

SPECIAL-TWEEZERS FOR SMD-TECHNIQUE

high precision tweezers from special steel stainless – matt finish – anti-magnetic – acid –resisting - alternative with ESD coating (-13) -

No.	Length		Finish / Model	Weight g
	mm	Inch		
5-048	110	4 3/8"	straight, very sharply pointed, 5 SA	12 g
5-048-13	110	4 3/8"	as above, with ESD coating	12 g
5-049	110	4 3/8"	straight, very sharply pointed, 4 SA	12 g
5-049-13	110	4 3/8"	as above, with ESD coating	12 g
5-051	115	4 1/2"	straight pointed, 2 SA	15 g
5-051-13	115	4 1/2"	as above, with ESD coating	15 g
5-052	110	4 3/8"	bent, very sharply pointed, 5b SA	13 g
5-052-13	110	4 3/8"	as above, with ESD coating	13 g
5-059	120	4 3/4"	flat, rounded tips, 2.0 mm width, 2a SA	15 g
5-059-13	120	4 3/4"	as above, with ESD coating	15 g
5-078	130	5 1/8"	tapering, chisel, 1.0 mm width, PSF SA	16 g
5-078-13	130	5 1/8"	as above, with ESD coating	16 g
5-053	110	4 3/8"	obliquely angled, very sharply pointed, 51 SA	13 g
5-053-13	110	4 3/8"	as above, with ESD coating	13 g
5-054	120	4 3/4"	sickle-shape-curved, very sharply pointed, 7abb SA	16 g
5-054-13	120	4 3/4"	as above, with ESD coating	16 g
5-055	120	4 3/4"	sickle-shaped, very sharply pointed, 7a SA	15 g
5-055-13	120	4 3/4"	as above, with ESD coating	15 g
5-056	120	4 3/4"	slightly bent, very sharply pointed, 7 SA	15 g
5-056-13	120	4 3/4"	as above, with ESD coating	15 g
5-057	120	4 3/4"	self-locking, straight-pointed, 31 SA	13 g
5-057-13	120	4 3/4"	as above, with ESD coating	13 g
5-058	120	4 3/4"	self-locking, bent, pointed, 31b SA	13 g
5-058-13	120	4 3/4"	as above, with ESD coating	13 g
5-061	115	4 1/2"	bent, flat rounded tips, 2ab SA	16 g
5-061-13	115	4 1/2"	as above, with ESD coating	16 g
5-062	115	4 1/2"	35° angled, 2.0 mm width, with gripping cavity Ø 0.8 mm, 59 SA	16 g
5-062-13	115	4 1/2"	as above, with ESD coating	16 g
5-063	115	4 1/2"	35° angled, 3.5 mm width, with gripping cavity Ø 0.8 mm, 58 SA	16 g
5-063-13	115	4 1/2"	as above, with ESD coating	16 g



No.	Length		Finish / Model	Weight g
	mm	Inch		
5-065	120	4 3/4"	straight, 3.0 mm width, with gripping cavity Ø 0.8 mm, 50 SA	16 g
5-065-13	120	4 3/4"	as above, with ESD coating	16 g
5-066	120	4 3/4"	30° angled, 2.5 mm width, 8b SA	15 g
5-066-13	120	4 3/4"	as above, with ESD coating	15 g
5-067	120	4 3/4"	tip 45° angled, 2.0 mm width, 12 SA	15 g
5-067-13	120	4 3/4"	as above, with ESD coating	15 g
5-068	120	4 3/4"	tip angled, 1.6 mm width, 13 SA	13 g
5-068-13	120	4 3/4"	as above, with ESD coating	13 g
5-071	85	3 3/8"	thin, straight-pointed, OC SA	8 g
5-071-13	85	3 3/8"	as above, with ESD coating	8 g
5-072	110	4 3/8"	thin, straight-pointed, 3c SA	11 g
5-072-13	110	4 3/8"	as above, with ESD coating	11 g
5-073	140	5 1/2"	long-thin, straight, very sharply pointed, SS SA	13 g
5-073-13	140	5 1/2"	as above, with ESD coating	13 g
5-074	120	4 3/4"	straight, pointed, 1 SA	14 g
5-074-13	120	4 3/4"	as above, with ESD coating	14 g
5-075	140	5 3/4"	straight, very sharply pointed, grip surface offset, 60 SA	13 g
5-075-13	140	5 3/4"	as above, with ESD coating	13 g
5-076	120	4 3/4"	rigid, straight, pointed, 00 SA	19 g
5-076-13	120	4 3/4"	as above, with ESD coating	19 g
5-077	130	5 1/8"	wide, tapering, pointed, AA SA	16 g
5-077-13	130	5 1/8"	as above, with ESD coating	16 g



