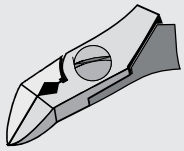
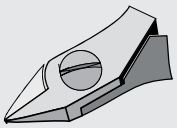
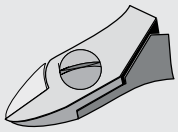
Tip cutter Angled wide head	Side cutter Tapered head	Side cutter Oval head
		
The angled head provides for precise cuts at different working angles.	The jaws of the cutter have straight edges and taper to a point. This head shape allows access to difficult to reach areas but reduces the cutting capacity in comparison to the same size oval head cutter.	This is the most widely used head shape, it is robust and size for size offers the highest cutting capacity.
622NA (P. 264)	612N, 622N, 632N (P. 263)	
2403E, 2404E (P. 48)	2477E (P. 268)	2412E, 2422E, 2432E (P. 267)
503E, 504E (P. 52)	577E, 595E (P. 272)	512E, 512N, 522N, 532N, 599E (P. 271)
	886E (P. 278)	812N, 822N, 896E (P. 277)

High cutting capacity
Cutting over the full length of the cutter

Erem offers carbide cutters (see P. 39) for cutting high-hardness wire (piano wire).

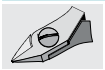
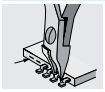
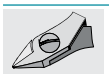
Wire quality

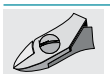
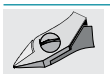
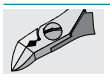
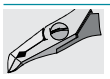
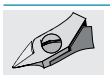
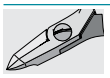
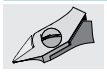
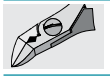
Piano wire, stainless spring steel wire, material 1.4310, tensile strength 2000–2400 MPa

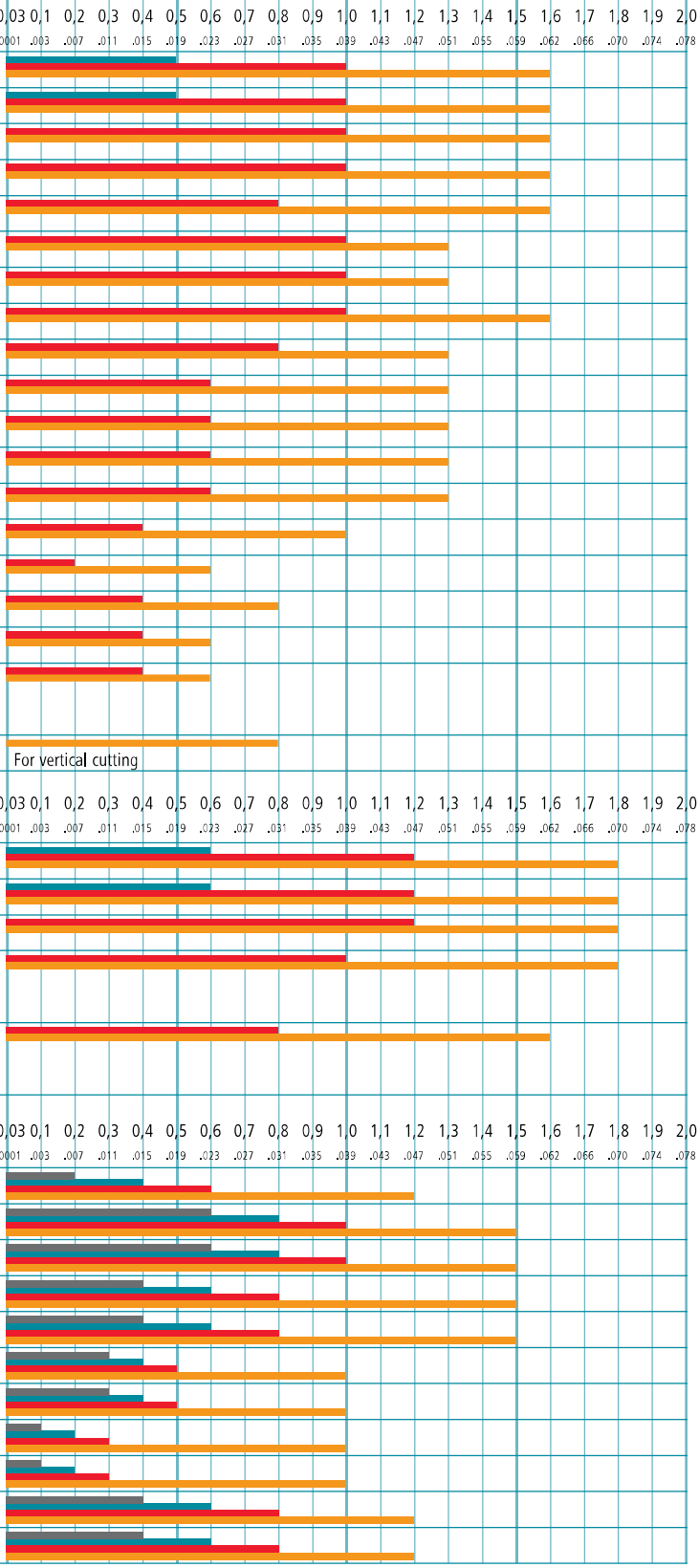
Hard wire, stainless steel wire, material 1.4301, tensile strength 1800 MPa

