ENGINEERED FOR PRECISION

rubis®
SWITZERLAND

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rubis®
SWITZERLAND

More than sixty years ago, the first precision tweezers were developed to place ruby stones into watch movements - which is where the name Rubis came from. Since then, the brand Rubis stands for tweezers made to genuine Swiss quality standards.

Vor über 60 Jahren haben wir die ersten Präzisionspinzetten entwickelt, um kleinste Rubine in Schweizer Uhrwerke zu setzen - daher unser Name Rubis. Seitdem steht die Marke Rubis für Pinzetten, die auch höchsten Anforderungen genügen.

ISO 9001 CERTIFIED ORGANIZATION
URS
UKAS QUALITY MANAGEMENT
043-A
United Registrar of Systems Cert No. 97640

Socially Responsible Management
URS guideline and SRM 8000 Standard
Certified Organization
URS
CERTIFICATE NO. 97640

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INTRODUCTION
EINFÜHRUNG

Tweezers are a simple tool - yet demanding in their specifications. They require continuous engineering and development to keep pace with the applications for the newest and ever changing technology.

Our first concern is with users of the Rubis tweezers – who often spend long hours with these tools – they soon become an important part of their work day.

That's why the Bauhaus philosophy of industrial design is so important to us. It incorporates the technical, functional and practical, as well as the aesthetics – uniting all these qualities into one harmonious whole – transmitting a unique spirit to the Rubis tweezers:

It is time to focus on the essential.

Fides P. Baldesberger

Pinzetten sind einfache Werkzeuge, an die jedoch hohe Anforderungen gestellt werden. Um diesen Ansprüchen in einer sich schnell verändernden Arbeitswelt gerecht zu werden, arbeiten wir kontinuierlich daran, die Pinzette als Arbeitsmittel weiterzuentwickeln.

In all unserem Tun stehen die Menschen im Mittelpunkt, die unsere Pinzetten benutzen. Für sie ist die Pinzette oft ein wesentlicher Bestandteil ihrer täglichen Arbeit. Vor allem ihnen muss das Werkzeug gerecht werden.

Deswegen ist uns Gestaltung so wichtig. In der Form versuchen wir die technischen, funktionalen und praktischen Aspekte in eine harmonische Einheit zu überführen. Eine Einheit, die dann gelingt, wenn sie auch hohen ästhetischen Anforderungen genügt. In diesem Sinne sehen wir uns ganz in der Tradition des Bauhaus:

Es ist Zeit, sich auf das Wesentliche zu konzentrieren.

Fides P. Baldesberger

HISTORY
GESCHICHTE

For over 60 years Rubis has been producing precision tweezers. At the beginning, tweezers were manufactured exclusively for the Swiss watch industry. For assembling the delicate mechanical clockworks of famous watches like Patek Philippe, Cartier, Rolex and others only the most precise tweezers of highest quality could be used. Hence, a tradition of craftsmanship with a keen awareness of functional precision, engineered details and aesthetic form was developing that all along has also been a virtue of Swiss watch producers.

A dynamic development made Outils Rubis a market leader, not only as supplier of tweezers to the watch industry, but to rapidly growing industries with demanding applications such as electronics, microelectronics, robotics, telecommunications, space technology, R&D, biogenetics, laboratories, surgery, microscopy, biology, microbiology, chemistry and medicine. Companies of worldwide reputation such as Motorola, Nokia, General Electric, Siemens, Toshiba, Hewlett Packard, just to name a few, as well as the renowned centres of scientific research like the University of Zürich and the Fraunhofer Institutes are longstanding users of tweezers made by Rubis.

As a Company we can look back to years of experience as basis of irreproachable product quality, and have attached utmost importance to research and development of new materials, progressive technology, solutions and functional design. Particularly important: As we take care ourselves of the complete engineering, we are in a position to offer our customers significant advantages: Our own tooling is part of our R&D and allows us to quickly and dependably realise any requests for custom-made products.

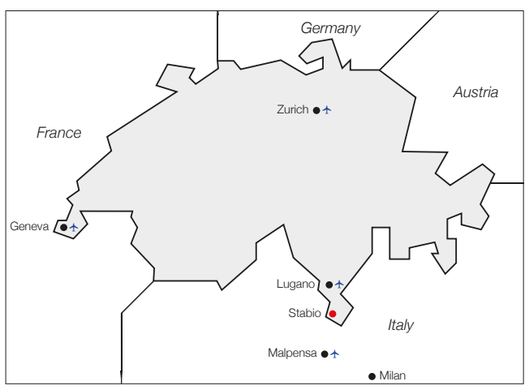
We consider personal contact with our customers and suppliers to be of decisive importance. Teamwork is a central pillar of our corporate philosophy.

Seit über 60 Jahren stellt Rubis Präzisionspinzetten her. Am Anfang wurden die Pinzetten ausschliesslich in der Schweizer Uhrenindustrie verwendet. Für die Montage der empfindlichen mechanischen Uhrwerke bekannter Hersteller wie Patek Philippe, Cartier oder Rolex kamen nur äusserst präzise und hochwertige Pinzetten in Frage. Hieraus entstand bei Rubis eine eigenständige handwerkliche Tradition, die sich durch einen ausgeprägten Sinn für Präzision und für die Schönheit der Form auszeichnete wie sie die Schweizer Uhrenmanufakturen seit jeher vorlebten.

Schon bald wurde Rubis zum Marktführer. Pinzetten wurden nicht länger nur für die Uhrenindustrie hergestellt, sondern auch für andere anspruchsvolle Anwendungen in Elektronik und Mikroelektronik, Robotik, Telekommunikation, Raumfahrt, Forschung, Biogenetik, Pharmazeutik, Labor, Chirurgie, Mikroskopie, Chemie, Medizin, Biologie und Mikrobiologie. Weltfirmen wie Motorola, Nokia, General Electric, Siemens, Toshiba, Hewlett Packard, um nur einige zu nennen, und renommierte Forschungsinstitutionen wie die Fraunhofer Institute und die Universität Zürich arbeiten seit Jahren mit Rubis Pinzetten.

Erfahrung und die sprichwörtliche Schweizer Präzision bilden die Grundlagen für die einzigartige Qualität unserer Produkte. Intensiv betreiben wir Forschung und Entwicklung: Neue Materialien, der Einsatz innovativer Technologien und funktionales Design stehen dabei im Vordergrund. Wir haben das komplette Engineering im Hause, um kunden- und marktnah fertigen zu können. Unserer eigener Formenbau - Teil unserer F&E - erlaubt uns, Wünsche nach Spezialanfertigungen schnell und zuverlässig umzusetzen.

Der persönliche Kontakt mit unseren Kunden und Zulieferern hat deswegen für uns entscheidende Bedeutung. Teamwork ist und bleibt ein wichtiger Pfeiler unserer Unternehmensphilosophie.



INDEX
INHALT

TECHNICAL INFORMATION
TECHNISCHE INFORMATION

MATERIALS

STEEL AND VARIOUS ALLOYS

AL Aluminum alloy Al Mg Si.

AXAL™ High yield strength alloy. 100% antimagnetic, highly resistance to corrosion, stress corrosion cracking and hydrogen embattlement, temperature resistance of 500°C. Good fatigue strength.

DURAX™ Martensitic steel, hardened up to 616 Vickers becomes 6 times harder than standard steel.

NI Nickel, nonferrous alloy.

SA Austenitic, acid proof, stainless steel, antimagnetic. Resistant against hydrogen fluoride and nitric acid.

TNF Titan IMI 125. High temperature stability up to 885°C. Without capillarity at soldering. 100% antimagnetic. Stainless 100% acid proof.

HIGH TECH PLASTICS

D Delrin. Soft material, medical use, non scratching, acid resistant. Temperature resistant up to 115°C.

E Epoxy resin, resistant up to 155°C. 10^{12} Ω x cm, good electrical insulation.

PBT Polybutylen-terephthalat, enforced by 20% fiberglass, resistance to chemicals, highly isolating and resistant up to 210°C short exposure, non burning.

Peek With 30% fiberglass. Antistatic, ESD safe. 10^{5} Ω x cm. Temperature resistant up to 250°C.

PPS Xtel with 30% fiberglass. Antistatic 10^{9} Ω x cm ESD safe. Temperature resistance up to 300°C.

Vestamid Vestamid with 25% fiberglass. ESD safe, DIN 53482 10^{3} Ω x cm, conductive. Temperature resistant up to 175°C.

CERAMIC

C Zirconia oxyde ceramic, stabilized with Yttrium ZrO2Y203. Porosity 0%, gas tight. Ra, N4 micron. Max. temp. 1200°C. No surface resistivity. Hardness acc.

COATING

GRIP Epoxy coating with good electrical and heat insulation effect. Heat resistance up to 140°C. Non slip grip.

PM Polymer. Good electrical and heat insulation.

TF Teflon coating anti scratch, non sticking.

ION Anti-microbial coating with B-Soft polyurethane resins releases silver ions neutralizing bacteria and germs.

NANO Lotus effect. Nanometric coating composed of polysilicates and ceramic oxides closes even the tiniest of pores on the surface of the tweezers.

MATERIALIEN

STAHL UND ANDERE LEGIERUNGEN

AL Aluminium-Legierung Al Mg Si.

AXAL™ Hohe Elastizitätsgrenze, 100% antimagnetisch, hoch beständig gegen Korrosion, Spannungskorrosion und Versprödung durch H_2O, temperaturbeständig bis 500°C. Ausgezeichnete Ermüdungsfestigkeit.

DURAX™ Bis auf 616 Vickers gehärtet, ist dieser martensitische Stahl 6 Mal härter als gängiger Stahl.

NI Nickel, eine Nichteisen-Legierung.

SA Austenitischer Chirurgenstahl, säurebeständig, rostfrei, antimagnetisch. Beständig gegen Salpeter- und Flusssäure.

TNF Titan IMI 125. 100% antimagnetisch, rostfrei, 100% säurebeständig, temperaturbeständig bis 885°C, ohne Kapillarwirkung beim Löten.

HIGH TECH KUNSTSTOFFE

D Delrin, weiches, sehr schonendes, nicht kratzendes Material, für medizinische Anwendungen, säurebeständig, temperaturbeständig bis 115°C.

E Epoxidharz, hitzebeständig bis zu 155°C, gute elektrische Isolationseigenschaften.

PBT Mit 20% Fiberglas verstärktes Polybutylenterephthalat, gute chemische Beständigkeit, hohe Isolationswerte, temperaturbeständig bis 200°C, selbstlöschend.

Peek Mit 30% Fiberglas, antistatisch, ESD sicher. 10^{5} Ω x cm, temperaturbeständig bis 250°C.

PPS Mit 30% Fiberglas verstärktes Xtel, antistatisch 10^{9} Ω x cm , ESD sicher, temperaturbeständig bis 300°C.

Vestamid Mit 25% Fiberglas verstärktes Vestamid, ESD sicher, DIN 53482 10^{3} Ω x cm, leitend, temperaturbeständig bis 175°C.

KERAMIK

C Zirkonoxidkeramik stabilisiert mit Yttrium ZrO2Y203. Porosität 0% , gasdicht, Ra, N4 micron, temperaturbeständig bis 1200°C, kein Oberflächenwiderstand.

BESCHICHTUNGEN

GRIP Epoxidbeschichtung für gute elektrische Isolation und Wärmeisolation, temperaturbeständig bis 140°C, rutschfester Griff.

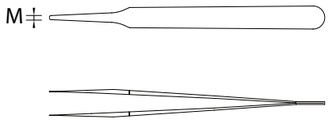
PM Polymere, gute elektrische Isolation und Wärmeisolation.

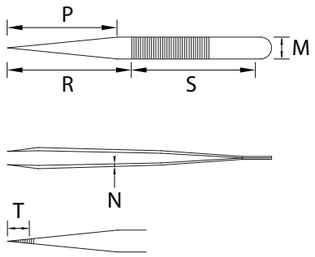
TF Schonende, antihaftende Teflonbeschichtung.

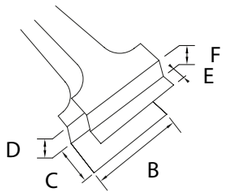
ION Silber-Ionen freisetzende antibakterielle Spezialbeschichtung aus B-Soft Polyurethanharzen neutralisiert Bakterien und Keime.

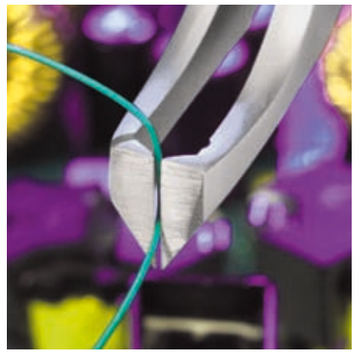
NANO Lotus-Effekt. Nanometrische Beschichtung aus Polysilicaten und Keramikoxiden schliesst die feinsten Poren auf der Stahloberfläche und lässt Flüssigkeit und Schmutz abperlen.

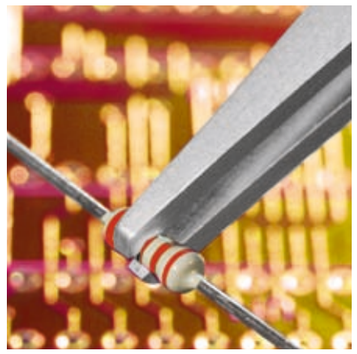
DIMENSIONS AND APPLICATIONS
MASSE UND ANWENDUNGEN

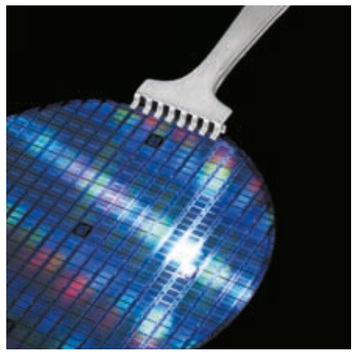












EVOLUTION
EVOLUTION

Evolution is what our development engineers call it when they harmonise ultra-modern technology and traditional Swiss precision engineering in their ground-breaking precision instruments. Continuous innovation has enabled the premium label to ready its classic tweezers to meet new and exacting demands.

Substantial added value, clear customer benefits and a reliably uncompromised level of product quality for each single pair of tweezers are the targets of our R&D.

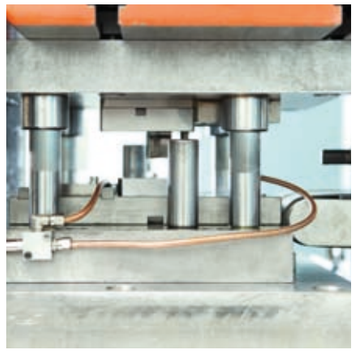
Evolution nennen es unsere Entwicklungsingenieure, wenn sie modernste Technologie und traditionelle Schweizer Feinmechanik in zukunftsweisenden Präzisionsinstrumenten in Einklang bringen. Durch kontinuierliche Innovation gelang es uns, den Klassiker Pinzette für neue, anspruchsvolle Anforderungen fit zu machen.

Hoher Zusatznutzen, klare Kundenvorteile und eine zuverlässig hohe Verarbeitungsqualität für jede einzelne Pinzette stehen mit Mittelpunkt unserer Entwicklungsarbeit.

MANUFACTURING
MANUFAKTUR

Never has the manufacturing process been so complex and crucial – and at the same time fascinating as it is today. The quality of our products is the result of applying a combination of state of the art technology, an eye on economy and superior traditional workmanship. Modern know-how, flexibility, years of experience, prime quality raw materials, excellent engineering, design and exclusive styling contribute to Rubis tweezers being in a class by itself.

Zu keiner Zeit war der Herstellungsprozess so komplex und so entscheidend und gleichzeitig so faszinierend wie heute. Die Qualität unserer Produkte ist das Ergebnis einer Kombination aus modernster Technologie, Wirtschaftlichkeit und traditioneller Handwerkskunst. Modernes Know-how, Jahrzehnte der Erfahrung, beste Rohmaterialien, Ingenieurskunst und exklusive Gestaltung tragend dazu bei, dass Rubis Pinzetten heute eine Klasse für sich sind.



Each product is individually finished and controlled under magnification. All parts are machine grinded and polished. None is chrome or nickel plated.

Jedes unserer Produkte wird individuell von Hand gefertigt und einzeln unter dem Vergrösserungsglas kontrolliert. Alle Teile werden maschinell geschliffen und poliert, nichts wird vernickelt oder verchromt.

NOVELTIES
NEUHEITEN

AXAL™

Cobalt-Chromium-Molybdenum alloy. The combination of various extraordinary characteristics make the Rubis Axal™ tweezers a valuable and special tool: Very high Vickers hardness, 100% antimagnetic, 100% rust proof and 100% acid resistant. Good fatigue and tensile strength guarantee durability and make them practically wear proof providing a considerably longer service life. Axal™ tweezers offer a range of physical, chemical and technological properties that make them appropriate for a wide variety of applications. Exceptional good tolerance on human tissues. Perfect tweezers for surgical appliances and laboratories.