CUTTING TWEEZERS

made from Carbon Steel, extremely hard, excellent sharpness at the cutting edges. For cutting of soft copper, gold and silver wires up to 0.25 mm Ø.

5-079	115	4 1/2"	Carbon Steel, matt finish 15 AGW	25 g
5-079-13	115	4 1/2"	as above, with ESD coating	25 g

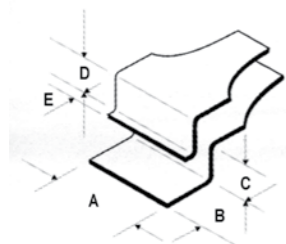


WAFER-TWEEZERS

for positioning of flat and fine components, e.g. extremely sensitive and breakable wafer (glass-wafer etc.) fine PCB's and LCD's very smooth and non-reflective surface
high grade steel SA, anti-magnetic

No.	Length		Finish / Model	Weight g
	mm	inch		
5-411	130	5 1/8"	with graduated lower paddle and 3 teeth 3 DWF small	14
5-411-13			as above, with ESD coating	
5-412	130	5 1/8"	with graduated lower paddle and 3 teeth 3 DWF	14
5-412-13			as above, with ESD coating	
5-413	130	5 1/8"	with graduated lower paddle and 4 teeth 4 DWF	17
5-413-13			as above, with ESD coating	
5-414	130	5 1/8"	with graduated lower paddle and 5 teeth 5 DWF	20
5-414-13			as above, with ESD coating	
5-415	130	5 1/8"	with graduated lower paddle and 6 teeth 6 DWF	20
5-415-13			as above, with ESD coating	
5-421	130	5 1/8"	with graduated lower paddle, no teeth 3 DW small	14
5-421-13			as above, with ESD coating	
5-422	130	5 1/8"	with graduated lower paddle, no teeth 4 DW	17
5-422-13			as above, with ESD coating	
5-423	130	5 1/8"	with graduated lower paddle, no teeth 5 DW	20
5-423-13			as above, with ESD coating	
5-424	130	5 1/8"	with graduated lower paddle, no teeth 6 DW	20
5-424-13	130	5 1/8"	as above, with ESD coating	

	Dimension					for Wafer size
	A	B	C	D	E	
	mm	mm	mm	mm	mm	
5-411	6	6	4	4	3,2	2"
5-412	9	6	2,5	3	3,2	2"
5-413	12	8	4	5	3,2	3"
5-414	16	6	4	5	3,2	4" - 5"
5-415	20	8	4	5	3,2	6"
5-421	6	6	4	5	3	2"
5-422	12	8	4	5	3	3"
5-423	16	8	4	4	3	4" - 5"
5-424	20	8	4	5	3,5	6"



TWEEZERS WITH INTERCHANGEABLE PLASTIC TIPS

Special tweezers with soft and ESD safe tips

Tweezers: anti-magnetic, acidfree, ESD safe

Tips: soft, conductive plastic tips for very sensitive assemblies

No.	Length		Finish / Modell	Weight g
	mm	inch		
5-431	125	5"	rounded tips 1.5 mm wide, 70 CV	17
5-431-0			replacement tips for 5-431	
5-432	125	5"	flat tips 2 mm wide, 72 CV	17
5-432-0			replacement tips for 5-432	
5-433	125	5"	fine flat tips 1 mm wide, 74 CV	17
5-433-0			replacement tips for 5-433	
5-434	125	5"	very fine rounded tips, 76 CV	17
5-434-0			replacement tips for 5-434	
5-435	125	5"	fine rounded tips, 80 CV	17
5-435-0			replacement tips for 5-435	



SPECIAL TWEEZERS WITH „DELRIN“ TIPS

Tweezers: anti-magnetic, acidfree

Tips from Delrin: highest consistency, stiffness and hardness, ductile, fatigue-steady

