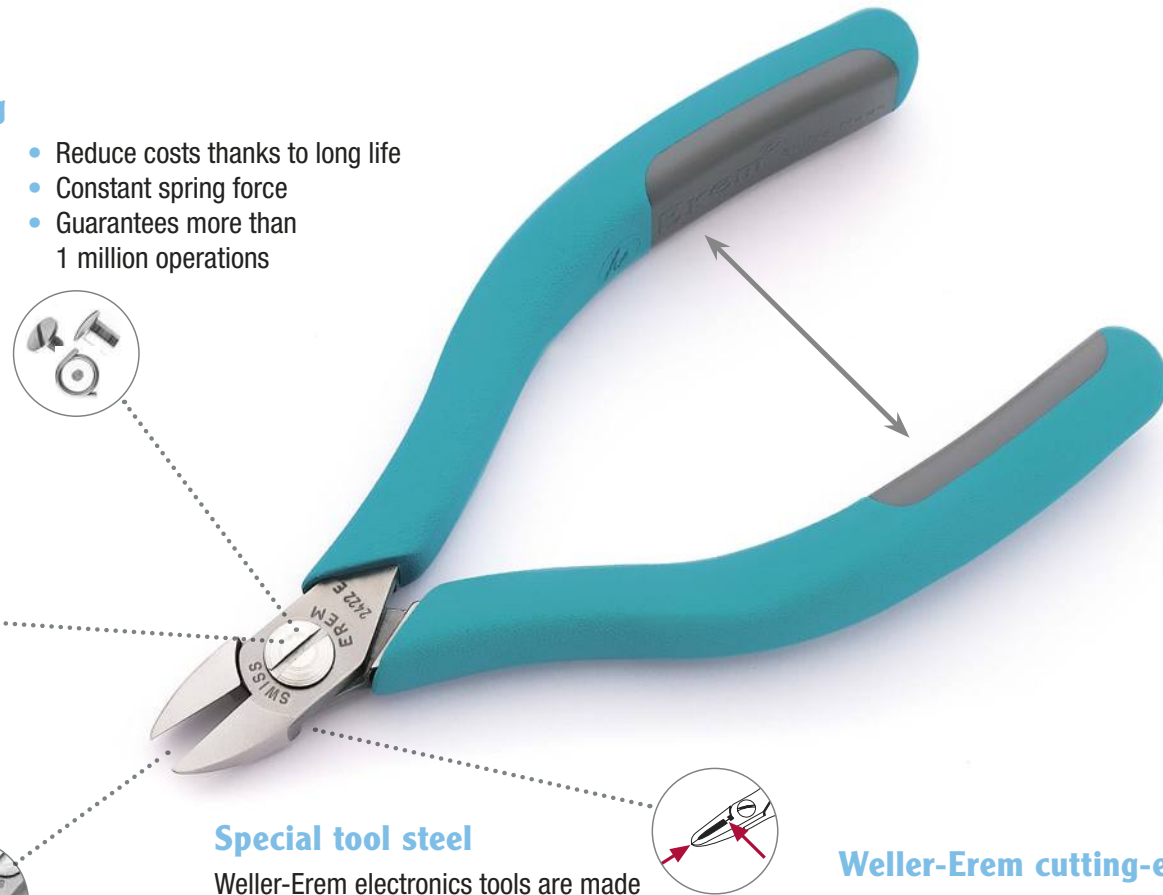
### Special tool steel

Weller-Erem electronics tools are made from bright steel. The special tool steel is made using a unique Swiss processing technique.

- The bright tool steel gives additional strength and toughness to the tools to promote a long service life.

### ESD-safe









The interchangeable foam-cushion handles are ESD-safe and are fitted as standard on all Weller-Erem cutters and pliers.



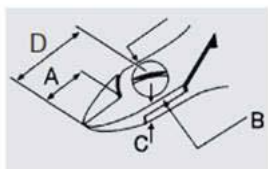
### Weller-Erem cutting-edge protection for tip cutters

All tip cutters are fitted with a special stop system which prevents the cutting edges from overlapping.