Hohe Vickershärte, 100% antimagnetisch, 100% rostfrei und 100% säurebeständig: Es ist diese Kombination hervorragender Eigenschaften, die diese Pinzette aus einer Kobalt-Chrom-Molybdän-Legierung einzigartig macht. Enorme Härte sowie die grosse Zug- und Ermüdungsfestigkeit bewirken, dass die Pinzette keine Abnutzungserscheinungen zeigt und eine deutlich längere Lebensdauer hat. Die speziellen physikalischen, chemischen und technologischen Eigenschaften der Axal™ Pinzette erlauben den Einsatz in anspruchsvollen Anwendungen. Wegen der guten Verträglichkeit mit menschlichem Gewebe eignen sich die Axal™ Pinzetten hervorragend als chirurgische Instrumente. Sie sind ideal für sensible Laborbereiche.

GRIP

Their special soft coating provides a non-slip grip and improves the handling of the tweezer. The soft coating prevents hand fatigue, and protects the hand from heat and cold. Helping people work better, more comfortably and more safely.

Ihr weicher Spezialbelag schafft einen rutschfesten Griff und erlaubt ein spürbar angenehmeres Handling. Die Soft-Touch-Beschichtung beugt der Ermüdung der Hand vor, sie isoliert und schützt vor Wärmeeinflüssen. Damit Menschen sicherer, besser und angenehmer arbeiten können.

DURAX™

With a 616HV Vickers-hardness, the Rubis Durax ™ tweezers are six times harder than standard steel tweezers. Even with intensive use, Rubis Durax ™ tweezers retain their original precision. The advanced material properties guarantee higher resistance against normal wear and tear, providing a considerably longer service life. Durax™ is not 100% antimagnetic nor 100% rustproof.

Mit 616 HV Vickershärte ist die Rubis Durax™ sechs Mal härter als eine herkömmliche Stahlpinzette. Auch bei intensiver Nutzung bewahrt die Rubis Durax™ ihre ursprüngliche Präzision. Die anspruchsvollen Materialeigenschaften garantieren hohe Resistenz gegen Abnutzungserscheinungen. Durax™ ist nicht 100% antimagnetisch und nicht 100% rostfrei.

NANO

Ultra-modern nanotechnology closes even the tiniest of pores on the surface of the tweezers, which is made from extremely high grade surgical stainless steel. Dirt, oil, water and other liquids simply pearl off. Through the Lotus effect, the tweezers are easy to keep perfectly clean - particularly important in sensitive laboratory and production settings.

Modernste Nanotechnologie schliesst auch noch die allerfeinsten Poren der Pinzettenoberfläche aus rostfreiem Chirurgenstahl. Schmutz, Öl, Wasser und andere Flüssigkeiten perlen einfach ab. Durch den Lotus-Effekt lässt sich die Pinzette immer perfekt sauber halten, was besonders in sensiblen Labor- und Fertigungsprozessen von Bedeutung ist.

ION

This innovation has resulted in a special coating surface on the tweezers which releases silver ions. These ions act as an antibacterial agent which helps the user from contamination of any pathogens. Unlike other methods, the use of ion technology does not give rise to any resistance. Consequently, it represents a risk-free method of guaranteeing hygiene at workstations where instruments are used by several different people.

Ihre neuartige Spezialbeschichtung setzt antimikrobiell wirksame Silber-Ionen frei. Sie neutralisieren zuverlässig und effektiv Bakterien, Keime und andere Krankheitserreger. Anders als bei anderen Methoden werden dabei keine Resistenzen erzeugt. Das Ergebnis? Ein gutes Stück mehr Hygiene an Arbeitsplätzen, wo Instrumente von verschiedenen Menschen benutzt werden.

SS see page 33 / siehe Seite 33

AXAL™ - THE SUPERIOR TWEEZERS

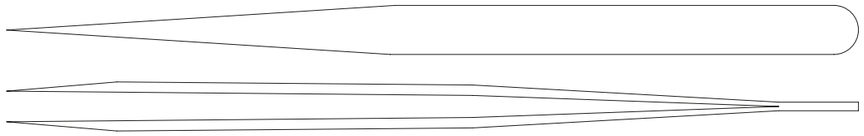
FÜR ANSPRUCHSVOLLE ANWENDUNGEN

The Cobalt-Chromium-Molybdenum alloy provides not only very high Vickers hardness it is also 100% antimagnetic and 100% rustproof. An indispensable tool for a wide range of applications.

Die Kobalt–Chrom–Molybdän-Legierung sorgt für enorme Härte, ist aber zugleich 100% antimagnetisch und 100% rostfrei. Einsatz in einem breiten Spektrum anspruchsvoller Anwendungen.

SS AXAL™ 135 mm 5 1/3”

	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4

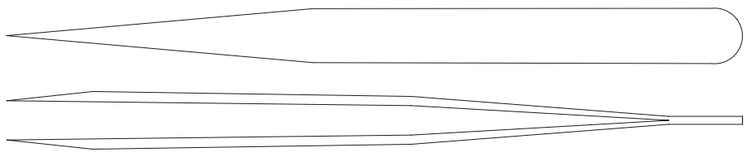


Extra long, slim, ultra fine.

Extra lang, schlank und ultra fein.

1 AXAL™ 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

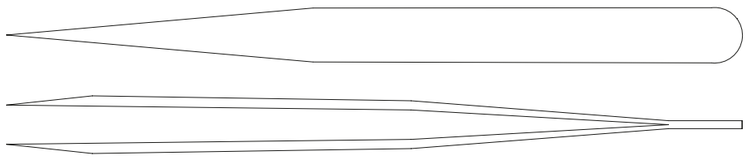


Edges on the outside rounded off.

Aussenkanten gerundet.

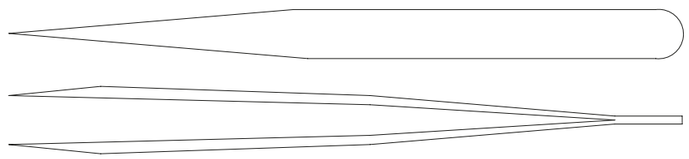
3 AXAL™ 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



3C AXAL™ 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3

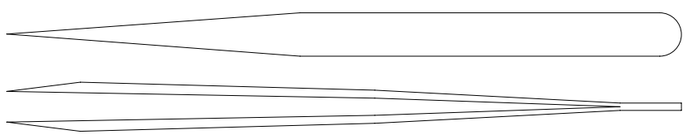


0 AXAL™ 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2

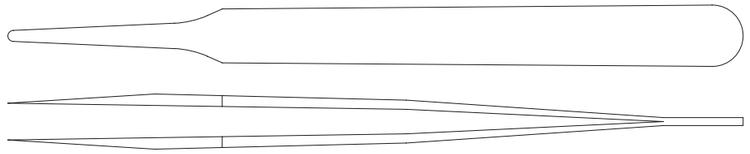
0C 11 AXAL™ 110 mm 4 1/3”

	M	N	P
mm	9	1.5	47
inch	1/3	1/16	1 3/4



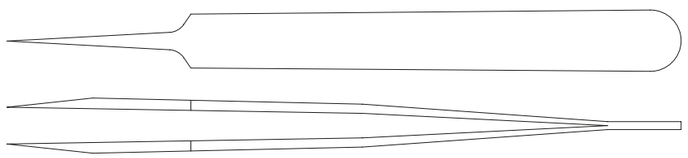
2A AXAL™ 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



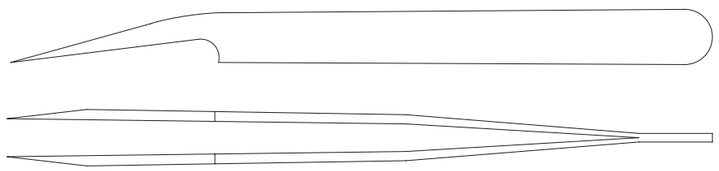
5 AXAL™ 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



5A AXAL™ 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

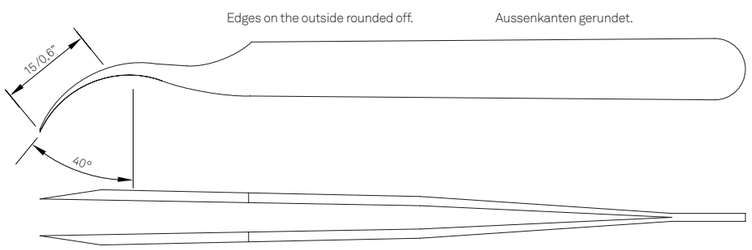


7 AXAL™ 115 mm 4 1/2”

	M	N	P
mm	11	1.5	34
inch	1/2	1/16	1 1/3

Edges on the outside rounded off.

Aussenkanten gerundet.

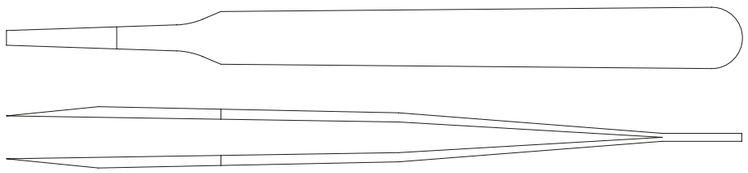


AXAL™ - THE SUPERIOR TWEEZERS

FÜR ANSPRUCHSVOLLE ANWENDUNGEN

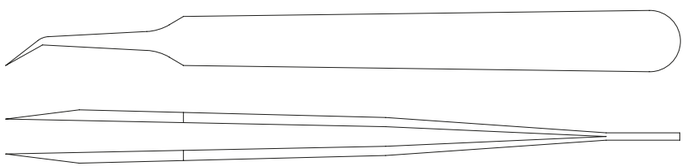
F AXAL™ 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	33	2.5
inch	1/3	1/16	1 1/4	1/10



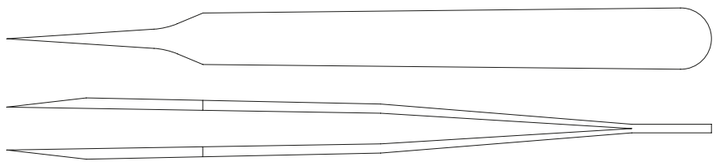
4AB AXAL™ 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/6



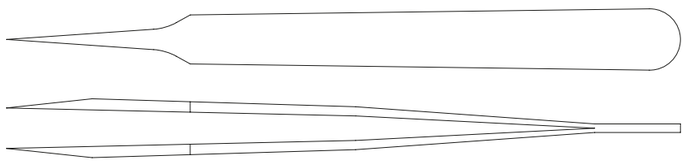
2 AXAL™ 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



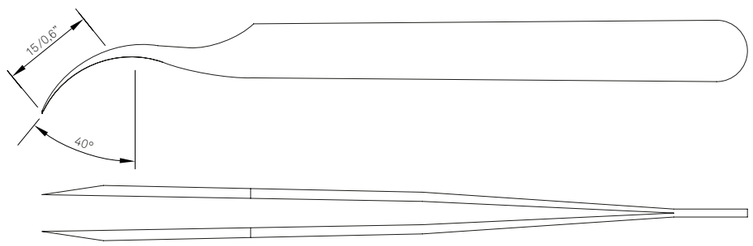
4 AXAL™ 110 mm 4 1/3”

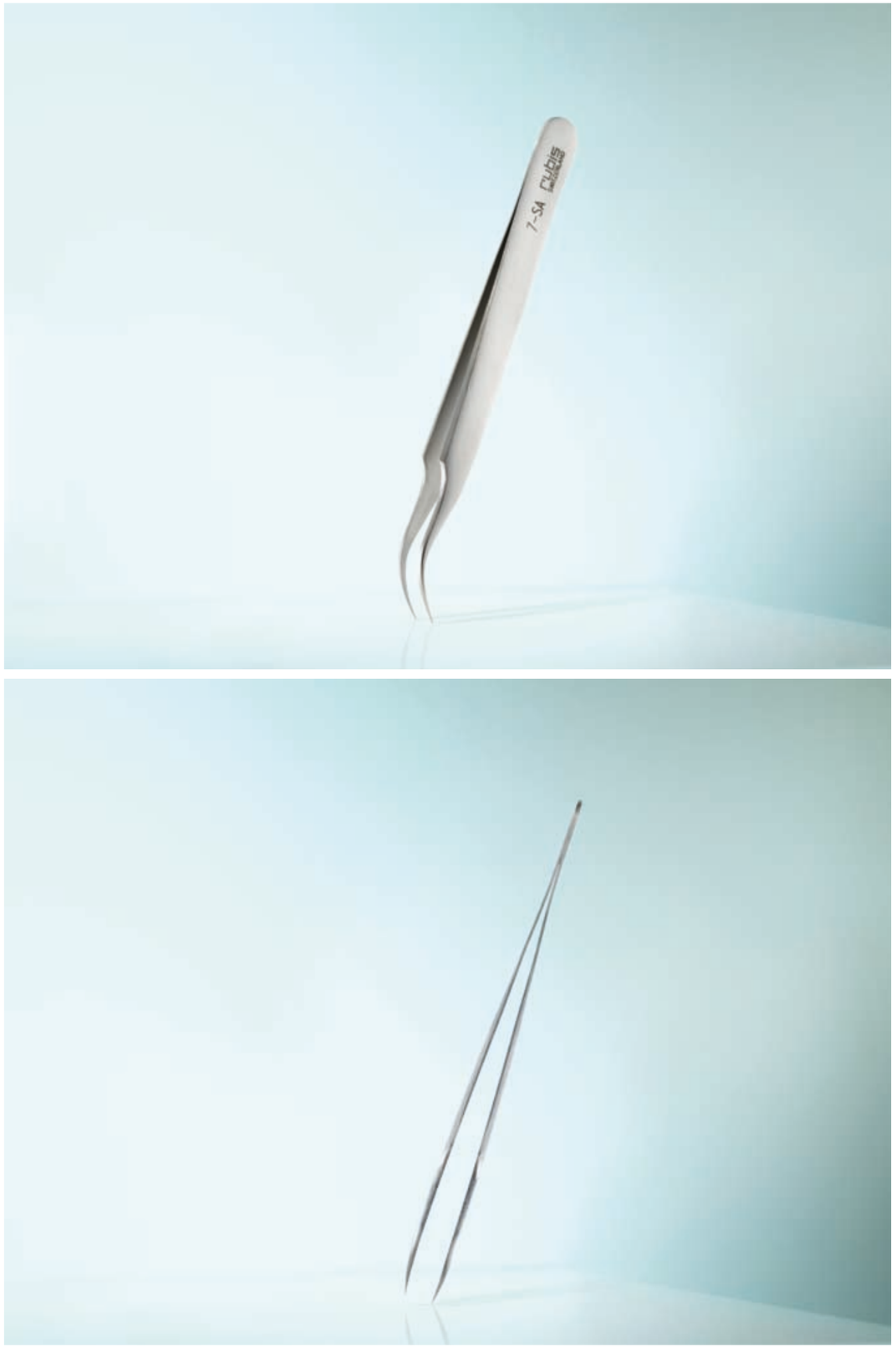
	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/6



7A AXAL™ 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3





7 see page 36 / siehe Seite 36

GRIP - THE NON-SLIP TWEEZERS

MIT RUTSCHFESTEM GRIFF

The special soft coating provides a non-slip grip and improves the handling perceptibly.

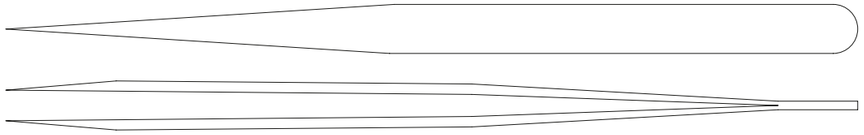
Die weiche Spezialbeschichtung schafft einen rutschfesten Griff und erlaubt ein spürbar angenehmeres Handling.

SS grip 135 mm 5 1/3”

	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4

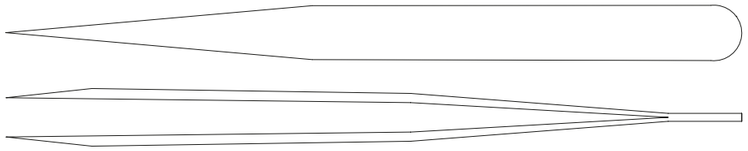
Extra long, slim, ultra fine.

Extra lang, schlank und ultra fein.



1 grip 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

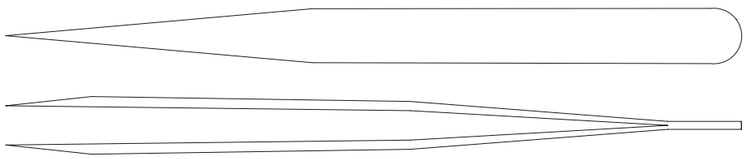


3 grip 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

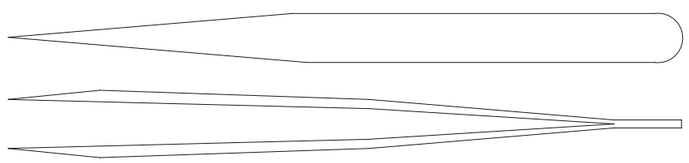
Edges on the outside rounded off.

Aussenkanten gerundet.