Medium-hard wire, stainless steel wire, material 1.4301, tensile strength 800 MPa

Soft wire, copper, aluminium, tensile strength 250 MPa

	Model	Cut		Cutting capability
				mm 0,03 0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 Inch .0001 .003 .007 .011 .015 .019 .023 .027 .031 .035 .039 .043 .047 .051 .055 .059 .062 .066 .070 .074 .078
	**612N**		Semi-flush	
	622N		Flush	
	632N		Super full flush	
	**622NA**		Flush	
	**622NB**		Flush	
	676E		Flush	
	776E		Super full flush	
	632NCF		Super full flush	**Only** for soft materials: silicone, rubber, etc.
	**670E**		Flush	
	670EP		Flush	For micro-package contacts
	670EPF		Flush	**Only** for micro pitches under 0.5 mm / .019 Inch
Series 2400 MagicSense				mm 0,03 0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 Inch .0001 .003 .007 .011 .015 .019 .023 .027 .031 .035 .039 .043 .047 .051 .055 .059 .062 .066 .070 .074 .078
	**2412E**		Semi-flush	
	2422E		Flush	
	2432E		Super full flush	
	**2477E**		Flush	
	**2403E** 30°		Flush	
	2404E 30°		Flush	
	**2482E** 45°		Flush	
	2475E 45°		Flush	
	**2470E**		Flush	

	Model		Cut	
Series 500 Medium				
	**512N**			Semi-flush
	512E			Semi-flush
	522N			Flush
	599E			Flush
	532N			Super full flush
	**595E**			Flush
	577E			Flush
	**503E**			Flush
	504AE			Flush
	**555E**	35°		Flush
	572E	40°		Flush
	582E	45°		Flush
	582EW			Flush
	593AE	30°		Flush
	575E	45°		Flush
	**592E**			Flush
	792E			Super full flush
	**570E**			Flush
	573E			Flush
Series 800 Maxi				
	**812N**			Semi-flush
	896E			Semi-flush
	822N			Flush
	**886E**			Flush
	**884E**			Flush
Tungsten-carbide cutters				
	**622TX**			Flush
	599T			Semi-flush
	599TF			Flush
	**595T**			Semi-flush
	595TF			Flush
	2476TX1			Flush
	576TX1			Flush
	**2476 TX**			Flush
	576TX			Flush
	**503ET**	30°		Semi-flush
	503ETF	30°		Semi-flush



Side cutters for use in medical device manufacturing

The 632NCF miniature side cutter is ideally suitable for soft material such as silicone tubes in medical device applications, precision connector seals or miniature rubber seals.

The miniature cutter is also the ideal tool for cutting soft synthetic parts, e.g. in the manufacture of hearing aids.

