

# **High-Precision Tools for Medical Device Manufacturing**



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## Side cutters and tip cutters

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

## **Built-in Weller-Erem Magic Spring**

FOR CRITICAL APPLICATIONS

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.

#### **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

Reduce costs thanks to long life

Constant spring force

Guarantees more than

1 million operations

.



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													
Modal		01	Description	Key Applications	Dimensions				Dental/	Cardio-	Typical	Tungsten-		
	Model				A	В	C	D	Ortho	vascular*	Medical	Steel		
503ETST	A STATE		• Tip cutter - angled wide head Ca M Int	Guide Wires, Stents, Catheters, Single/	0.354 in	0.433 in	0.236 in	0.748 in				(		
	-	Flush		Multiple Fillers, Lateral/ Internal Cuts	9 mm	11 mm	6 mm	19 mm		V		V		
576TX	and the second sec		<ul> <li>Tip cutter -pointed relieved head</li> <li>The underside is relieved and facilitates optimm access even to extremely hard-to-reach areas.</li> <li>The narrowest head shape.</li> </ul>	Guide Wires, Stents, Catheters, Single/	0.433 in	0.433 in	0.236 in	0.748 in						
		Flush		Multiple Fillers, Lateral/ Internal Cuts	11 mm	11 mm	6 mm	19 mm		V		V		
576TX-1	202	Flush	<ul> <li>Side cutter - tapered head</li> <li>Jaws have straight edges and taper to a point</li> </ul>	Guide Wires, Stents, Catheters, Single/	0.433 in	0.433 in	0.236 in	0.011 in		$\checkmark$				
			Head shape allows access to difficult to reach areas but reduces the cutting In capacity in comparison to the same size oval head cutter	Internal Cuts	11 mm	11 mm	6 mm	19 mm				V		
595T	A CONTRACTOR	Semi-Flush	<ul> <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		$\checkmark$				
					12 mm	11 mm	6 mm	19 mm				V		
599TF	D	Flush	Side cutter - oval head     Fits all cutting applications where easy access is given		0.472 in	0.433 in	0.236 in	0.748 in		$\checkmark$				
					12 mm	11 mm	6 mm	19 mm				V		
599TFO	SI	Side cutter     High precision for optical fibres	Stainless Steel Coil Wires, Kevlar®,	0.472 in	0.43 in	0.24 in	0.748 in		(					
		Semi-Flush	<ul> <li>Ideal for Kevlar<sup>®</sup> silks, Vectran<sup>™</sup> sheated wires, optical fibres and small stainless wires.</li> </ul>	Vectran™ Braided Wires, Fiber Optics	12 mm	11 mm	6 mm	19 mm		V		V		
E147A	- Nor		Side cutter with compound action     For cutting hard wires with minimal effort	Guide Wires, Stents, Catheters, Single/ Multiple Fillers, Lateral/ Internal Cuts	0.472 in	0.413 in	0.284 in	-						
		Semi-Flush			12 mm	10.5 mm	7.2 mm	-	V	V	V			
T622N		Side cutter – oval head	Guide Wires, Stents, Catheters, Single/	0.354 in	0.354 in	0.236 in	0.590 in							
1622N				Flush	Fits all cutting applications where easy access is given	Multiple Fillers, Lateral/ Internal Cuts	9 mm	9 mm	6 mm	15 mm		V		$\checkmark$

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

DA B B

CUTTEDC

A = length of cutting edges B = head widh

C = head thickness

D = head length

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	CUTTERS											
	Model Cut		Description	Koy Applications	Dimensions				Dental/	Cardio-	Typical	Tungsten-
			Description	Rey Applications	A	В	C D		Ortho	vascular*	Medical	Steel
622NB 2622NB			<ul> <li>Side cutter - pointed relived 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				
		Flush			9 mm	9.8 mm	6 mm	16 mm				
632NCF	191	Super Full Flush	<ul> <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 solico connector seals, miniature ruber 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.	0.354 in	0.354 in	0.236 in	0.590 in		$\checkmark$	$\checkmark$	
				miniature rubber seals or soft synthetic parts	9 mm	9 mm	6 mm	15 mm				
	107	Semi-Flush	<ul> <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			$\checkmark$	$\checkmark$
24/01/11					11 mm	11 mm	6 mm	19 mm				
7005	<ul> <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>		0.472 in	0.433 in	0.236 in	0.748 in						
792E		Super Full Flush	Full • This is the narrowest head shape h	MICTO Electronics	12 mm	11 mm	6 mm	19 mm				
04005			Side cutter - oval head     Robust and size for size offers the highest cutting capacity     This is the most widely used head shape	Micro electronics	0.472 in	0.433 in	0.236 in	0.748 in			(	
2422E	Some A	Flush			12 mm	11 mm	6 mm	19 mm				