3C grip 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3

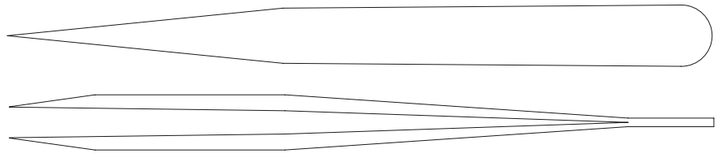


0 grip 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2

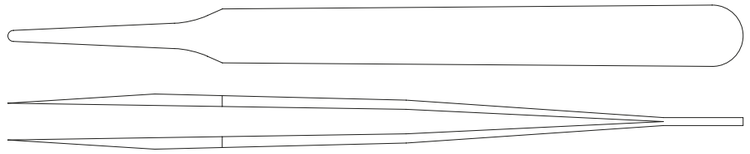
00 grip 115 mm 4 1/2”

	M	N	P	U
mm	10	2.5	46	0.5
inch	1/3	1/10	1 3/4	1/20



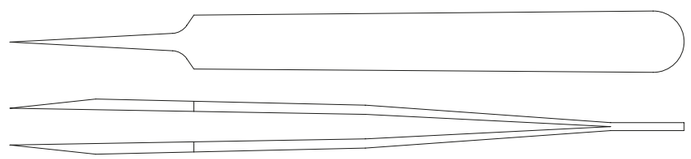
2A grip 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



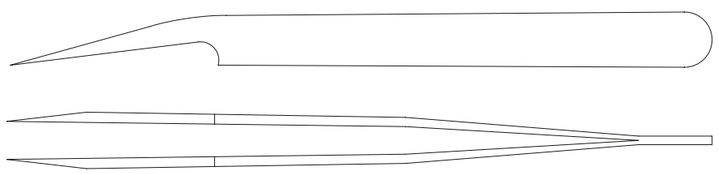
5 grip 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/6



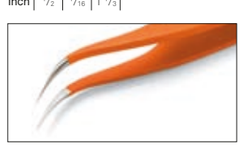
5A grip 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



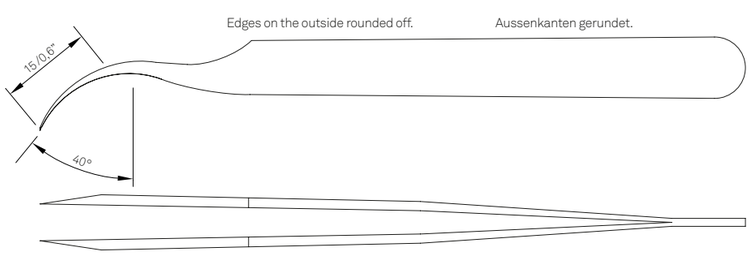
7 grip 115 mm 4 1/2”

	M	N	P
mm	11	1.5	34
inch	1/2	1/16	1 1/3



Edges on the outside rounded off.

Aussenkanten gerundet.



DURAX™ - THE RESISTENT TWEEZERS

DIE ROBUSTE

With a 616HV Vickers-hardness, the Rubis Durax™ tweezers are six times harder than standard steel tweezers. However it is neither 100% antimagnetic nor 100% rustproof.

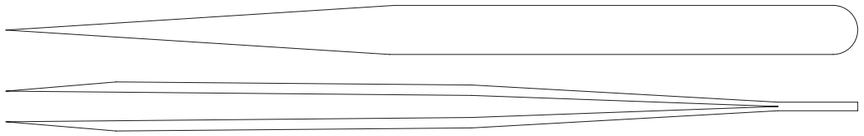
Mit 616 HV Vickershärte ist die Rubis Durax™ sechs Mal härter als eine herkömmliche Stahlpinzette. Sie ist jedoch weder 100% antimagnetisch noch 100% rostfrei.

SS DURAX™ 135 mm 5 1/3”

Extra long, slim, ultra fine.

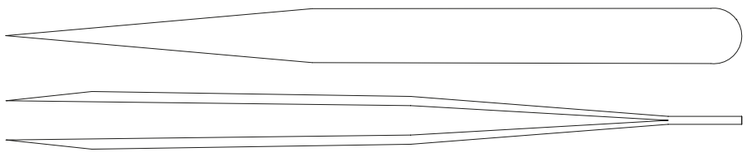
Extra lang, schlank und ultra fein.

	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4



1 DURAX™ 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

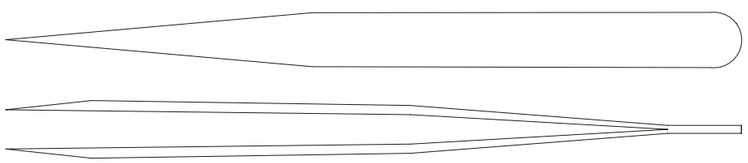


3 DURAX™ 120 mm 4 3/4”

Edges on the outside rounded off.

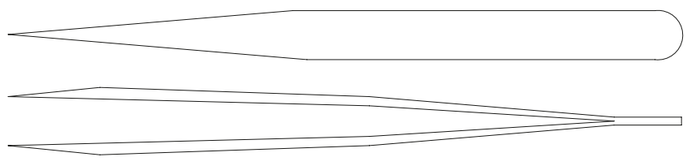
Aussenkanten gerundet.

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



3C DURAX™ 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3

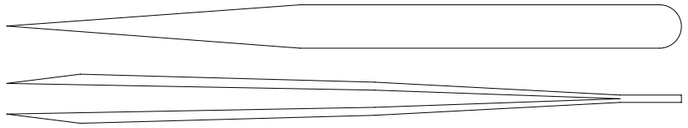


0 DURAX™ 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2

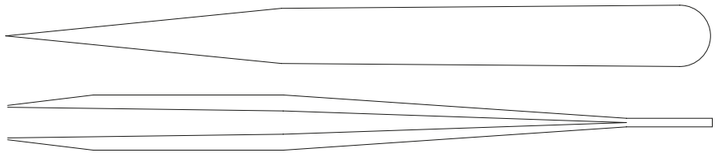
0C 11 DURAX™ 110 mm 4 1/3”

	M	N	P
mm	9	1.5	47
inch	1/3	1/16	1/34



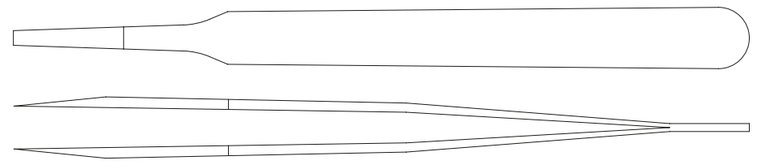
00 DURAX™ 115 mm 4 1/2”

	M	N	P	U
mm	9	2.5	46	0.5
inch	1/3	1/10	1 3/4	1/20



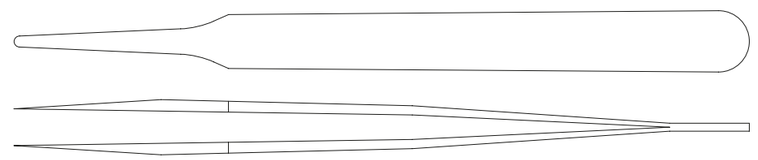
F DURAX™ 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	33	2.5
inch	1/3	1/16	1 1/4	1/10



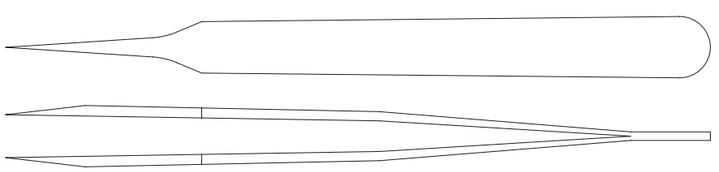
2A DURAX™ 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



2 DURAX™ 115 mm 4 1/2”

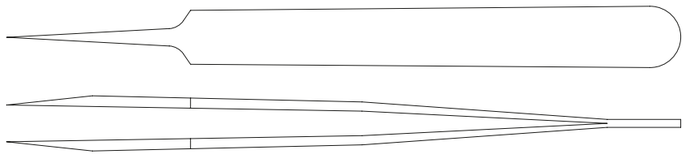
	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



DURAX™ - THE RESISTENT TWEEZERS
DIE ROBUSTE

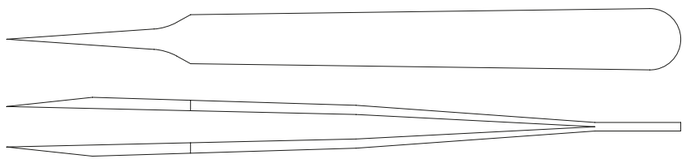
5 DURAX™ 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/6



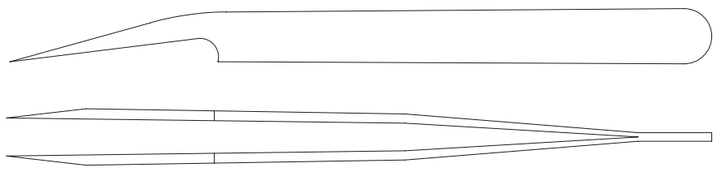
4 DURAX™ 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/6



5A DURAX™ 115 mm 4 1/2”

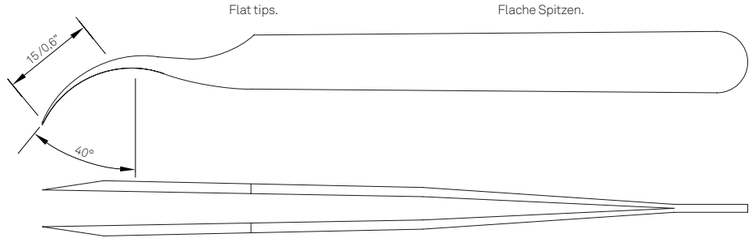
	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



7E DURAX™ 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

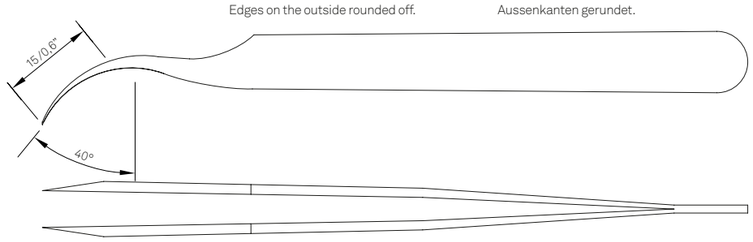
Flat tips. Flache Spitzen.



7 DURAX™ 115 mm 4 1/2”

	M	N	P
mm	11	1.5	34
inch	1/2	1/16	1 1/3

Edges on the outside rounded off. Aussenkanten gerundet.



5A see left page / siehe linke Seite

NANO - THE LOTUS TWEEZERS

MIT LOTUS EFFEKT

The cleanest tweezers surface ever produced: Ultra-modern nanotechnology closes the tiniest of pores on the surface made from high grade surgical stainless steel.

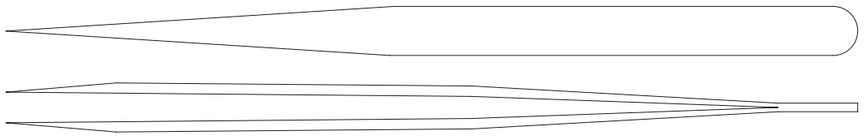
Die sauberste Pinzetten-Oberfläche, die es gibt. Modernste Nanotechnologie schliesst die Poren des rostfreien Chirurgenstahls.

SS nano 135 mm 5 1/3”

Extra long, slim, ultra fine.

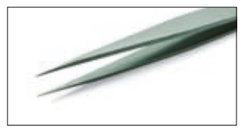
Extra lang, schlank und ultra fein.

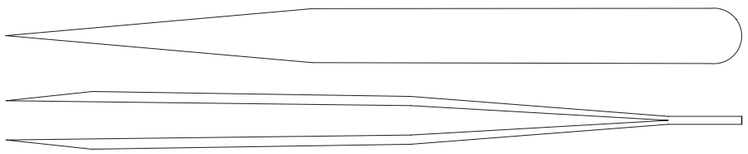
	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4



1 nano 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



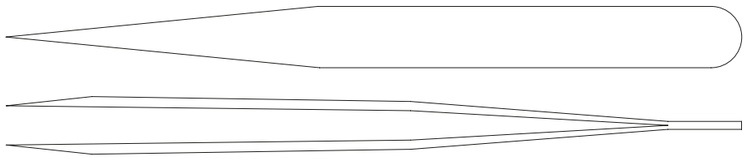


3 nano 120 mm 4 3/4”

Edges on the outside rounded off.

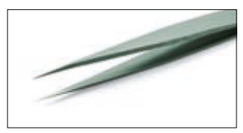
Aussenkanten gerundet.

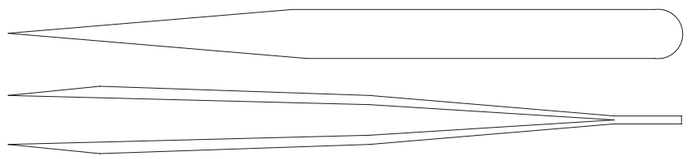
	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



3C nano 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3



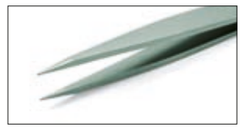


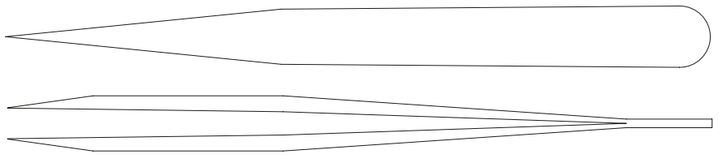
0 nano 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2

00 nano 115 mm 4 1/2”

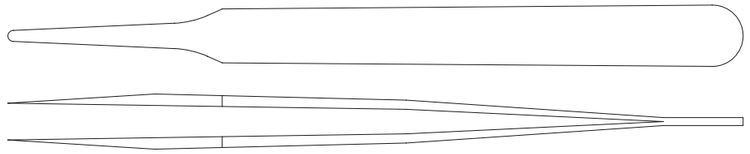
	M	N	P	U
mm	10	2.5	46	0.5
inch	1/3	1/10	1 3/4	1/20





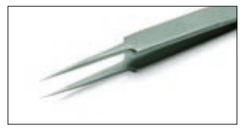
2A nano 120 mm 4 3/4”

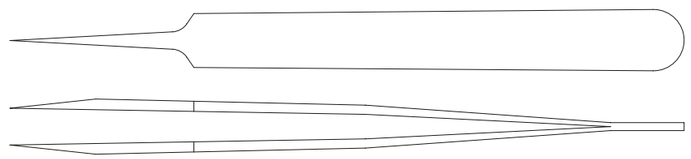
	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



5 nano 110 mm 4 1/3”

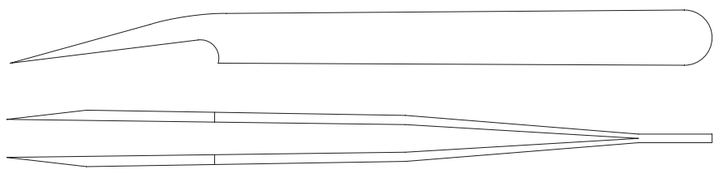
	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8





5A nano 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

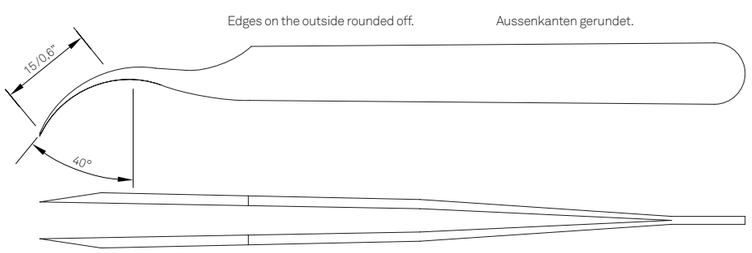


7 nano 115 mm 4 1/2”

Edges on the outside rounded off.

Aussenkanten gerundet.

	M	N	P
mm	11	1.5	34
inch	1/2	1/16	1 1/3



ION -THE ANTI-MICROBIAL TWEEZERS

MIT SILBER-IONEN BESCHICHTUNG

Hygiene even at workstations where tweezers are used by several different people: The innovative special coating releases silver ions which act as an antimicrobial neutralising reliably bacteria, germs and other pathogens.

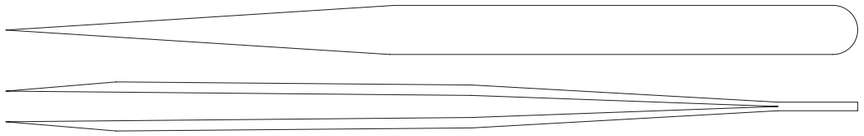
Hygiene auch an Arbeitsplätzen, wo sich Menschen eine Pinzette teilen: Die neuartige Spezialbeschichtung setzt antimikrobiell wirksame Silber-Ionen frei, die zuverlässig Bakterien, Keime und andere Krankheitserreger neutralisieren.

SS ion 135 mm 5 1/3”

Extra long, slim, ultra fine.