# CUTTERS

Model	Cut	Description	Key Applications	Dimensions				Dental/ Ortho	Cardio- vascular*	Typical Medical	Tungsten- Carbide Steel
				A	B	C	D				
503ETST	 Flush	<ul style="list-style-type: none"> <li>Tip cutter - angled wide head</li> </ul>	Guide Wires, Stents, Catheters, Single/Multiple Fillers, Lateral/Internal Cuts	0.354 in	0.433 in	0.236 in	0.748 in		✓		✓
				9 mm	11 mm	6 mm	19 mm				
576TX	 Flush	<ul style="list-style-type: none"> <li>Tip cutter -pointed relieved head</li> <li>The underside is relieved and facilitates optimum access even to extremely hard-to-reach areas.</li> <li>The narrowest head shape.</li> </ul>	Guide Wires, Stents, Catheters, Single/Multiple Fillers, Lateral/Internal Cuts	0.433 in	0.433 in	0.236 in	0.748 in		✓		✓
				11 mm	11 mm	6 mm	19 mm				
576TX-1	 Flush	<ul style="list-style-type: none"> <li>Side cutter - tapered head</li> <li>Jaws have straight edges and taper to a point</li> <li>Head shape allows access to difficult to reach areas but reduces the cutting capacity in comparison to the same size oval head cutter</li> </ul>	Guide Wires, Stents, Catheters, Single/Multiple Fillers, Lateral/Internal Cuts	0.433 in	0.433 in	0.236 in	0.011 in		✓		✓
				11 mm	11 mm	6 mm	19 mm				
595T	 Semi-Flush	<ul style="list-style-type: none"> <li>Side cutter - tapered head</li> <li>The jaws of the cutter have straight edges and taper to a point</li> <li>This head shape allows access to difficult to reach areas but reduces the cutting capacity in comparison to the same size oval head cutter.</li> </ul>	Hard Wire - Stainless Steel 303-316, MP35N, Stents	0.472 in	0.433 in	0.236 in	0.748 in		✓		✓
				12 mm	11 mm	6 mm	19 mm				
599TF	 Flush	<ul style="list-style-type: none"> <li>Side cutter - oval head</li> <li>Fits all cutting applications where easy access is given</li> </ul>		0.472 in	0.433 in	0.236 in	0.748 in		✓		✓
				12 mm	11 mm	6 mm	19 mm				
599TFO	 Semi-Flush	<ul style="list-style-type: none"> <li>Side cutter</li> <li>High precision for optical fibres</li> <li>Ideal for Kevlar® silks, Vectran™ sheathed wires, optical fibres and small stainless wires.</li> </ul>	Stainless Steel Coil Wires, Kevlar®, Vectran™ Braided Wires, Fiber Optics	0.472 in	0.43 in	0.24 in	0.748 in		✓		✓
				12 mm	11 mm	6 mm	19 mm				
E147A	 Semi-Flush	<ul style="list-style-type: none"> <li>Side cutter with compound action</li> <li>For cutting hard wires with minimal effort</li> </ul>	Guide Wires, Stents, Catheters, Single/Multiple Fillers, Lateral/Internal Cuts	0.472 in	0.413 in	0.284 in	-	✓	✓	✓	
				12 mm	10.5 mm	7.2 mm	-				
T622N	 Flush	<ul style="list-style-type: none"> <li>Side cutter – oval head</li> <li>Fits all cutting applications where easy access is given</li> </ul>	Guide Wires, Stents, Catheters, Single/Multiple Fillers, Lateral/Internal Cuts	0.354 in	0.354 in	0.236 in	0.590 in		✓	✓	✓
				9 mm	9 mm	6 mm	15 mm				

\* Includes production of catheters, stents, pace makers, etc.