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

CUTTEDC

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## **PLIERS**

Medal	0	Description	Кеу	Dimensions					
Model	Gui		Applications	A	В	C	E	G	DIMENSION DIAGRAM
5525	Wire	<ul> <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> </ul>	All Types of Insulation,	0.82 in	0.24 in	0.24 in	0.43 in	0.354 in	$ \begin{array}{c}     A \\     E \\     G \\     \hline     G \\     \hline     \hline     G \\     \hline     \hline     \hline     \hline     G \\     \hline      \hline     \hline     \hline     \hline     \hline      \hline     \hline     \hline     \hline      \hline      \hline       \hline      \hline     \hline       \hline      \hline            $
e.	Stripper	Onlimited surphing length flattics to side surphing The required diameter is set by means of screws Non-reflecting surface Screwdriver and key are included Robust, high-precision tools for use in electronics and aeronautical engineering	optical fibers.	21 mm	6 mm	6 mm	11 mm	9 mm	G = Length of cutting blade $G = Length of cutting blade$ $F = H$
2411PD		Needle nose pliers with very precise and rounded investore	For miniature and	1.32 in	0.43 in	0.24 in	0.039 in	0.047 in	A = Jaw length B = Head width
		Non-reflecting surface, ESD-safe	standard electronics.	33.5 mm	11 mm	6 mm	1 mm	1.2 mm	A C = head thickness E = Width of tips G = Total height of both tips
531E	Tapered       • Flat nose pliers with replaceable nylon jaws       • Non-reflecting surface, ESD-safe, high grade tool steel         • Nylon jaws prevent nicking and scratching	Forming and handling components while preventing scratching	0.91 in	0.43 in	0.24 in	0.2 in	0.12 in		
- The second sec		tool steel     Nylon jaws prevent nicking and scratching	and nicking for miniature and standard electronics.	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



## TWEEZERS

Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size	
CASADU	arcan.	Chroinkt/ Dound	<ul> <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	4.724 in	0.53 oz			SS w/ Teflon	N/A	
ZASARU		Straight/ Round		ribbons.	120 mm	16 g			Coated Tips	N/A	
5FSA,	SF-SA	Staight Pointed	Precision tweezers with extremely pointed tips for use in dissection procedures and working under a microscope	For use on soft	4.528 in	0.42 oz			Stainless Steel		
5MBS		otalgit i olitou	Relieved shape facilitates excellent access to the most confined spaces     Stainless steel, robust tips, non-rusting, non-reflecting surface	materials.	115 mm	12 g		V	Staniicss Steel		
15465		Narrow Oblique Head	Cutting tweezers with narrow oblique head     Hardened cutting edges for long service life	Designed for cutting fine soft wires up to dia. 0.25	4.528 in	0.74 oz		(	Carbon Steel	.216 narrowed	
13440			Suitable for cutting fine, soft wires and small components	mm/.010 in. and small components.	115 mm	21 g				to a pt	
29Y Series			Non-reflecting surface     Su     Te     Te	Suitable for stripping fine wires with PVC or Teflon <sup>®</sup> insulation.	4.724 in	0.78 oz		$\checkmark$	Stainless &		
					120 mm	22 g			Carbon		
		Ring-Shaped	<ul> <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		(	Stainlass Staal		
54040					120 mm	17 g	V		Stanness Steel		
754	100	<ul> <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,	4.724 in	0.53 oz		(	Stainloss	Very Fine		
			laboratory technology and microelectronics	120 mm	15 g		V	Stamicss	VeryThic		
5 <b>SA</b>	5-SA	Straight	<ul> <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	Very Fine	
JUA		Sudight			115 mm	12 g		V	Antiacid	Vory Thie	
258SA		Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling     Poliwerk here for the security to be a formation of the security o	Secure handling of components up to 480F	4.724 in	0.53 oz		(	Stainless Anti-	Fine Point		
				Judiyin	Relieved shape facilitates excellent access to the most confined spaces     Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant     For precision work e.g. under a microscope	and resistant to acid and molten solder - water resistant.	120 mm	15 g			acid w/ pointed synthetic tips