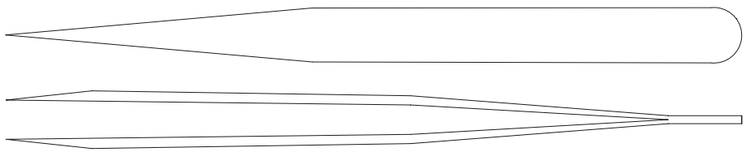
Extra lang, schlank und ultra fein.

	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4



1 ion 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

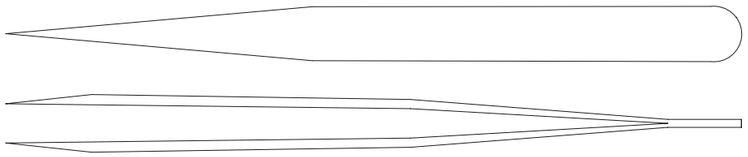


3 ion 120 mm 4 3/4”

Edges on the outside rounded off.

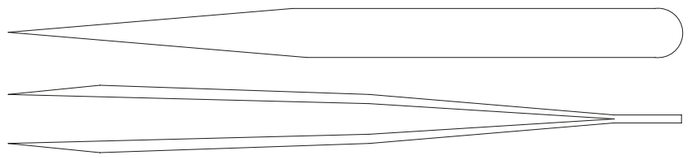
Aussenkanten gerundet.

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



3C ion 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3

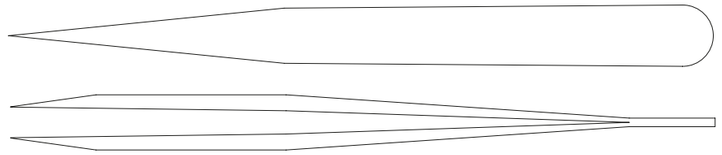


0 ion 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2

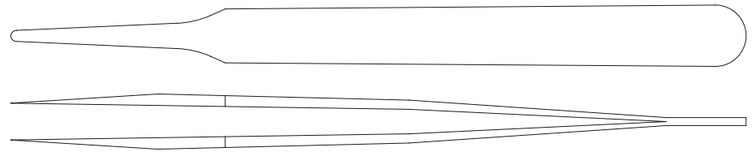
00 ion 115 mm 4 1/2”

	M	N	P	U
mm	10	2.5	46	0,5
inch	1/3	1/10	1 3/4	1/20



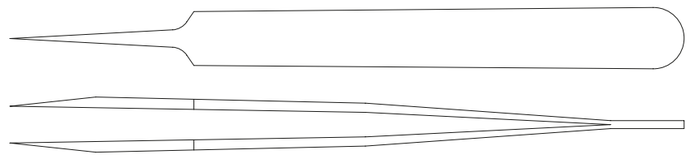
2A ion 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



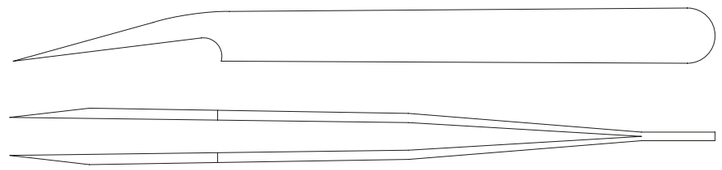
5 ion 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



5A ion 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

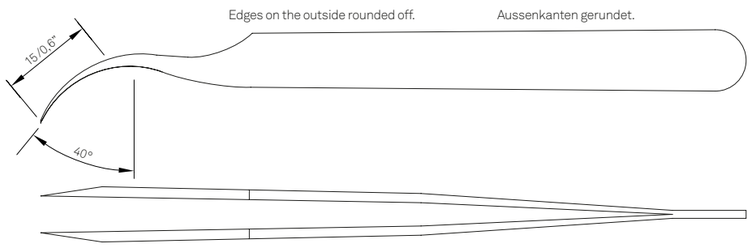


7 ion 115 mm 4 1/2”

	M	N	P
mm	11	1.5	34
inch	1/2	1/16	1 1/3

Edges on the outside rounded off.

Aussenkanten gerundet.



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SWISS TWEEZE™ - THE LIGHT TWEEZER

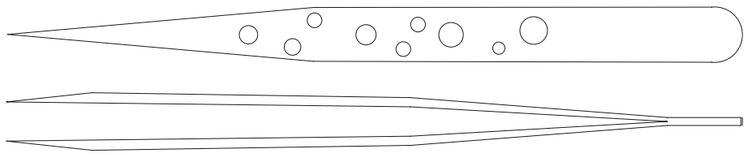
LEICHT UND GRIFFSICHER

The perforated design engineered for a non slip grip makes it particularly light. Prevents hand fatigue. (Int. registered design).

Das Lochdesign sorgt für einen rutschfesten Griff, macht diese Pinzette besonders leicht und beugt Handermüdung vor. (International registriertes Design).

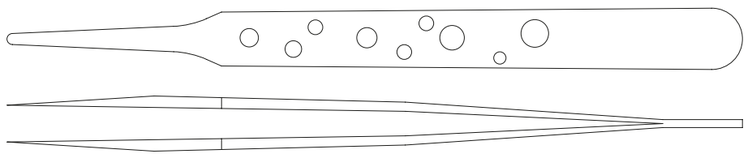
1G 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



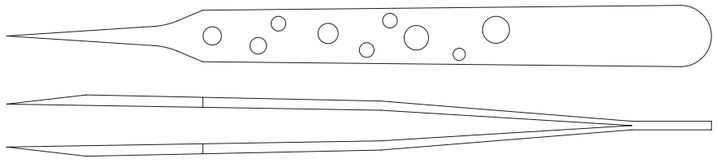
2AG 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



2G 115 mm 4 1/2”

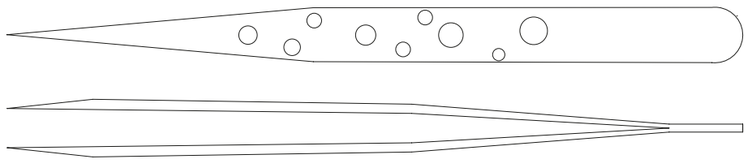
	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



3G 120 mm 4 3/4”

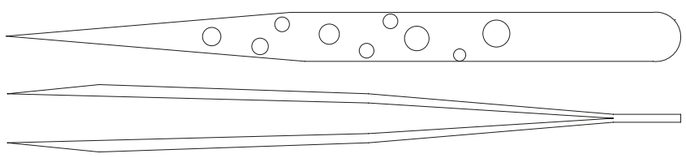
	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

Edges on the outside rounded off. Aussenkanten gerundet.



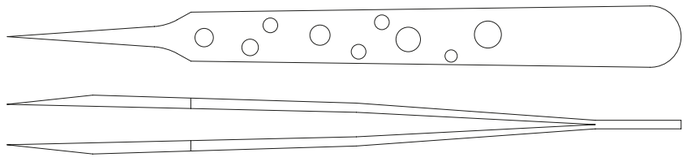
3CG 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3



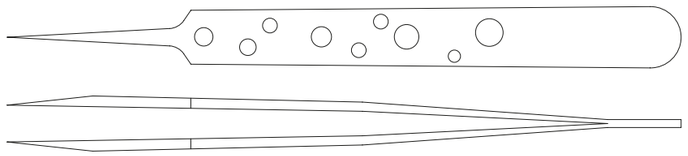
4G 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



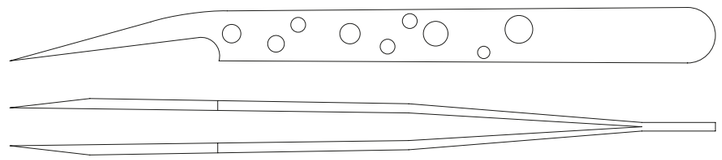
5G 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



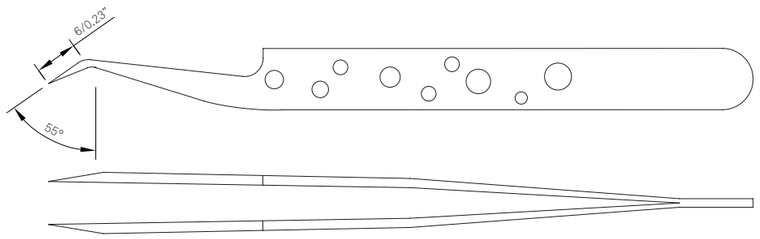
5AG 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



5ARG 115 mm 4 1/2”

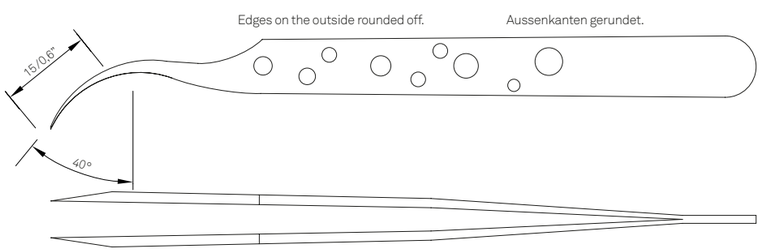
	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



7G 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

Edges on the outside rounded off. Aussenkanten gerundet.



STURDY, STRONG, POINTED

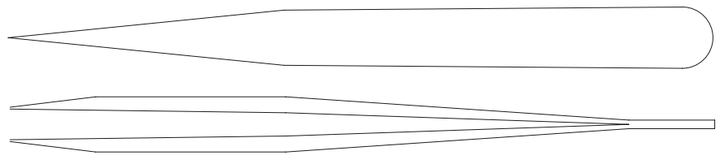
ROBUST UND KRÄFTIG

Classic tweezers made from finest stainless steel.

Klassiker aus bestem rostfreiem Chirurgenstahl.

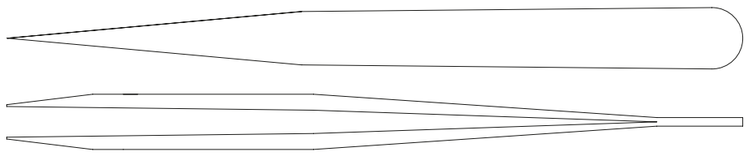
00 115 mm 4 1/2”

	M	N	P	U
mm	10	2.5	46	0.5
inch	1/3	1/10	1 3/4	1/20



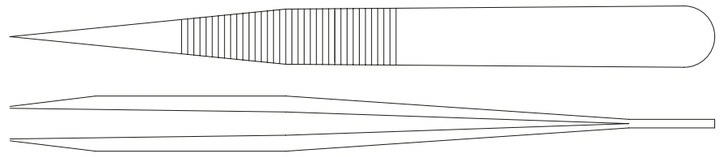
000 120 mm 4 3/4”

	M	N	P
mm	10	2.5	50
inch	1/3	1/10	2



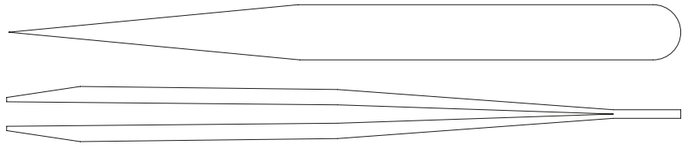
00 B 115 mm 4 1/2”

	M	N	P	R	S	U
mm	10	2.5	44	38	27	0.5
inch	1/3	1/10	1 3/4	1 1/2	1	1/20



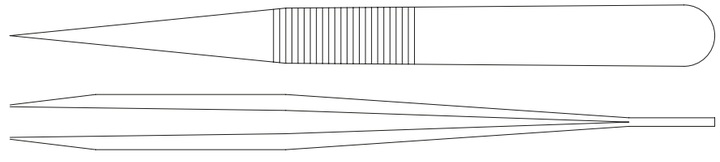
00 C 110 mm 4 1/3”

	M	N	P	U
mm	9	2.5	47	0.5
inch	1/3	1/10	1 3/4	1/20



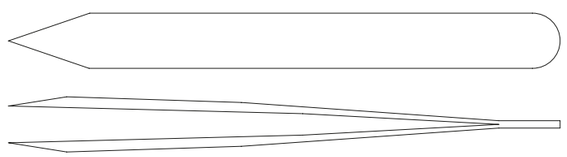
00 D 115 mm 4 1/2”

	M	N	P	R	S	T	U
mm	10	2,5	47	40	27	12	0,5
inch	1/3	1/10	1 3/4	1 1/2	1	1/2	1/20



H 90 mm 3 1/2”

	M	N	P	U
mm	9	1.5	12	0.7
inch	1/3	1/16	1/2	1/20



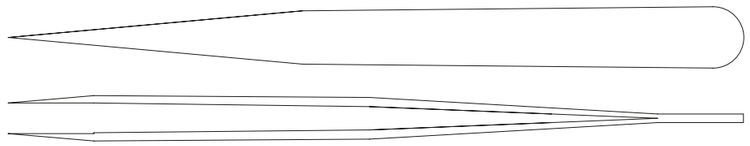
00 see page 30 / siehe Seite 30

ULTRA FINE STRAIGHT POINTED PRECISION TIP

ULTRAFEINE SPITZE PRÄZISIONSSPITZE

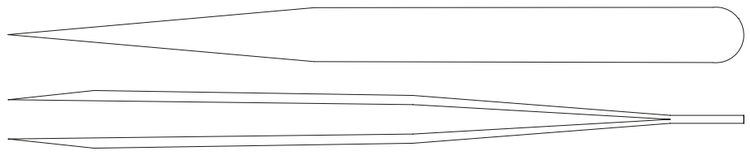
0 120 mm 4 3/4”

	M	N	P
mm	10	1.5	51
inch	1/3	1/16	2



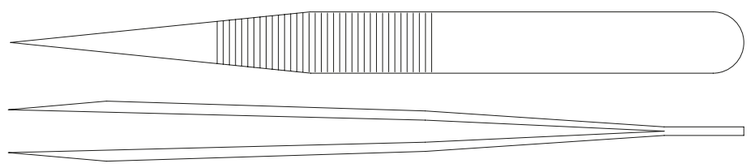
1 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2



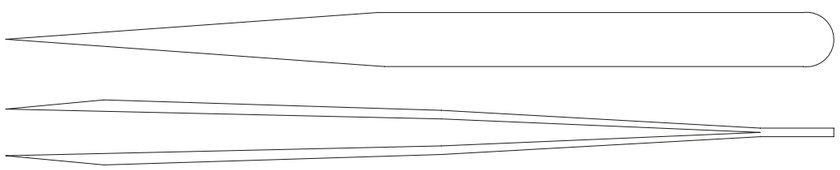
44 120 mm 4 3/4”

	M	N	P	R	S
mm	10	1.5	52	37	35
inch	1/3	1 1/16	2	1 1/2	1 3/8



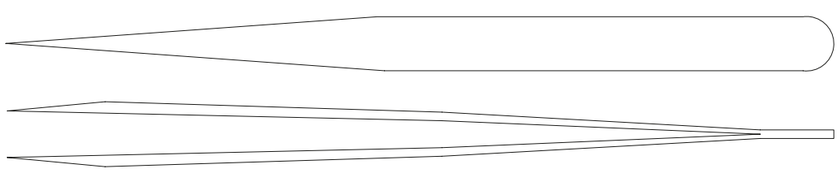
26 135 mm 5 1/3”

	M	N	P
mm	10	1.5	61
inch	1/3	1/16	2 1/2



27 135 mm 5 1/3”

	M	N	P
mm	10	1.5	61
inch	1/3	1/16	2 1/2

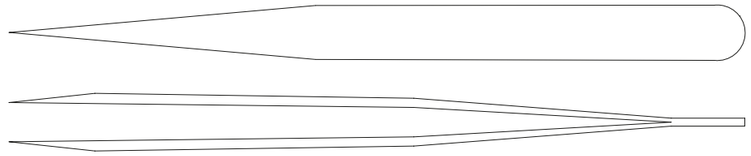


3 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

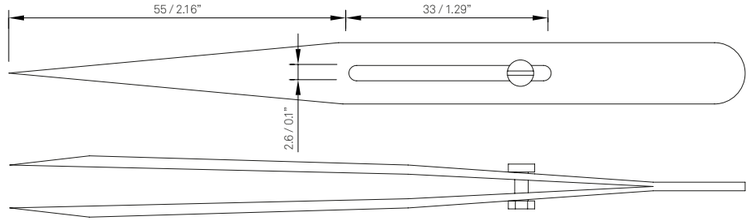
Edges on the outside rounded off.

Aussenkanten gerundet.



3L 120 mm 4 3/4”

	M	N	P
mm	10	1.5	50
inch	1/3	1/16	2

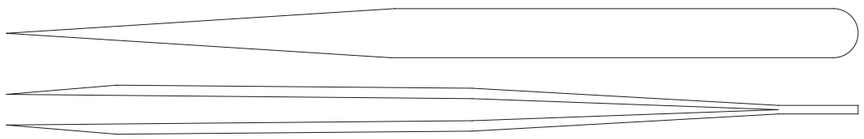


SS 135 mm 5 1/3”

	M	N	P
mm	8	1.5	83
inch	1/3	1/16	3 1/4

Extra long, slim, ultra fine.

Extra lang, schlank und ultra fein.