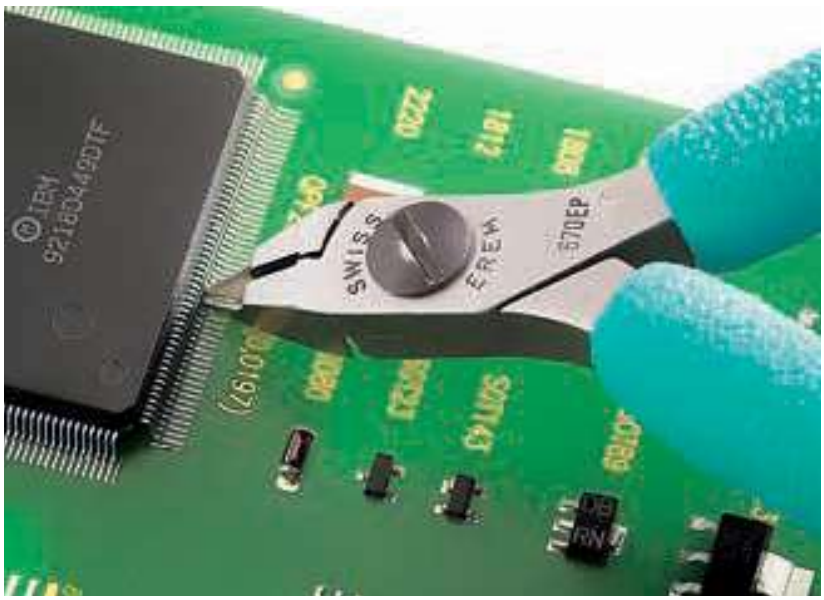
The cutting edges of the 632NCF side cutter are precision-ground to an extremely high level. This enables the cutter to deliver a razor-like full-flush cut.

Tip cutters to remove fine pitch SMD ICs

A simple method to remove SMD ICs is to cut each of the individual leads to remove the device and then reflow the joint with a soldering iron and remove the component lead from the board.

The solder left on the board can then be removed with a desoldering tool or desolder braid and a new component fitted.

The 670EP and 670EPF have fine pointed tapered and relieved heads that are able to fit between individual leads and cut them without causing damage to the printed circuit.



Tungsten-carbide cutter for the preparation of cardio-vascular stents

A stent is a vascular-wall prop. It is a lattice-shaped tube made of stainless steel or nickel-titanium. It serves to hold open constricted coronary blood vessels and improves the flow of blood through the vessels.

It is important in stent manufacture that the cut end of any wire in the lattice is as flat as possible, otherwise it will be necessary rework the stents.

These side cutters have fine polished carbide cutting blades to accurately cut the lattice and reduce the need for rework.

High precision side cutter for cutting stainless wires

The 599TFO has wear resistant tungsten carbide cutting edges and all round capability. It is able to cut Vectran™ braided wires, fibre optics, Kevlar® and small stainless steel braids and wires.

A further application lies in telecommunications, i.e. working on fibre-optic cables, Kevlar® silks and piano wires.

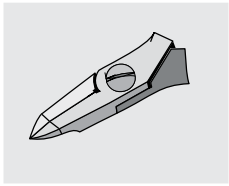
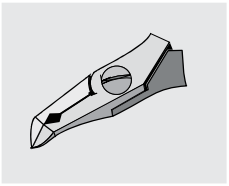
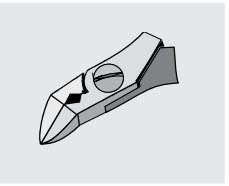
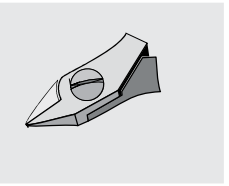
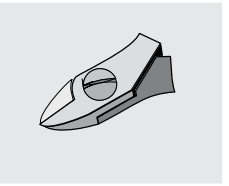
Vectran™ is a Trademark of Kurary Co., Ltd.
Kevlar® is a registered Trademark of E.I. Dupont de Nemours and Company

Series 2400 MagicSense

- Medium-size cutter
- Combines robustness, visibility and accessibility.
- Large variety of head shapes for precision working in hard-to-reach areas.
- The optimised ergonomic shape of the Series 2400 MagicSense prevents hand fatigue
- Improved induction-hardened cutting edges up to 64 – 65 HRc for an extremely long service life
- Cutting edges made from special tool steel
- Non-reflecting surface, ESD-safe nd resharpenable

Series 2400 MagicSense

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

Tip cutter Straight long relieved head	**Tip cutter** Angled narrow head	**Tip cutter** Angled wide head	**Side cutter** Tapered head	**Side cutter** Oval head
				

Visibility and accessibility — **Robustness, high cutting capacity**

Side cutter – oval head

130 mm/5.118 Inch
70 g/2.47 oz.

- This is the most widely used head shape.
- Fits for all cutting applications where easy access is given
- It is robust and size for size offers the highest cutting capacity.

Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter		
		A	B	C	D	Hard wire	Medium hardness	Copper wire
2412E	Semi-flush	12 .472	11 .433	6 .236	19 .748	0.5 .019	1.0 .039	1.6 .062
2422E	Flush	12 .472	11 .433	6 .236	19 .748	–	1.0 .039	1.6 .062
2432E	Super full flush.	12 472	11 .433	6 .236	19 .748	–	0.8 .039	1.6 .062

Wire quality, see P. 38
Optional: Safety device for wire scraps. Order suffix „W“, e.g. 2412W

Series 2400 MagicSense

Side cutter – tapered head

127 mm/5.999 Inch
70 g/2.47 oz.

- The jaws of the cutter have straight edges and taper to a point.
- This head shape allows access to difficult to reach areas but reduces the cutting capacity in comparison to the same size oval head cutter.

Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter	
		A	B	C	D	Medium hardness	Copper wire
2477E	Flush	12 .472	11 .472	6 .433	19 .236	1.0 .039	1.3 .051

Tip cutter – angled wide head

127 mm/5.118 Inch
70 g/2.47 oz.
30°

- The angled head provides for precise cuts at different working angles.

Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter	
		A	B	C	D	Medium hardness	Copper wire
2403E	Flush	9 .354	11 .433	6 .236	19 .748	1.0 .039 Wide, robust head, fine cut	1.6 .062
2404E	Flush	9 .354	11 .433	6 .236	20 .787	0.8 .031 Model same as 2403E, but with pointed rounded head	1.3 .051

Series 2400 MagicSense

Tip cutter – angled narrow head

135 mm/5.315 Inch
72 g/2.54 oz.
45°

- The angled head provides for precise cuts at different working angles.

Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter	
		A	B	C	D	Medium hardness	Copper wire
2482E	Flush	6 .236	11 .433	6 .236	26 1.024	0.6 .023	1.2 .047
	Suitable for working on printed-circuit boards, component connections, can be used in both 90° and 180° applications						
2475E	Flush	4 .157	11 .433	6 .236	22 .866	0.4 .015	0.6 .023
	Suitable for fine cutting work on hybrid circuits of miniature components						

Tip cutter – straight long relieved head

140 mm/5.512 Inch
72 g/2.54 oz.

- This head is suitable for horizontal and vertical cuts.
- The long tips facilitate cutting in hard-to-reach areas.

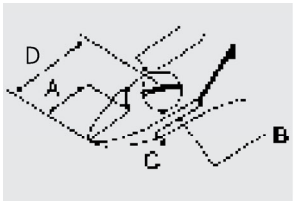
Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter	
		A	B	C	D	Medium hardness	Copper wire
2470E	Flush	4 .157	11 .433	6 .236	29 1.142	0.4 .015	0.6 .023

Safety device for wire scraps **only** possible on 2412EW, 2422EW, 2432EW, 2477EW, 2482EW models.

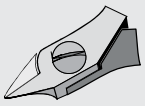
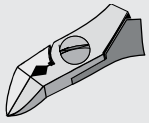
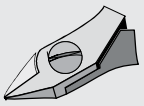
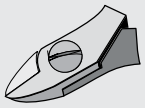
Tungsten-carbide cutters

- Medium sized precision cutters
- Wear resistant tungsten carbide edged cutting blades
- Manufactured from high grade tool steel
- Suitable for cutting hard and tough wires e.g. piano wire, nickel and diode leads
- Non reflecting surface, ESD safe and resharpenable

Tungsten-carbide cutters



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

Tip cutter Pointed relieved head	**Tip cutter** Angled wide head	**Side cutter** Tapered head	**Side cutter** Oval head
			

Visibility and accessibility — **Robustness, high cutting capacity**

Side cutter – oval head

115 mm/4.527 Inch
67 g/2.36 oz.

- This is the most widely used head shape.
- Fits for all cutting applications where easy access is given
- It is robust and size for size offers the highest cutting capacity.

Model	Cut	Dimensions in mm/Inch				Max. cutting capability in mm/Inch Diameter			
		A	B	C	D	Piano wire	Hard wire	Medium hardness	Copper wire
622TX	Flush	8 .315	9 .354	6 .236	15 .590	0.2 .007 Miniature cutter	0.4 .015	0.6 .023	1.2 .047
599T	Semi-flush	12 .472	11 .433	6.5 .256	19 .748	0.6 .023	0.8 .031	1.0 .039	1.5 .059
599TF	Flush	12 .472	11 .433	6.5 .256	19 .748	0.6 .023	0.8 .031	1.0 .039	1.5 .059

Wire quality, see P. 38