#### 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

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## **TWEEZERS**

Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size
24954		Straight	Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling     Non-reflecting surface     Suitable for delicate standard applications and precision work on small components or wires     Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant     w	Microelectronics, medicine and laboratory technology. Secure han-	5.118 in	0.71 oz			Anti-Magnetic	Plunt
2455A		Straight		to 480F and resistant to acid and molten solder - water resistant.	130 mm	20 g		V		blunt
M5S	M5-S	Straight	<ul> <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 labora- tory technology. For	3.150 in	0.21 oz			Stainless Steel	Verv Fine
				precision electronic application work under a microscope	80 mm	6 g		V		,
3CSA	2654 657	Straight	<ul> <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		V	· · · · · · · · · · · · · · · · · · ·	
1SA	1-55	Straight	<ul> <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		$\checkmark$	Stainless	Fine Point
					120 mm	14 g			Sieei	
0454	2854	Straight	<ul> <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		$\checkmark$	Stainless Steel	Flat Round
					120 mm	15 g				
3CSA	2056 (2)	Straight	Suitable for delicate standard applications and precision work on small     components or wires	General purpose use in microelectronics, medical and laboratories and delicate work.	4.331 in	0.39 oz			Stainless Steel	Fine Point
		Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resi	Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant		110 mm	11 g		V		
3SA	2086 62	Straight	Straight       • Suitable for delicate standard applications and precision work on small components or wires         • Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant	General purpose use in microelectronics.	4.724 in	0.49 oz			Stainless	Fine Point
UUM		ottaight		medical and laboratories	120 mm	14 g		V	Steel	
5SA	5-5A	Straight	<ul> <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	Fine Point
JJA		onaight			115 mm	12 g		V	Steel	

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	WEEZERS										
Model		Shape	Description	Key Applications	Length	Weight	Dental/ Ortho	Various Medical	Material	Head Size	
5404	81.84 600	Daut	Precision tweezers, lightly curved 15°, relieved. Very pointed tips, e.g. for installing small components	For applications in biology, medicine,	4.528 in	0.42 oz			Stainless	Fire Drive	
JAJA		Dem	Bent shape facilitates access to confined spaces     Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant	laboratory technology and microelectronics	115 mm	12 g			Steel	rine roint	
754	<b>B</b> 2	Bont	Precision tweezers, curved, relieved, with pointed tips. Excellent handling in confined spaces     Bent shape facilitates access to confined spaces     Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant	For applications in biology, medicine,	4.724 in	0.53 oz		(	Stainless	Fine Point	
134		Dem		laboratory technology and microelectronics	120 mm	15 g			Steel	The Folit	
AASA	A.N.	Straight	Suitable for delicate standard applications and precision work on small components or wiree	General purpose use in	4.921 in	0.56 oz			Stainless	Eino Point	
AASA		ottaight	Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant	medical and laboratories	125 mm	16 g			Steel	Therom	
OOSA	000	Otoriski	Straight       • Precision tweezers with pointed tips. Very robust. Suitable for standard applications, e.g. for assembly in electronics       • Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant	General purpose use in microelectronics, medical and laboratories Suitable for delicate	4.724 in	0.71 oz		(	Stainless		
		Straight		standard applications and precision work on small components or wires	120 mm	20 g			Steel	Fine Point	
	672 S	Otoriald	Model same as 00SA but with serrated finger grips and inside-serrated tips	General purpose use in microelectronics, medical and laboratories Suitable for delicate	4.724 in	0.71 oz		(	Stainless		
OODSA		Straight for secure handling standard applic for secure handling standard applic standard applic or wires	standard applications and precision work on small components or wires	120 mm	20 g			Steel	Fine Point		
154.014		Cutting	Cutting tweezers with narrow oblique head. For soft wires up to dia. 0.25 mm/.010 lnch. • Delivers high-precision cuts • Hardened cutting edges for long service life	Suitable for cutting fine, soft wires and small components	4.528 in	0.92 oz		(	Carbon	Norrow Obligue	
15AGW					115 mm	26 g		V	Steel	Narrow Oblique	
4454		Straight	Relieved shape facilitates excellent access to the most confined spaces	For precision application	4.331 in	0.45 oz			Stainless	Very Fine	
4ASA			Suaiyiit	<ul> <li>neneveu strape racinates excenient access to the most commed spaces</li> <li>Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant</li> </ul>	work under a microscope	110 mm	13 g			Steel	Very Fine

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