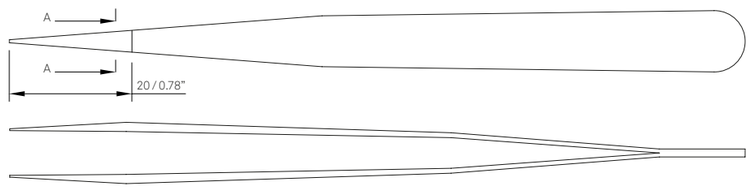


FTP 120 mm 4 3/4”

	M	N	P
mm	10	1.5	52
inch	1/3	1/16	2

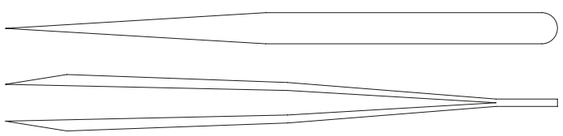
The especially rounded off edges prevent nicking and marring.

Alle Kanten sind speziell abgerundet, um Beschädigungen zu verhindern.



0C-9 90 mm 3 1/2”

	M	N	P
mm	7	1.5	39
inch	1/4	1/16	1 1/2

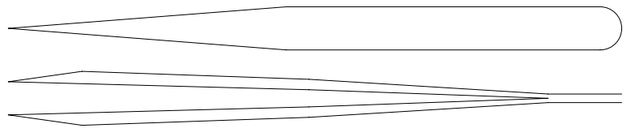


ULTRA FINE STRAIGHT POINTED PRECISION TIP

ULTRAFEINE SPITZE PRÄZISIONSSPITZE

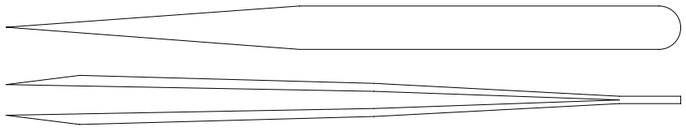
0C-10 100 mm 4”

	M	N	P
mm	8	1.5	41
inch	1/3	1/16	1 1/2



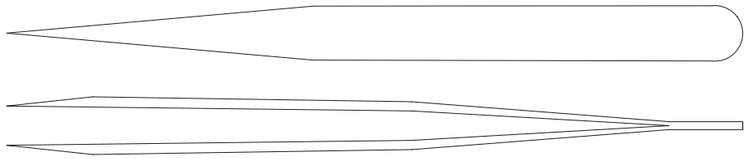
0C-11 110 mm 4 1/3”

	M	N	P
mm	9	1.5	47
inch	1/3	1/16	1 3/4



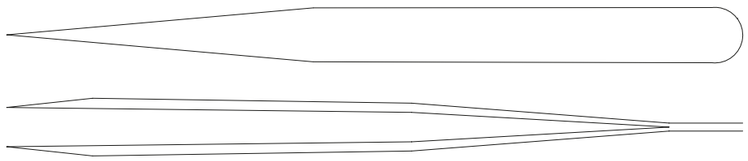
11 Nickel 120 mm 4 3/4”

	M	N	P
mm	10	1.5	48
inch	1/3	1/16	1 3/4



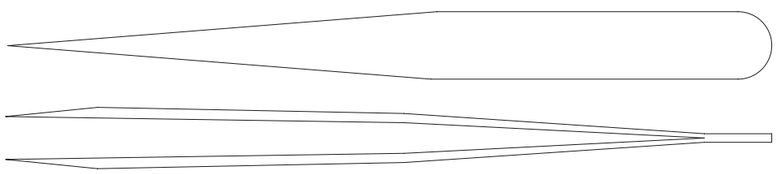
12 Nickel 120 mm 4 3/4”

	M	N	P
mm	10	1.5	48
inch	1/3	1/16	1 3/4



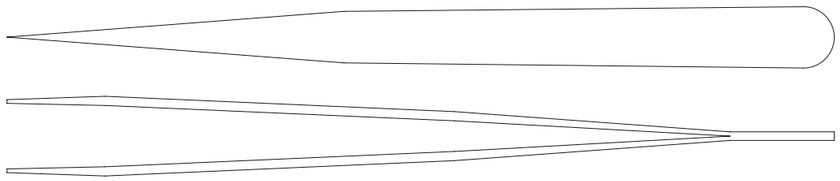
AA 125 mm 5”

	M	N	P
mm	11	1.5	60
inch	1/2	1/16	2 1/3



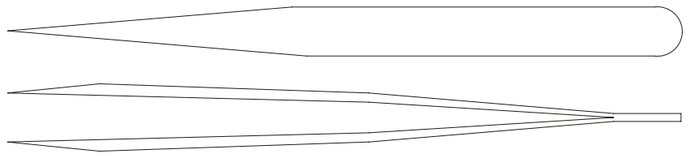
PP 135 mm 5 1/3”

	M	N	P
mm	10	1.5	58
inch	1/3	1/16	2 1/4

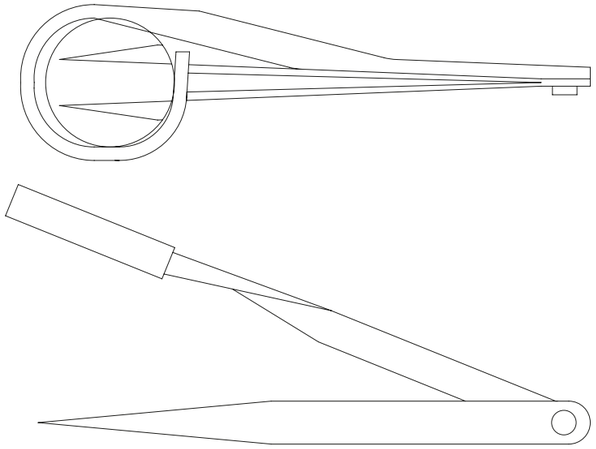


3C 110 mm 4 1/3”

	M	N	P
mm	9	1.5	43
inch	1/3	1/16	1 2/3



1K020 120 mm 5 1/3”

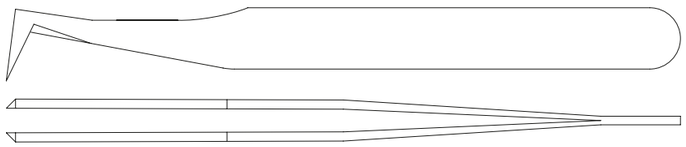


ULTRA FINE POINTED, CURVED AND ANGLED PRECISION TIP

ULTRAFEINE PRÄZISIONSSPITZE: SPITZ, SICHELFÖRMIG, GEWINKELT

6 110 mm 4 1/3”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

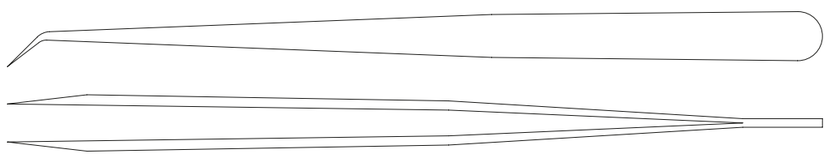


SSB 133 mm 5 1/4”

	M	N	P
mm	8	1.5	82
inch	1/3	1/16	3 1/4

Extra long, slim, ultra fine.

Extra lang, schlank und ultra fein.

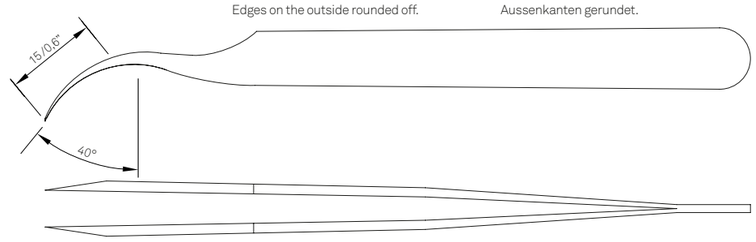


7 115 mm 4 1/2”

	M	N	P
mm	11	1,5	34
inch	1/2	1/16	1 1/3

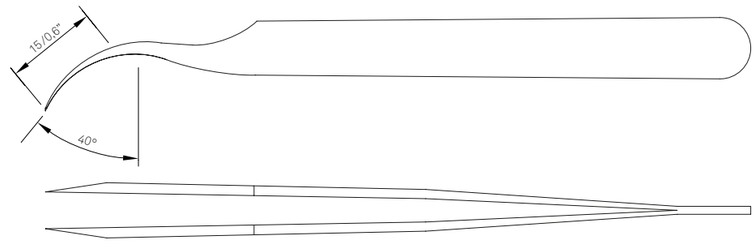
Edges on the outside rounded off.

Aussenkanten gerundet.



7A 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3

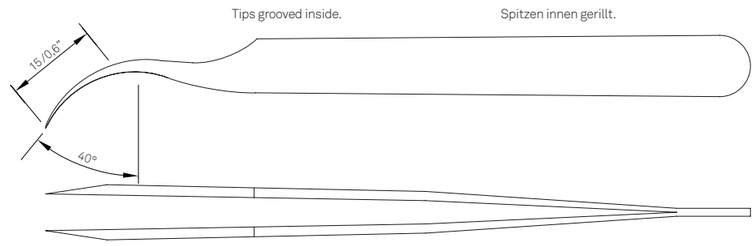


7B 115 mm 4 1/2”

	M	N	P	T
mm	10	1.5	34	13
inch	1/3	1/16	1 1/3	1/2

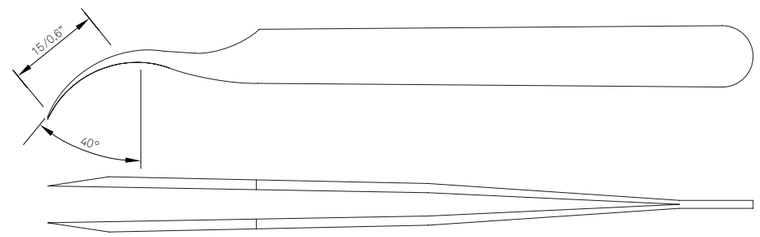
Tips grooved inside.

Spitzen innen gerillt.



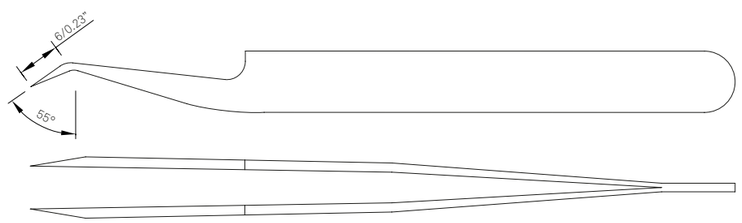
7E 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



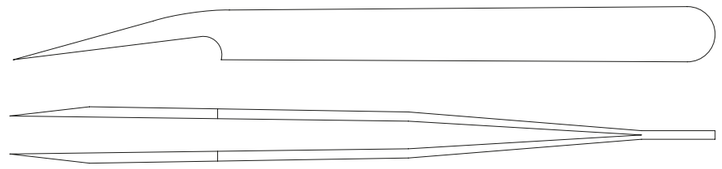
5AR 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



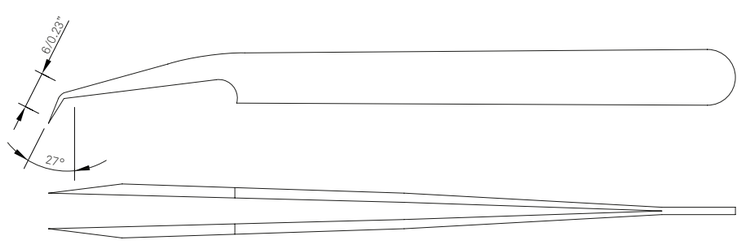
5A 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



5AB 112 mm 4 1/2”

	M	N	P
mm	10	1.5	32
inch	1/3	1/16	1 1/4

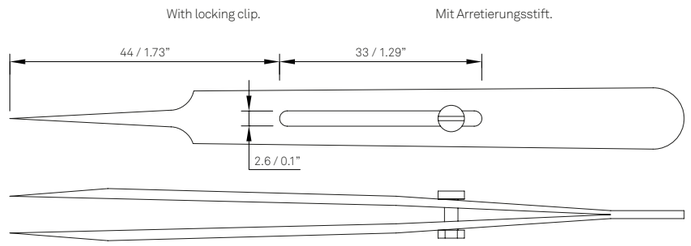


5L 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8

With locking clip.

Mit Arretierungsstift.

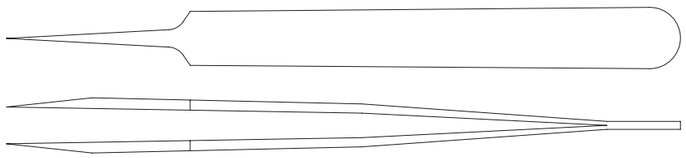


ULTRA FINE POINTED, CURVED AND ANGLED PRECISION TIP

ULTRAFEINE PRÄZISIONSSPITZE: SPITZ, SICHELFÖRMIG, GEWINKELT

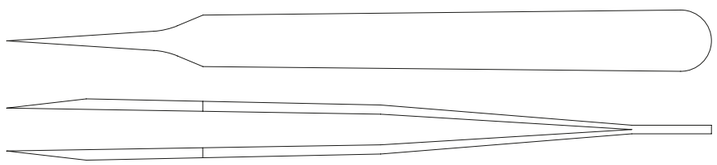
5 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



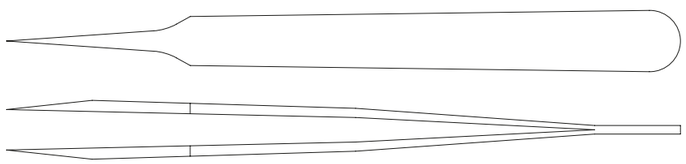
2 115 mm 4 1/2”

	M	N	P
mm	10	1.5	34
inch	1/3	1/16	1 1/3



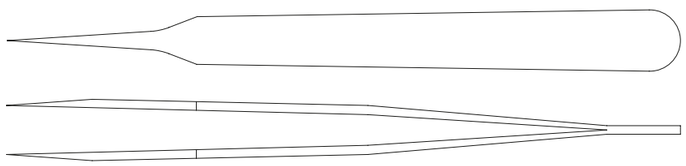
4 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



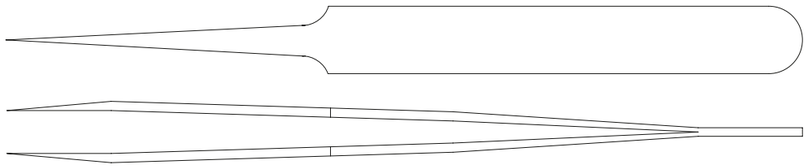
4A 110 mm 4 1/3”

	M	N	P
mm	9.5	1.5	31
inch	1/3	1/16	1 1/8



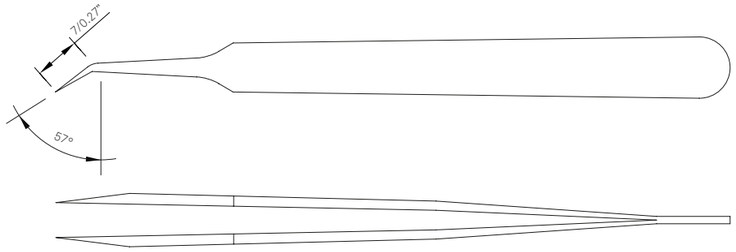
GG 130 mm 5 1/8”

	M	N	P
mm	12	1.5	54
inch	1/3	1/16	2 1/8



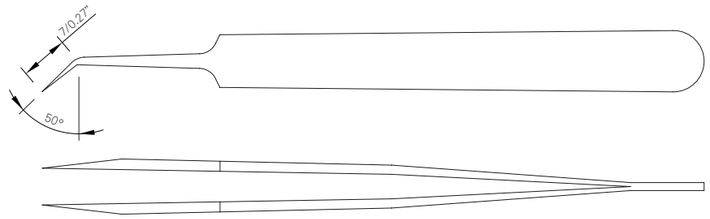
4AB 110 mm 4 1/3”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



5B 108 mm 4 1/4”

	M	N	P
mm	10	1.5	30
inch	1/3	1/16	1 1/8



5A see page 37 / siehe Seite 37

MINI TWEEZERS IN DIFFERENT SHAPES

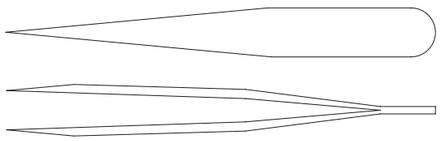
MINI PINZETTEN IN VERSCHIEDENEN FORMEN

Overall length 70 mm / 2”.

Gesamtlänge 70 mm / 2“.

1M 70 mm 2 3/4”

	M	N	P
mm	8	1.5	42
inch	1/3	1/16	1 2/3

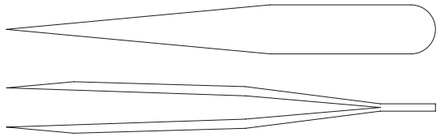


3M 70 mm 2 3/4”

	M	N	P
mm	8	1.5	42
inch	1/3	1/16	1 2/3

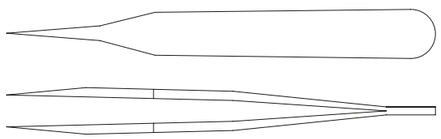
Edges on the outside rounded off.