A = length of cutting edges  
B = head width  
C = head thickness  
D = head length

For further information please see:  
<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Cutters>

weller-tools.com

**Weller**  
Erem

# CUTTERS

Model	Cut	Description	Key Applications	Dimensions				Dental/ Ortho	Cardio-vascular*	Typical Medical	Tungsten-Carbide Steel
				A	B	C	D				
622NB 2622NB	 Flush	<ul style="list-style-type: none"> <li>Side cutter - pointed relieved head</li> <li>Facilitates optimum access to extremely hard-to-reach areas</li> </ul>		0.354 in	0.39 in	0.236 in	0.65 in				✓
				9 mm	9.8 mm	6 mm	16 mm				
632NCF	 Super Full Flush	<ul style="list-style-type: none"> <li>Tip cutter - straight short relieved head</li> <li>High precision for optical fibres</li> <li>Suitable for precision cuts of soft materials (e.g. small silicone tubes precision connector seals, miniature rubber seals, soft synthetic parts)</li> <li>High-precision working on SMD and micro-package contacts</li> </ul>	Soft materials only. Perfect for trimming silicone material, miniature rubber seals or soft synthetic parts	0.354 in	0.354 in	0.236 in	0.590 in		✓	✓	
				9 mm	9 mm	6 mm	15 mm				
2476TX1	 Semi-Flush	<ul style="list-style-type: none"> <li>Side cutter - tapered relieved head</li> <li>Series 2400 MagicSense model</li> <li>The jaws of the cutter have straight edges and taper to a point</li> <li>This head shape allows access to difficult to reach areas but reduces the cutting capacity in comparison to the same size oval head cutter</li> </ul>	Stainless Steel or Nickel Titanium Wires, Catheters, Coiled Wires	0.433 in	0.433 in	0.236 in	0.011 in		✓	✓	✓
				11 mm	11 mm	6 mm	19 mm				
792E	 Super Full Flush	<ul style="list-style-type: none"> <li>Side cutter - pointed relieved head</li> <li>The underside is relieved and facilitates optimum access even in extremely hard-to-reach areas</li> <li>This is the narrowest head shape</li> </ul>	Micro electronics	0.472 in	0.433 in	0.236 in	0.748 in			✓	
				12 mm	11 mm	6 mm	19 mm				
2422E	 Flush	<ul style="list-style-type: none"> <li>Side cutter - oval head</li> <li>Robust and size for size offers the highest cutting capacity</li> <li>This is the most widely used head shape</li> </ul>	Micro electronics	0.472 in	0.433 in	0.236 in	0.748 in			✓	
				12 mm	11 mm	6 mm	19 mm				

\* Includes production of catheters, stents, pace makers, etc.

For further information please see:  
<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Cutters>

# PLIERS

Model	Cut	Description	Key Applications	Dimensions					DIMENSION DIAGRAM
				A	B	C	E	G	
552S	Wire Stripper	<ul style="list-style-type: none"> <li>Suitable for all types of insulation, Teflon®, Tefzel and optical fibres.</li> <li>Unique precision for damage-free stripping of fine wires.</li> <li>Interchangeable blades</li> <li>Unlimited stripping length thanks to side stripping</li> <li>The required diameter is set by means of screws</li> <li>Non-reflecting surface</li> <li>Screwdriver and key are included</li> <li>Robust, high-precision tools for use in electronics and aeronautical engineering</li> </ul>	All Types of Insulation, Teflon, Tefzel and optical fibres.	0.82 in	0.24 in	0.24 in	0.43 in	0.354 in	<p>A = Jaw length B = Width of tips C = Depth of interchangeable blade E = Total height of both tips G = Length of cutting blade</p>
				21 mm	6 mm	6 mm	11 mm	9 mm	
2411PD	Needle nose	<ul style="list-style-type: none"> <li>Needle nose pliers with very precise and rounded jaws</li> <li>Non-reflecting surface, ESD-safe</li> </ul>	For miniature and standard electronics.	1.32 in	0.43 in	0.24 in	0.039 in	0.047 in	<p>A = Jaw length B = Head width C = head thickness E = Width of tips G = Total height of both tips</p>
				33.5 mm	11 mm	6 mm	1 mm	1.2 mm	
531E	Tapered	<ul style="list-style-type: none"> <li>Flat nose pliers with replaceable nylon jaws</li> <li>Non-reflecting surface, ESD-safe, high grade tool steel</li> <li>Nylon jaws prevent nicking and scratching</li> </ul>	Forming and handling components while preventing scratching and nicking for miniature and standard electronics.	0.91 in	0.43 in	0.24 in	0.2 in	0.12 in	<p>A = Jaw length B = Head width C = head thickness E = Width of tips G = Total height of both tips</p>
				23 mm	11 mm	6 mm	5 mm	3 mm	

For further information please see:

<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Pliers>

## Internal patented Weller-Erem Magic Spring

The Magic Spring system used in Weller-Erem precision tools is unique. It is integral to the cutting head and provides a constant closing and re-opening force. It is highly reliable, makes the tools easy to use and reduces operator fatigue.