No.	Length		Finish / Modell	Weight g
	mm	Inch		
5-441	125	5"	rounded tips 1.5 mm wide, 70 DV	17
5-441-0			replacement tips for 5-441	
5-443	125	5"	fine flat tips 1 mm wide, 74 DV	17
5-443-0			replacement tips for 5-443	



SPECIAL TWEEZERS WITH INTERCHANGEABLE ESD CERAMIC TIPS

Tweezers: anti-magnetic, acidfree

Tips: ESD Ceramic

No.	Length mm	Finish / Modell	Weight g
5-452-0		replacement tips for 5-452	
5-454	125	fine rounded tips, 0,7 mm wide	17
5-454-0		replacement tips for 5-454	



SPECIAL TWEEZERS FOR SMD TECHNOLOGY

quality precision tweezers from special steel stainless - matt polished - antimagnetic - acid resistant

5-050 6-piece set of special tweezers for the SMD-technique, matt finish, stainless, anti-magnetic in a wallet

No.	Description of individual tools	Weight: 135 g
5-051	SMD-tweezers, straight pointed, 115 mm	
5-052	SMD-tweezers, bent, very sharply pointed, 110 mm	
5-054	SMD-tweezers, sickle-shaped curved, very sharply pointed, 120 mm	
5-058	SMD-tweezers, crossed, bent, pointed, 120 mm	
5-061	SMD-tweezers, bent, flat tips 2 mm wide, 115 mm	
5-062	SMD-tweezers, bent, flat tips, with gripping cavity, 115 mm	



5-050

5-060 6-piece set ESD-Tweezers for the SMD-Technique in a wallet made from dissipative material

No.	Description of individual tools	Weight: 155 g
5-049-13	SMD-tweezers, straight, very sharply pointed, 110 mm	
5-055-13	SMD-tweezers, sickle-shaped, very sharply pointed, 120 mm	
5-059-13	SMD-tweezers, flat, rounded tips, 2 mm width, 120 mm	
5-067-13	SMD-tweezers, tip 45° angled, 2.0 mm width, 120 mm	
5-068-13	SMD-tweezers, tip angled, 1.6 mm, 120 mm	
5-078-13	SMD-tweezers, tapering, chisel, 1.0 mm width, 130 mm	



5-060

ESD-TWEEZERS

made from conductive, black plastic material, reinforced with glass fibre, conductive and acid-resistant, melting point 175° C

No.	Length		Finish	Weight
	mm	Inch		
5-191	120	4 3/4"	straight, rounded tips, 2 mm wide	5 g
5-192	120	4 3/4"	straight, 3 mm flat-hand tips, grip surface offset	4 g
5-193	120	4 3/4"	straight, flat, 6 mm wide tips	5 g
5-194	120	4 3/4"	bent, pointed tips	5 g
5-195	120	4 3/4"	straight, pointed tips, grip surface offset	4 g

5-190 V 6-piece set of ESD tweezers

strung on the ESD tool holder "VARIO"

Contents: 5 tweezers made from conductive black plastic material, No. 5-191, 5-192, 5-193, 5-194, 5-195, 1 tweezers with ceramic tips No. 5-454

Weight: 125 g



5-190 V

5-090 V 5-piece set of ESD tweezers

strung on the ESD tool holder "VARIO"

Contents: 5 tweezers made from conductive black plastic material, No. 5-191, 5-192, 5-193, 5-194, 5-195

Weight: 94 g



5-090 V

TITAN TWEEZERS

tweezers made from Titan are for highest demands, have a light weight, immunity to corrosion, even to aggressive acids, they are antimagnetic, antibacterial, solder-repellent, and non-reflective. The melting point is 1677°C.

5-031	110	4 3/8"	matt-stainless, sharply pointed	9 g
5-035	120	4 3/4"	matt-stainless, sharply pointed	9 g
5-036	145	5 3/4"	matt-stainless, straight - round - wide tips with fine serration	15 g
5-037	150	6"	matt-stainless, fine bent tips tips with fine serration	12 g



IC-TWEEZERS

for gripping, inserting and removing of IC's

2-601-13	125	5"	with ESD-coating	22 g
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