Aussenkanten gerundet.



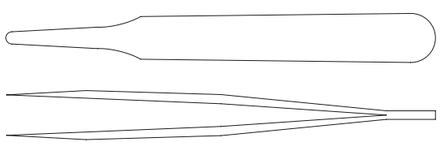
2M 70 mm 2 3/4”

	M	N	P
mm	8	1.5	23
inch	1/3	1/16	1



2AM 70 mm 2 3/4”

	M	N	P	U
mm	8	1.5	22	2
inch	1/3	1/16	3/4	1/12



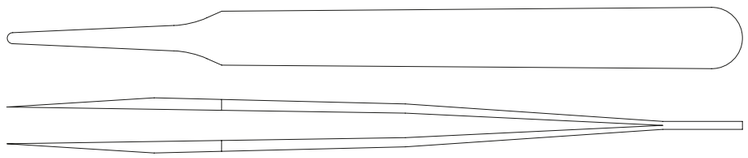
2A see page 42 / siehe Seite 42

ROUND TIP TWEEZERS IN VARIOUS SHAPES AND STYLES

PINZETTEN MIT RUNDER SPITZE

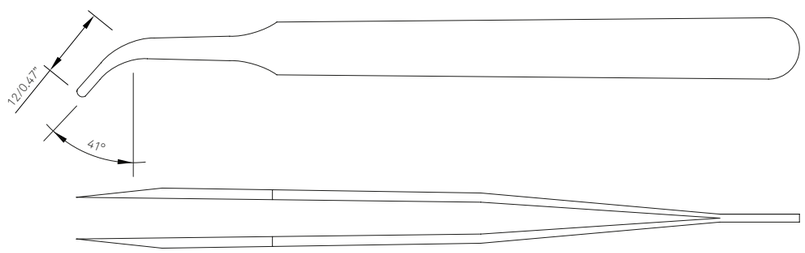
2A 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



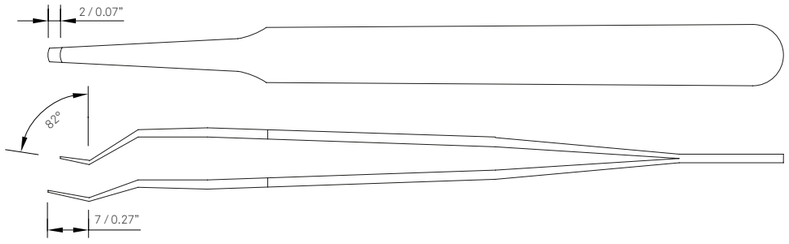
2B 118 mm 4 2/3”

	M	N	P	U
mm	10	1.5	32	2
inch	1/3	1/16	1 1/4	1/12



2ADE 120 mm 4 3/4”

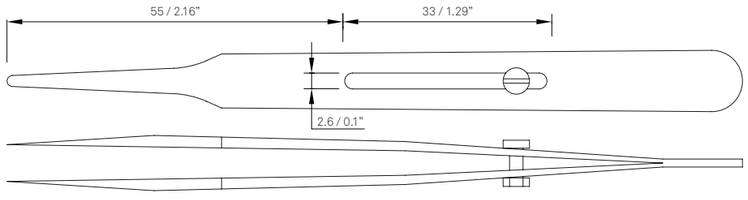
	M	N	P	U
mm	10	1.5	35	2
inch	1/3	1/16	1 3/8	1/12



2AL 120 mm 4 3/4”

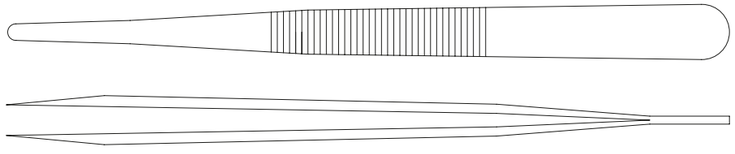
	M	N	P	U
mm	10	1.5	50	2
inch	1/3	1/16	2	1/12

With locking clip. Mit Feststellschraube.



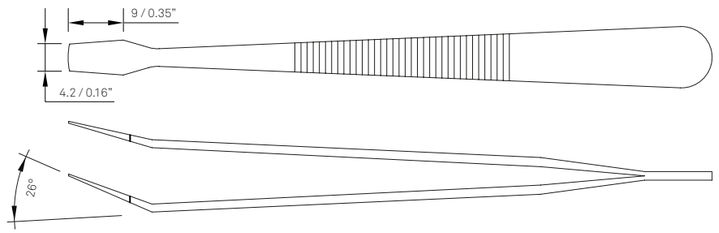
321 118 mm 4 2/3”

	M	N	P	R	S	U
mm	9	1.5	47	44	35	2.5
inch	1/3	1/16	1 3/4	1 3/4	1 3/8	1/10



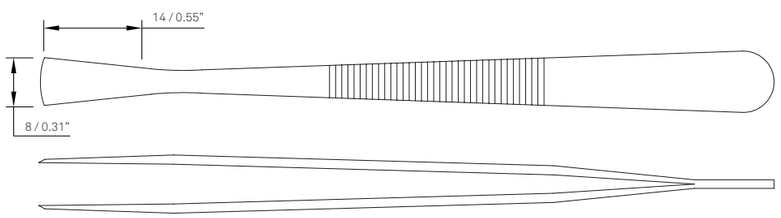
325 105 mm 4 1/8”

	M	N	P	R	S	U
mm	10	1.5	57	37	35	4.2
inch	1/3	1/16	2 1/4	1 1/2	1 3/8	1/6



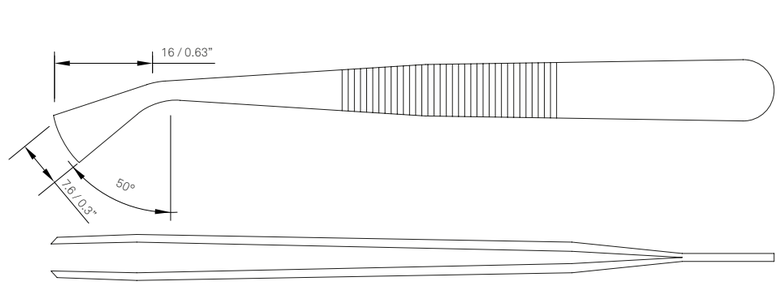
35A 120 mm 4 3/4”

	M	N	P	R	S	U
mm	10	1.5	60	45	35	8
inch	1/3	1/16	2 1/3	1 3/4	1 3/8	1/3



35B 118 mm 4 2/3”

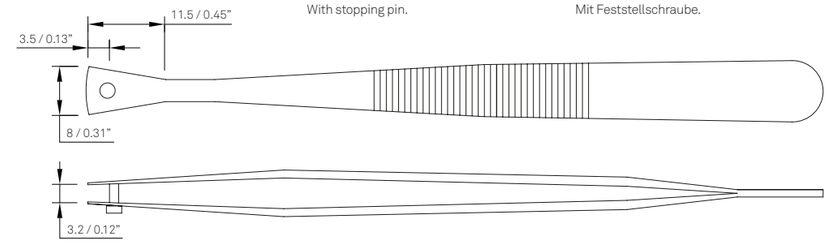
	M	N	P	R	S	U
mm	10	1.5	50	44	35	7.6
inch	1/3	1/16	2	1 3/4	1 3/8	1/3



35AP 120 mm 4 3/4”

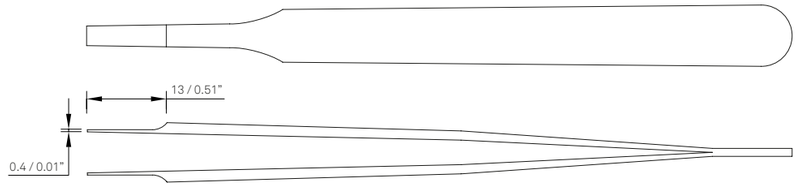
	M	N	P	R	S	U
mm	10	1.5	62	47	35	8
inch	1/3	1/16	2 1/2	1 3/4	1 3/8	1/3

With stopping pin. Mit Feststellschraube.



D 115 mm 4 1/2”

	M	N	P	U
mm	10	1.5	31	3
inch	1/3	1/16	1 1/4	1/10

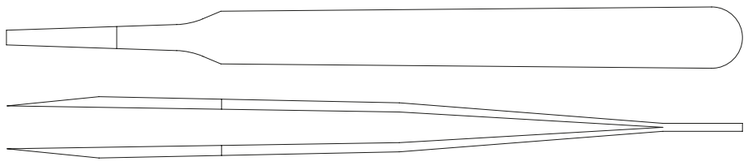


ROUND TIP TWEEZERS IN VARIOUS SHAPES AND STYLES

PINZETTEN MIT RUNDER SPITZE

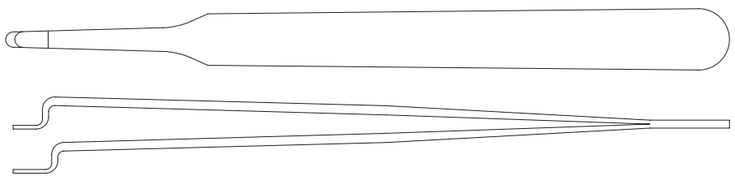
F 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	33	2.5
inch	1/3	1/16	1 1/4	1/10



FD 118 mm 4 2/3”

	C	D	E	M	N	P	U
mm	7.3	3.4	4.9	10	1.5	34	2.5
inch	1/3	1/8	1/5	1/3	1/16	1/13	1/10



232/10 see page 72 / siehe Seite 72

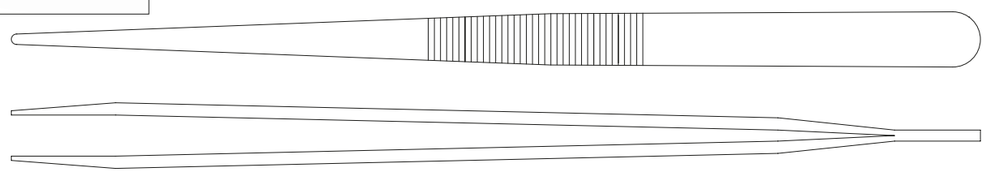
GENERAL USE TWEEZERS

UNIVERSAL PINZETTEN

232 158 mm 6 1/4”

	M	N	P	R	S	T	U
mm	9	2	80	68	44	17	1.7
inch	1/3	1/12	3 1/8	2 2/3	1 3/4	2/3	1/16

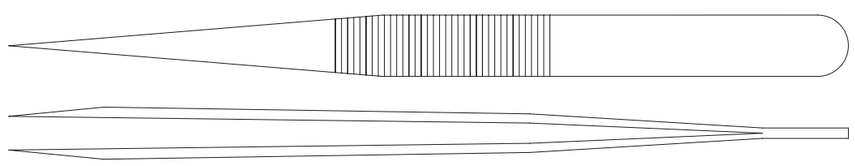
Tips grooved inside. Spitzen innen gerillt.



524 137 mm 5 1/3”

	M	N	P	R	S	T	U
mm	10	1.5	60	52	35	15	1
inch	1/3	1/16	2 1/3	2	1 3/8	2/3	1/25

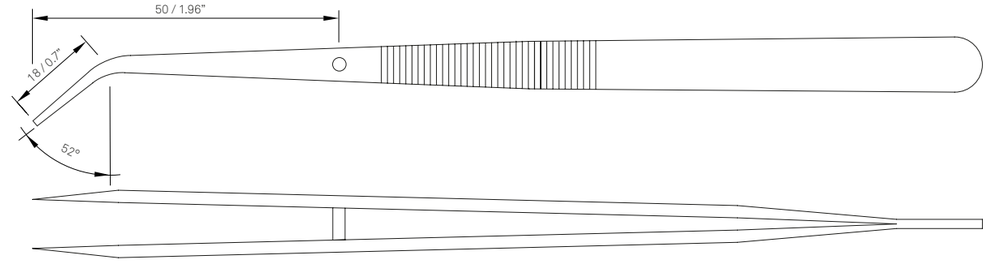
Tips grooved inside. Spitzen innen gerillt.



615 155 mm 6”

	M	N	R	S	T	U
mm	8	2	57	41	15	1
inch	1/3	1/12	2 1/4	1 2/3	2/3	1/25

With alignment pin. Tips grooved inside. Mit Zentrierstift. Spitzen innen gerillt.



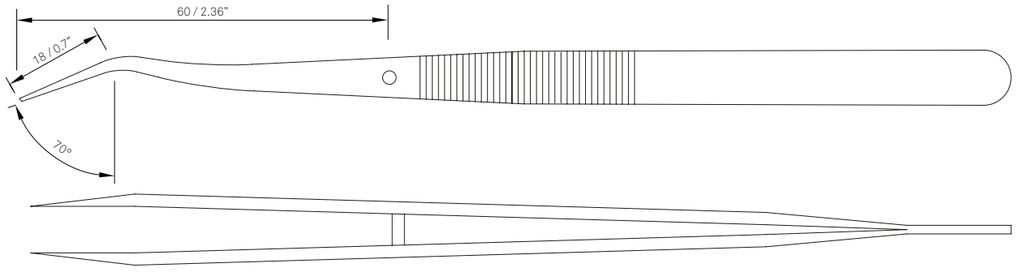
GENERAL USE TWEEZERS
UNIVERSAL PINZETTEN

616 162 mm 6 3/8”

	M	N	R	S	T	U
mm	9	2	66	45	15	1
inch	1/3	1/12	2 2/3	1 3/4	2/3	1/25

With alignment pin. Tips grooved inside.

Mit Zentrierstift. Spitzen innen gerillt.

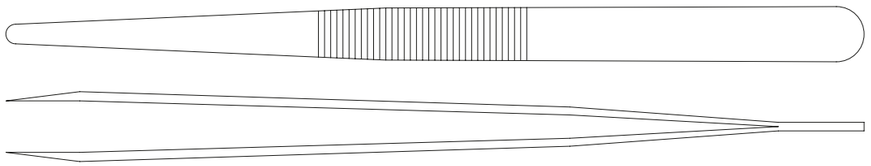


B00 140 mm 5 1/2”

	M	N	P	R	S	T	U
mm	9	1.5	60	52	35	17	2.5
inch	1/3	1/16	2 1/3	2	1 1/3	2/3	1/10

Tips grooved inside.

Spitzen innen gerillt.

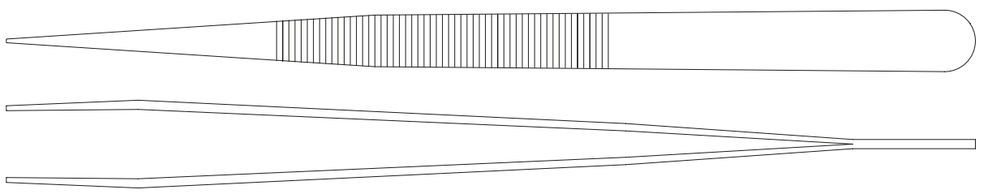


L-black 158 mm 6 1/4”

	M	N	P	R	S	T	U
mm	10	1.5	65	45	35	13	1
inch	1/3	1/16	2 1/2	3 1/4	1 3/8	1/2	1/25

Tips grooved inside.

Spitzen innen gerillt.

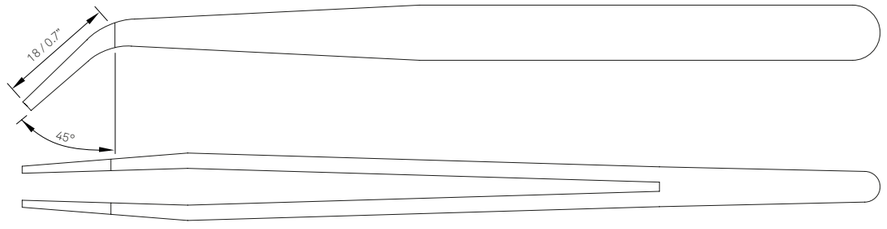


615I 140 mm 5 1/2”

	M	N	T	U
mm	11	1.5	15	2
inch	1/2	1/16	2/3	1/12

Tips grooved inside. With an isolating plastic cover.

Spitzen innen gerillt. Mit isolierender Kunststoffbeschichtung.



NK6 see page 58 / siehe Seite 72

REVERSE ACTION TWEEZERS

KREUZPINZETTEN

Comfortable soldering tweezers, Insertion/Extraction tweezers and anti-wicking tweezers.

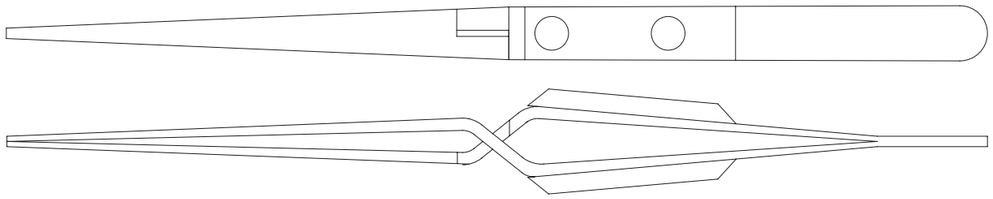
Löt- und Auslötpinzette, Pinzetten zur Herabsetzung der Löt-dochtwirkung, Einsetz- und Ausstosspinzetten.