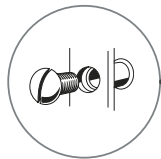
- Reduce costs thanks to long life
- Constant spring force
- Guarantees more than 1 million operations



## High-precision screw joint

This self-locking screw joint system gives a smooth cutting and opening action and ensures that there is no blade overlap or play.

- Smooth jaw action with no play
- No damaging of sensitive components



## Precision-ground jaws

The very precisely worked tips get a firm and sure grip on even the thinnest of parts.

The choice of high-quality materials and meticulous tempering are especially important during the manufacturing of these tweezers.

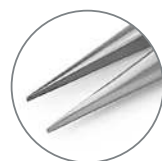
- Ground with the greatest precision

## Special tool steel

Weller-Erem electronics tools are made from bright steel. They are not drop forged.

The special tool steel is made using a unique Swiss processing technique.

- The bright tool steel gives additional strength and toughness to the tools to promote a long service life.



## ESD-safe

The interchangeable foam-cushion handles are ESD-safe and are fitted as standard on all Weller-Erem cutters and pliers.

## Ergonomically shaped handles

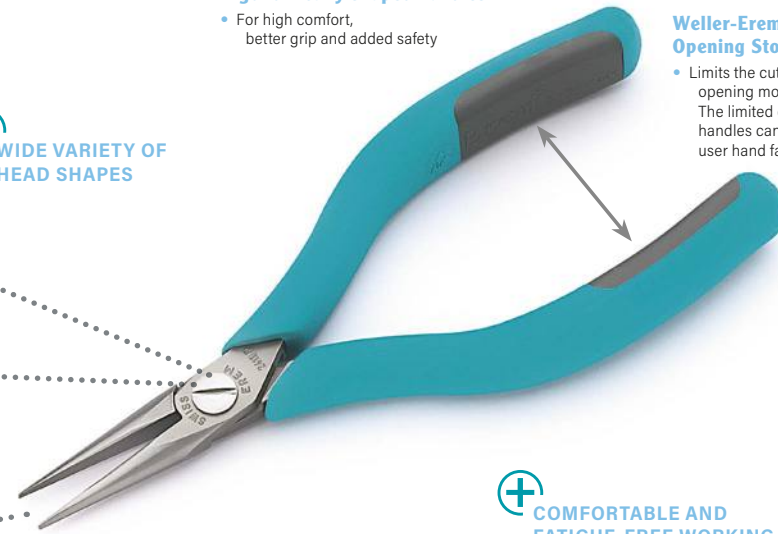
- For high comfort, better grip and added safety

## Weller-Erem - Maximum Opening Stop

- Limits the cutting-edge tips from opening more than 5 mm/197 Inch. The limited extent to which the handles can open prevents user hand fatigue.