OA 160 mm 6 1/3”

	M	N	P	T	U
mm	10	2	83	12	2
inch	1/3	1/12	3 1/4	1/2	1/12

For soldering and unsoldering operations. With protection grip.

Zum Löten und Auslöten, mit Schutzgriff.

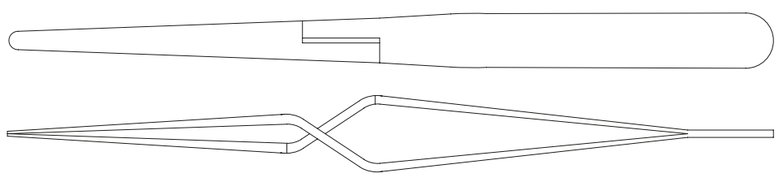


OR 117 mm 4 1/2”

	M	N	P
mm	10	1.5	44
inch	1/3	1/16	1 3/4

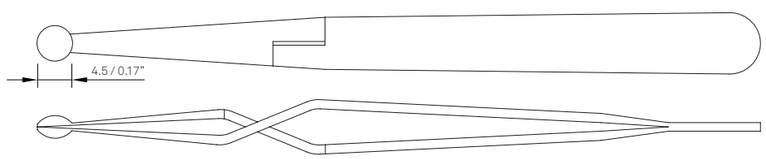
321R 125 mm 5”

	M	N	R	U
mm	8	1.5	60	3.5
inch	1/3	1/16	2 1/3	1/8



T 118 mm 4 2/3”

	M	N	P
mm	10	1.5	46
inch	1/3	1/16	1 3/4

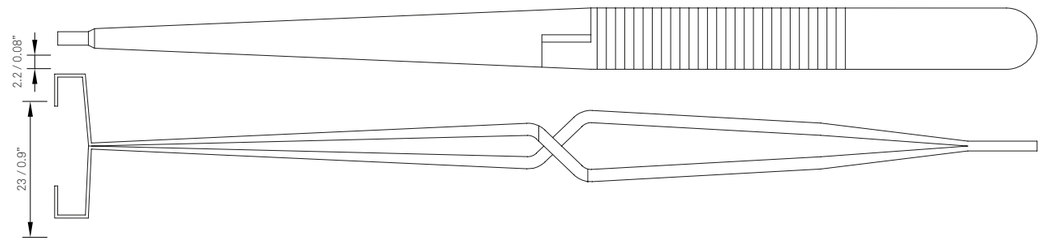


DA/2 160 mm 6 1/4”

	M	N	P	R	S	U
mm	10	2	90	90	38	2.2
inch	1/3	1/12	3 1/2	3 1/2	1 1/2	1/12

For removing dips and leads. Distance between the 2 tips 23 mm/ 900”. Comes in different sizes.

Zur Entfernung von Schaltern und Kabeln auf Platinen. Abstand zwischen den beiden Spitzen 23 mm/ 900”. In verschiedenen Grössen lieferbar.

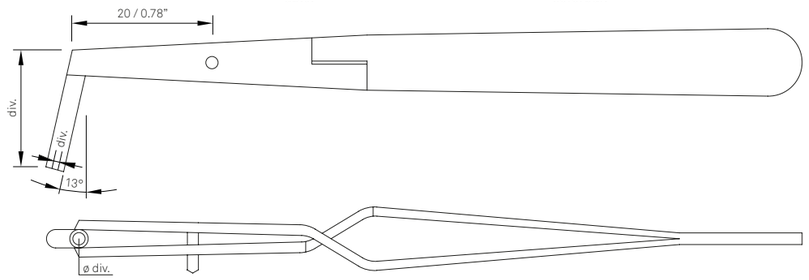


E 031 120 mm 4 3/4”

	M	N	P
mm	11	1.5	48
inch	1/2	1/16	3/4

Extraction tweezers for the perfect extraction of electrical connector contacts which meet military specifications as well as industrial ones. Exists in 31 standard types. On request, special sizes available.

Spezialpinzette zum Ausstossen der Kontakte von elektrischen Konnektoren, die militärischen und industriellen Normen entsprechen. Lieferbar in 31 Standardtypen. Auf Anfrage in Sondergrössen lieferbar.



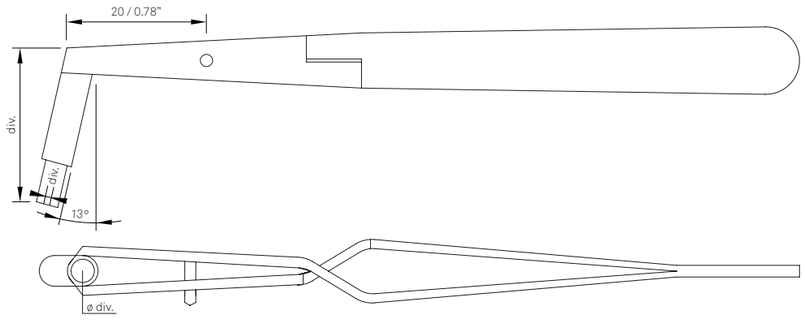
REVERSE ACTION TWEEZERS
KREUZPINZETTEN

IN 69-20 120 mm 4 3/4”

	M	N	P
mm	10	1.5	48
inch	1/3	1/16	1 3/4

Insertion tweezers for the perfect insertion of electrical connector contacts which meet military specifications as well as industrial ones. Exists in 31 standard types. On request, special sizes available.

Spezialpinzette zum Einstecken der Kontakte von elektrischen Konnektoren, die militärischen und industriellen Normen entsprechen. Lieferbar in 31 Standardtypen. Auf Anfrage in Sondergrössen lieferbar.

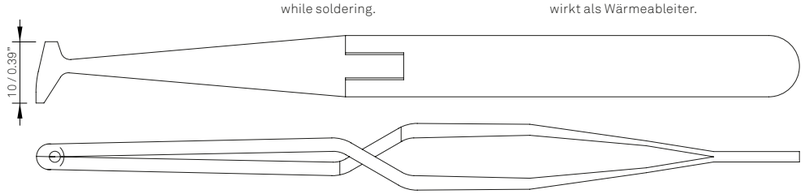


C44 AWG 28-30 125 mm 5”
C45 AWG 24-26
C46 AWG 20-22
C47 AWG 16-18

	M	N	P
mm	10	2.5	58
inch	1/3	1/10	2 1/4

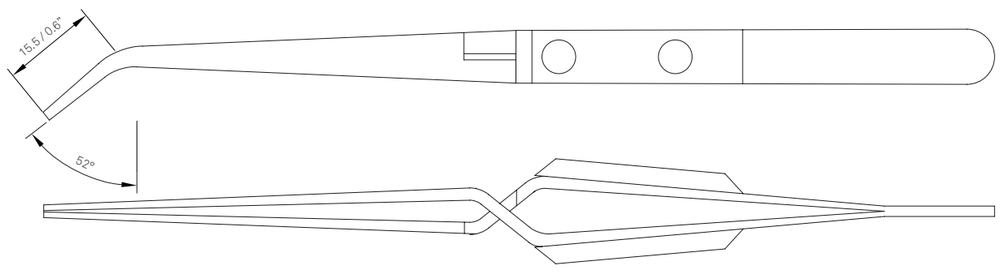
Eliminates wicking, protects plastic insulation on wire and acts as a heat sink while soldering.

Verhindert den Lötdochteffekt, schützt die Kunststoffisolation von Leitern und wirkt als Wärmeableiter.



0A bent 160 mm 6 1/3”

	M	N	P	T	U
mm	9	1.9	15.5	12	1.5
inch	3/8	5/64	5/8	1/2	1/16



42LB/4 see page 67 / siehe Seite 67

SMD TWEEZERS

SMD PINZETTEN

Special tweezers for surface mount devices. Component position tweezers. Easy handling and positioning of any SMD components. On request, special models available.

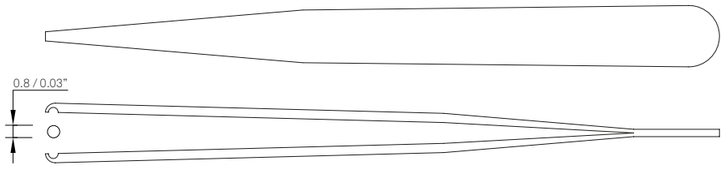
SMD Pinzette zur Bestückung von Platinen, einfaches Handhaben und sicheres Positionieren aller Bauteile. Sonderanfertigungen auf Anfrage.

201 110 mm 4 1/3”

	M	N	P	U
mm	10	1.5	42	1.6
inch	1/3	1/16	1 2/3	1/16

For gripping wires and tubular parts. dia. 0.8 mm / 1/32”, monolithic chip capacitors, and other.

Zum Greifen von Drähten und schlauchförmigen Bauteilen, ø 0.8 mm / 1/32“, monolithischen Chip-Kondensatoren u.a.

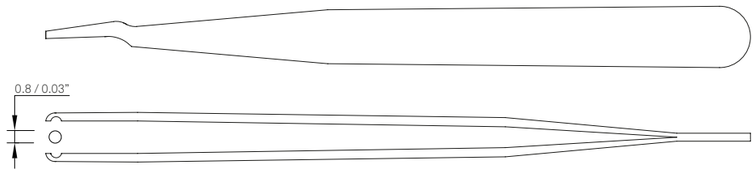


28S 115 mm 4 1/2”

	M	N	P	U
mm	10	1.5	50	1.3
inch	1/3	1/16	2	1/16

Same as 201 with bent tips.

Wie 201, aber mit gebogener Spitze.

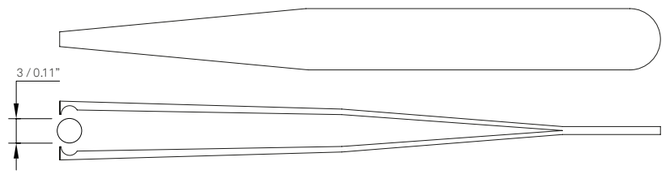


15C 98 mm 3 3/4”

	M	N	P	U
mm	10	1.5	45	2.5
inch	1/3	1/16	1 3/4	1/10

For handling small components dia. 1.6 mm / 0.06”. Other diameters on request.

Für kleine Bauteile ø 3 mm / 0.11”. Andere Durchmesser auf Anfrage.

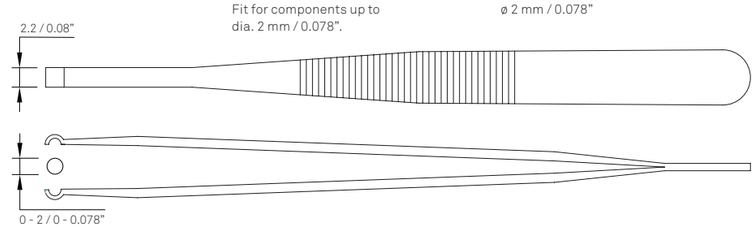


578 115 mm 4 1/2”

	M	N	P	R	S	U
mm	9	1.5	61	43	35	2.2
inch	1/3	1/16	2 1/2	1 2/3	1 3/8	1/12

Component positioning tweezers. Fit for components up to dia. 2 mm / 0.078”.

Bestückungspinzette für Bauteile bis ø 2 mm / 0.078”

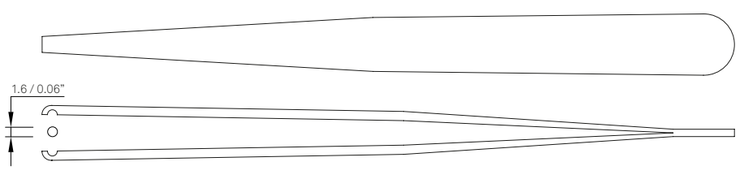


15 113 mm 4 1/2”

	M	N	P	U
mm	10	1.5	50	3
inch	1/3	1/16	2	1/10

For handling small components dia. 1.6 mm / 0.06”. Other diameters on request.

Für kleine Bauteile ø 1.6 mm / 0.06”. Andere Durchmesser auf Anfrage.

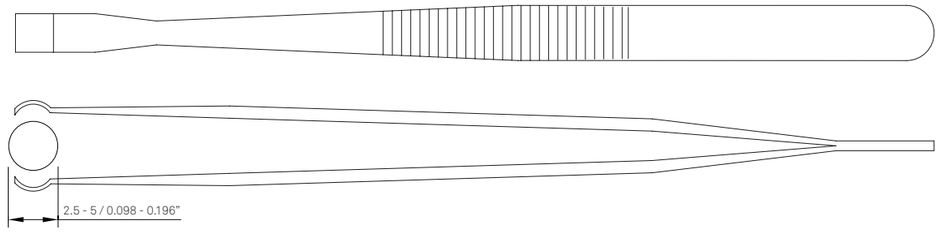


572 150 mm 6”

	M	N	P	R	S	U
mm	9	2	70	60	46	6.3
inch	1/3	1/12	2 3/4	2 1/3	1 3/4	1/4

Fit components of dia. 2.5 - 5.0 mm / .098 - .196”.

Für Bauteile von ø 2,5 - 5.0 mm / .098 - .196”

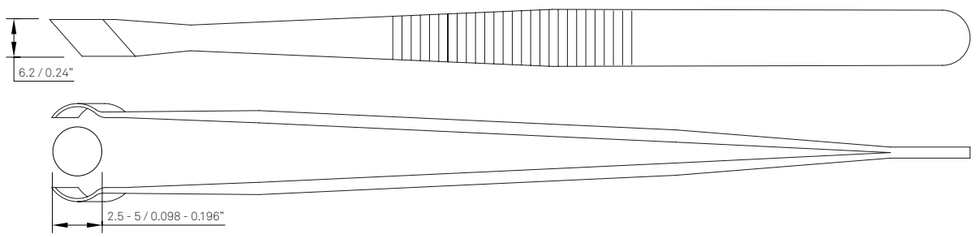


573 150 mm 6”

	M	N	P	R	S	U
mm	9	2	78	57	45	6.2
inch	1/3	1/12	3	2 1/4	1 3/4	1/4

Fit same components as 572.

Wie 572. Für Bauteile von ø 2,5 - 5.0 mm / .098 - .196”



SMD TWEEZERS

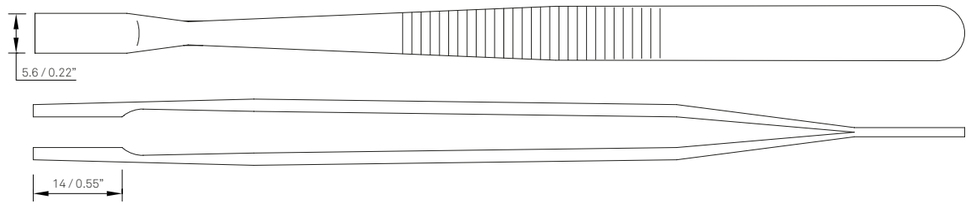
SMD PINZETTEN

571 152 mm 6”

	M	N	P	R	S	U
mm	9	2	73	61	45	5.6
inch	1/3	1/12	2 3/4	2 1/3	1 3/4	1/4

Fit same components as 572.

Wie 572. Für Bauteile von ø 2,5 - 5.0 mm / .098 - .196”.

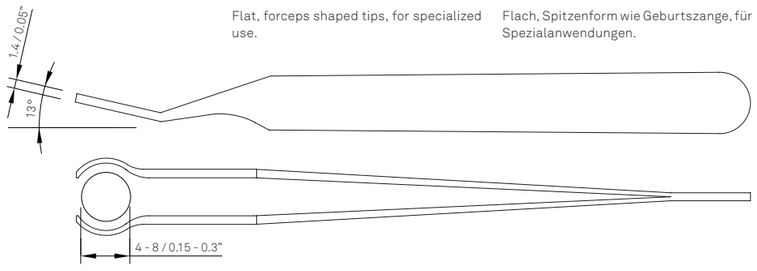


7D-13 110 mm 4 1/3”

	M	N	P	U
mm	10	1.5	30	1.4
inch	1/3	1/16	1 1/6	1/16

Flat, forceps shaped tips, for specialized use.

Flach, Spitzenform wie Geburtszange, für Spezialanwendungen.

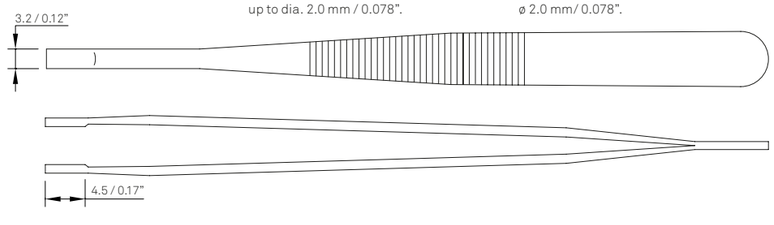


577 118 mm 4 2/3”

	M	N	P	R	S	U
mm	9	1.5	61	43	35	3.2
inch	1/3	1/16	2 1/2	1 2/3	1 3/8	1/8

Component positioning tweezers of sizes up to dia. 2.0 mm / 0.078”.