## WIDE VARIETY OF HEAD SHAPES


## COMFORTABLE AND FATIGUE-FREE WORKING.



weller-tools.com

**Weller**  
Erem








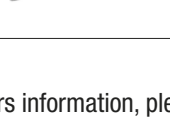
# TWEEZERS

Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size
2ASARU		Straight/ Round	<ul style="list-style-type: none"> <li>Precision tweezers with flat rounded tips for gripping components</li> <li>Coated tips for non-stick holding of self-adhesive parts</li> <li>Titanium stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	For handling sticky adhesive labels and ribbons.	4.724 in	0.53 oz		✓	SS w/ Teflon Coated Tips	N/A
					120 mm	16 g				
5FSA, 5MBS		Straight Pointed	<ul style="list-style-type: none"> <li>Precision tweezers with extremely pointed tips for use in dissection procedures and working under a microscope</li> <li>Relieved shape facilitates excellent access to the most confined spaces</li> <li>Stainless steel, robust tips, non-rusting, non-reflecting surface</li> </ul>	For use on soft materials.	4.528 in	0.42 oz		✓	Stainless Steel	
					115 mm	12 g				
15AGS		Narrow Oblique Head	<ul style="list-style-type: none"> <li>Cutting tweezers with narrow oblique head</li> <li>Hardened cutting edges for long service life</li> <li>Suitable for cutting fine, soft wires and small components</li> </ul>	Designed for cutting fine soft wires up to dia. 0.25 mm/.010 in. and small components.	4.528 in	0.74 oz		✓	Carbon Steel	.216 narrowed to a pt
					115 mm	21 g				
29Y Series			<ul style="list-style-type: none"> <li>Non-reflecting surface</li> </ul>	Suitable for stripping fine wires with PVC or Teflon® insulation.	4.724 in	0.78 oz		✓	Stainless & Carbon	
					120 mm	22 g				
940AS		Ring-Shaped	<ul style="list-style-type: none"> <li>Gripping tweezers with locking mechanism</li> <li>The ring-shaped tip provides for secure handling up to a tensile force of 5 kg</li> <li>Suitable as a ligature clamp in dentistry</li> <li>Can be disinfected and sterilized</li> <li>Gripping tweezers enable the user to hold and manipulate particularly fine wires with a diameter from 0.3 mm/.011 Inch or insulated optical fibres with a diameter of between 1.5 mm/.059 Inch and 5 mm/.197 Inch</li> </ul>		4.724 in	0.60 oz	✓	✓	Stainless Steel	
					120 mm	17 g				
7SA		Curved	<ul style="list-style-type: none"> <li>Precision tweezers, curved, relieved, with pointed tips</li> <li>Bent shape facilitates access to confined spaces</li> <li>Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	For applications in biology, medicine, laboratory technology and microelectronics	4.724 in	0.53 oz		✓	Stainless	Very Fine
					120 mm	15 g				
5SA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with very pointed tips, suitable for very fine wires</li> <li>Relieved shape facilitates excellent access to the most confined spaces</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> <li>For precision work e.g. under a microscope</li> </ul>	Micro electronics	4.528 in	0.42 oz		✓	Stainless Antiacid	Very Fine
					115 mm	12 g				
258SA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling</li> <li>Relieved shape facilitates excellent access to the most confined spaces</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> <li>For precision work e.g. under a microscope</li> </ul>	Secure handling of components up to 480F and resistant to acid and molten solder - water resistant.	4.724 in	0.53 oz		✓	Stainless Anti-acid w/ pointed synthetic tips	Fine Point
					120 mm	15 g				

For Tweezers information, please see  
<https://www.weller-tools.com/professional/USA/us/Top-Menu/Know+How+and+FAQ/Know-How+Erem/Tweezers:+Erem+impresses>

Products, please see  
<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Tweezers>

# TWEEZERS

Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size
249SA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling</li> <li>Non-reflecting surface</li> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	Microelectronics, medicine and laboratory technology. Secure handling of components up to 480F and resistant to acid and molten solder - water resistant.	5.118 in	0.71 oz		✓	Anti-Magnetic	Blunt
					130 mm	20 g				
M5S		Straight	<ul style="list-style-type: none"> <li>Micro-tweezers, very pointed tips, e.g. for precision work under a microscope</li> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Stainless steel, robust tips, non-rusting, non-reflecting surface</li> </ul>	Microelectronics, medicine and laboratory technology. For precision electronic application work under a microscope	3.150 in	0.21 oz		✓	Stainless Steel	Very Fine
					80 mm	6 g				
3CSA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers, standard model for delicate work</li> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories	4.331 in	0.39 oz		✓	Anti-Magnetic	
					110 mm	11 g				
1SA		Straight	<ul style="list-style-type: none"> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories	4.724 in	0.49 oz		✓	Stainless Steel	Fine Point
					120 mm	14 g				
2ASA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with flat rounded tips for gripping components.</li> <li>Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant</li> <li>Suitable for all standard gripping applications and assembly jobs on printed-circuit boards</li> </ul>	General purpose use in microelectronics, medical and laboratories	4.724 in	0.53 oz		✓	Stainless Steel	Flat Round
					120 mm	15 g				
3CSA		Straight	<ul style="list-style-type: none"> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories and delicate work.	4.331 in	0.39 oz		✓	Stainless Steel	Fine Point
					110 mm	11 g				
3SA		Straight	<ul style="list-style-type: none"> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories	4.724 in	0.49 oz		✓	Stainless Steel	Fine Point
					120 mm	14 g				
5SA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with very pointed tips, suitable for very fine wires.</li> <li>Relieved shape facilitates excellent access to the most confined spaces</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> <li>For precision work e.g. under a microscope</li> </ul>	For precision application work under a microscope	4.528 in	0.42 oz		✓	Stainless Steel	Fine Point
					115 mm	12 g				

For Tweezers information, please see  
<https://www.weller-tools.com/professional/USA/us/Top-Menu/Know+How+and+FAQ/Know-How+Erem/Tweezers:+Erem+impresses>

Products, please see  
<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Tweezers>

# TWEEZERS

Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size
5ASA		Bent	<ul style="list-style-type: none"> <li>Precision tweezers, lightly curved 15°, relieved. Very pointed tips, e.g. for installing small components</li> <li>Bent shape facilitates access to confined spaces</li> <li>Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	For applications in biology, medicine, laboratory technology and microelectronics	4.528 in	0.42 oz		✓	Stainless Steel	Fine Point
					115 mm	12 g				
7SA		Bent	<ul style="list-style-type: none"> <li>Precision tweezers, curved, relieved, with pointed tips. Excellent handling in confined spaces</li> <li>Bent shape facilitates access to confined spaces</li> <li>Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	For applications in biology, medicine, laboratory technology and microelectronics	4.724 in	0.53 oz		✓	Stainless Steel	Fine Point
					120 mm	15 g				
AASA		Straight	<ul style="list-style-type: none"> <li>Suitable for delicate standard applications and precision work on small components or wires</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories	4.921 in	0.56 oz		✓	Stainless Steel	Fine Point
					125 mm	16 g				
OOSA		Straight	<ul style="list-style-type: none"> <li>Precision tweezers with pointed tips. Very robust. Suitable for standard applications, e.g. for assembly in electronics</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	General purpose use in microelectronics, medical and laboratories Suitable for delicate standard applications and precision work on small components or wires	4.724 in	0.71 oz		✓	Stainless Steel	Fine Point
					120 mm	20 g				
OODSA		Straight	<ul style="list-style-type: none"> <li>Model same as OOSA, but with serrated finger grips and inside-serrated tips for secure handling</li> </ul>	General purpose use in microelectronics, medical and laboratories Suitable for delicate standard applications and precision work on small components or wires	4.724 in	0.71 oz		✓	Stainless Steel	Fine Point
					120 mm	20 g				
15AGW		Cutting	<ul style="list-style-type: none"> <li>Cutting tweezers with narrow oblique head. For soft wires up to dia. 0.25 mm/0.010 Inch.</li> <li>Delivers high-precision cuts</li> <li>Hardened cutting edges for long service life</li> </ul>	Suitable for cutting fine, soft wires and small components	4.528 in	0.92 oz		✓	Carbon Steel	Narrow Oblique
					115 mm	26 g				
4ASA		Straight	<ul style="list-style-type: none"> <li>Relieved shape facilitates excellent access to the most confined spaces</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	For precision application work under a microscope	4.331 in	0.45 oz		✓	Stainless Steel	Very Fine
					110 mm	13 g				

For Tweezers information, please see

<https://www.weller-tools.com/professional/USA/us/Top-Menu/Know+How+and+FAQ/Know-How+Erem/Tweezers:+Erem+impresses>

Products, please see

<https://www.weller-tools.com/professional/USA/us/Weller+Erem/Tweezers>

## Где купить:

ООО "КОМПАНИЯ ОПТУЛС"

г.Москва, ул.Бирюлёвская, д.53, корп. 2, офис 113

Tel.: +7 (495) 646-00-96

E-Mail: [sale@opttools.ru](mailto:sale@opttools.ru)

Internet: [www.opttools.ru](http://www.opttools.ru)

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

**Weller**  
Erem