Bestückungspinzette für Bauteile bis ø 2.0 mm/ 0.078”.

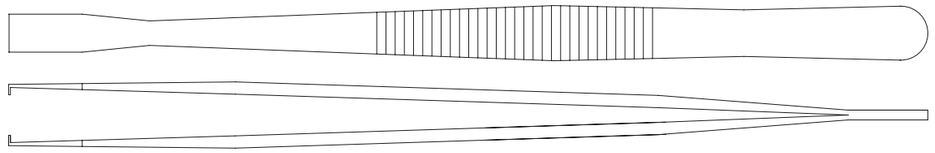


NTX/87 135 mm 5 1/3”

	M	N	P
mm	19.5	8	50
inch	3/4	1/3	2

Especially fit for handling SO/SMD’s.

Speziell zum Fassen von SO/SMD’s.

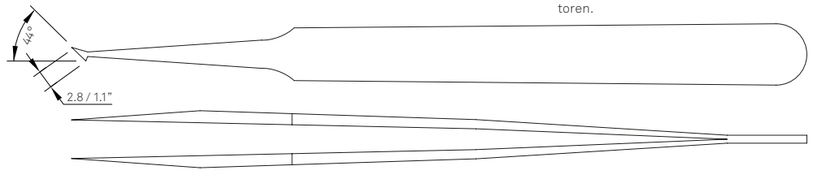


S02 120 mm 4 3/4”

	M	N	P	U
mm	10	1.5	35	3
inch	1/3	1/16	1 3/8	1/8

For placing and soldering 1mm wide monolithic chip capacitors.

Zum Positionieren und Löten von 1 mm breiten monolithischen Chip-Kondensatoren.

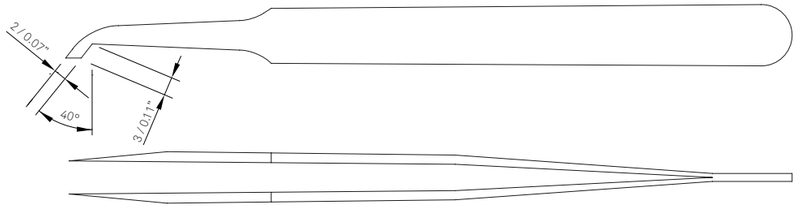


S03 118 mm 4 2/3”

	M	N	P
mm	10	1.5	32
inch	1/3	1/16	1 1/4

For handling chips, miniature components, SOT packages in crowded space conditions.

Zum Handling von Chips, kleinsten Bauteilen, SOT-Gehäusen auf engstem Raum.

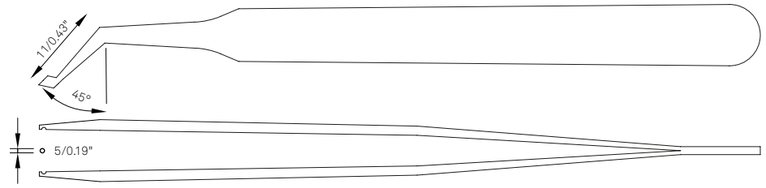


SMD-11 120 mm 4 3/4”

	M	N	P
mm	10	1.5	11
inch	1/3	1/16	7/16

For positioning 5 mm monolithic chip capacitors with flat base grooved tips (2 mm / 0.08” long).

Zum Einsetzen von kubischen Chip-Kondensatoren bis 5 mm. Mit flacher innen gerillter Spitze (2 mm / 0.08” lang).

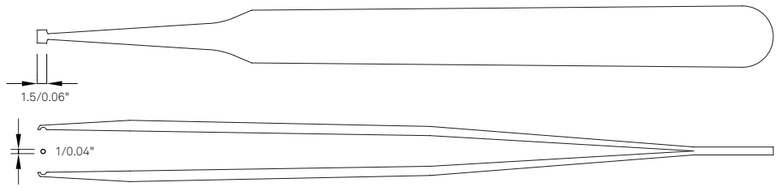


SMD-10 120 mm 4 3/4”

	M	N	P
mm	10	1.5	1.5
inch	1/3	1/16	1/16

For positioning monolithic chips capacitors, tips grooved inside.

Zum Einsetzen von kubischen Chip-Kondensatoren. Spitzen sind innen gerillt.

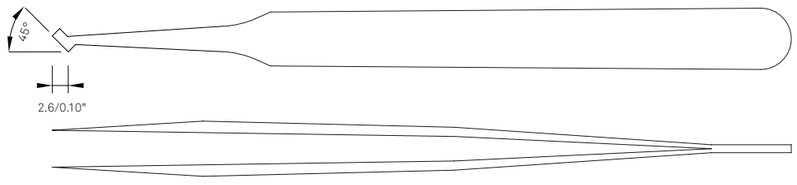


SMD-08 120 mm 4 3/4”

	M	N	P
mm	10	1.5	26
inch	1/3	1/16	7/64

For positioning and soldering 1 mm wide components. Tips are grooved inside.

Zum Einsetzen und Anlöten von 1 mm breiten Teilen. Spitzen sind innen gerillt.

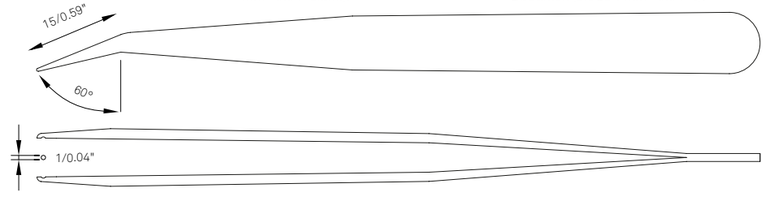


SMD-15 120 mm 4 3/4”

	M	N	P
mm	10	1.5	15
inch	1/3	1/16	19/32

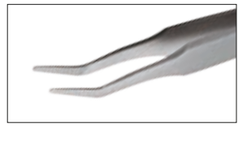
Grooved tips at 30° angle for holding and positioning cylindrical devices (up to 1 mm / 0.04” diam.).

Innen gerillte Spitze im 30° Winkel zum Halten und Einsetzen von zylindrischen Bauteilen (bis zu 1 mm / 0.04” ø).



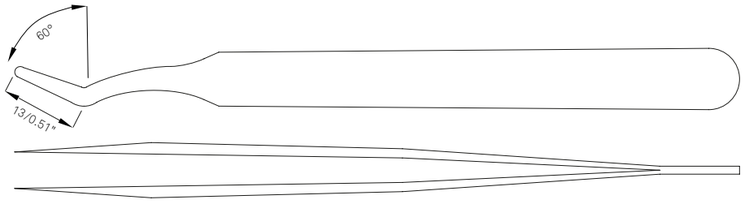
SMD-07 120 mm 4 3/4”

	M	N	P
mm	10	1.5	13
inch	1/3	1/16	1/2



For positioning all flat devices at 60° angle.

Zum Einsetzen von flachen Bauteilen im Winkel von 60°.



CUTTING TWEEZERS

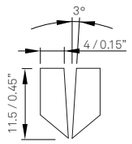
SCHNEIDEPINZETTEN

For cutting hairsprings, electronic component wires, copper, gold, silver and other soft wires.

Zum Schneiden von Haarfedern, den Drähten elektronischer Bauteile, Kupfer-, Gold-, Silber- und anderer weicher Drähte.

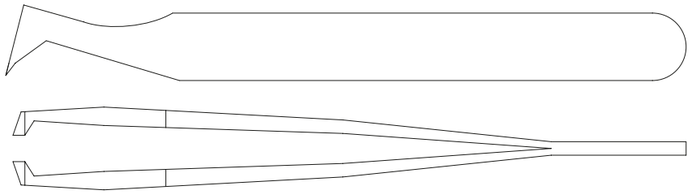
15A 111 mm 4 3/8”

	M	N	P
mm	11	3	24
inch	1/2	1/10	1



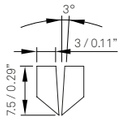
Large head, oblique strong cut at the cutter`s tip. Cutting edge is limited to the tip area (see drawing).

Breiter Kopf, schräger starker Schnitt an der Spitze Schnittfläche beschränkt sich auf den vordersten Bereich der Spitze (siehe Zeichnung).



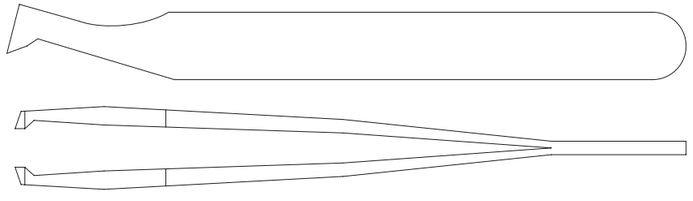
15AC 111 mm 4 3/8”

	M	N	P
mm	11	3	24
inch	1/2	1/10	1



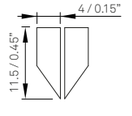
Small head, flush, oblique cut at cutter`s tip. Recommended for soft wires only. Cutting edge is limited to tip area (see drawing).

Kleiner Kopf, bündiger schräger Schnitt an der Spitze. Nur für weiche Drähte. Schnittfläche beschränkt sich auf den vordersten Bereich der Spitze (siehe Zeichnung).



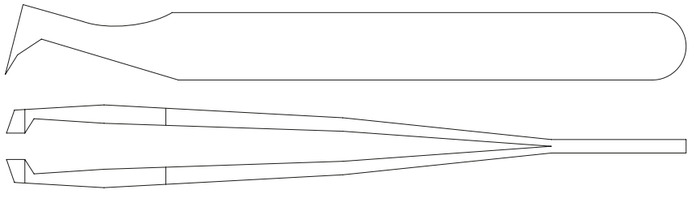
15AP 111 mm 4 3/8”

	M	N	P
mm	11	3	24
inch	1/2	1/10	1



Large head, parallel, strong cut.

Breiter Kopf, paralleler, starker Schnitt.



POLYMER ALLOY TWEEZERS

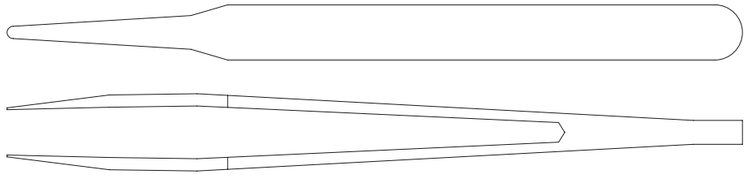
PINZETTEN AUS VERSCHIEDENEN POLYMEREN

ESD safe ⚠, conductive plastic tweezers.
Vestamid reinforced by 25% fibreglass. DIN 53482 10^3 Ω x cm. Temperature resistant up to 175°C. Good rigidity and good resistance against acids. Non magnetic, Silicone and Amine free. Very precise; when pressure is applied during work, the tips don't open.

ESD sichere ⚠, leitfähige Kunststoff-Pinzetten
Mit 25% Glasfaser verstärktes Vestamid. DIN 53482 10^3 Ω x cm. Temperaturbeständig bis 175°C. Hohe Festigkeit und gute Säurebeständigkeit. Nicht magnetisch, silizium- und aminfrei, hoch präzise.

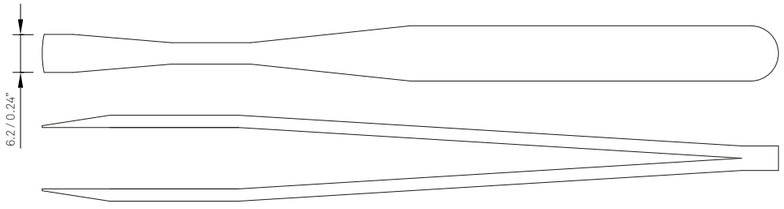
NK2A 120 mm 4 3/4"

	M	N	P	U
mm	9	2	35	2
inch	1/3	1/12	1 3/8	1/12



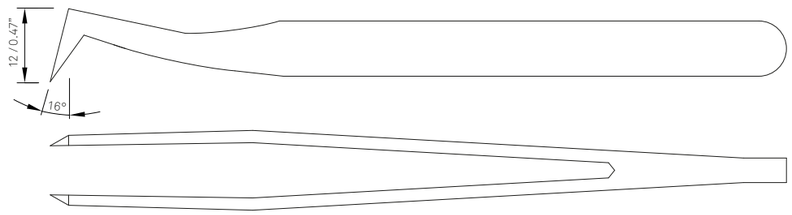
NK35A 120 mm 4 3/4"

	M	N	P
mm	9	2	58
inch	1/3	1/12	2 1/4



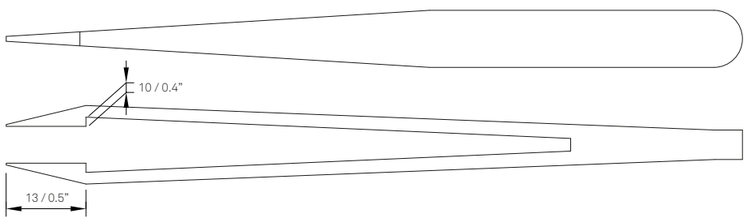
NK6 120 mm 4 3/4"

	M	N	P
mm	9	2	38
inch	1/3	1/12	1 1/2



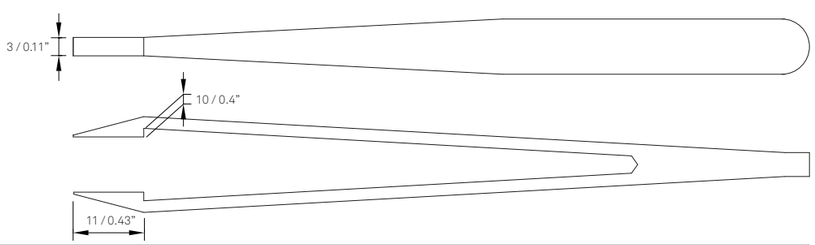
NK7 120 mm 4 3/4"

	M	N	P
mm	9	2	70
inch	1/3	1/12	2 3/4



NKR 120 mm 4 3/4"

	M	N	P
mm	9	2	70
inch	1/3	1/12	2 3/4

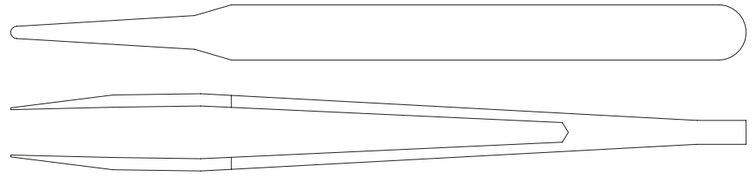


Highly acid - resistant plastic tweezers
PBT (Polybutylene terephthalate) reinforced by 20% fiberglass. Non magnetic, highly isolating, temperature resistance up to 210°C short exposure), not burning, high resistance to wear and tear.

Hoch säurebeständige Kunststoff-Pinzetten
Mit 20 % Glasfaser verstärktes PBT (Polybutyleneterephthalate). Nicht magnetisch, hoch isolierend, kurzzeitig temperaturbeständig bis 210°C, nicht brennbar, verschleissarm.

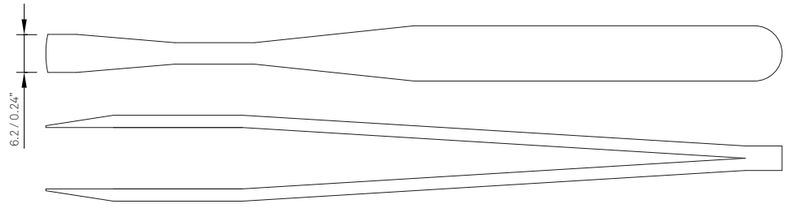
K2A 120 mm 4 3/4"

	M	N	P	U
mm	9	2	35	2
inch	1/3	1/12	1 3/8	1/12



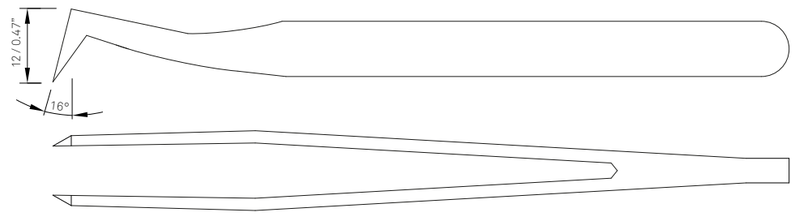
K35A 120 mm 4 3/4"

	M	N	P
mm	9	2	58
inch	1/3	1/12	2 1/4



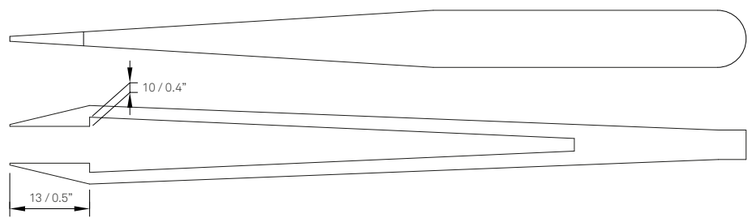
K6 120 mm 4 3/4"

	M	N	P
mm	9	2	38
inch	1/3	1/12	1 1/2



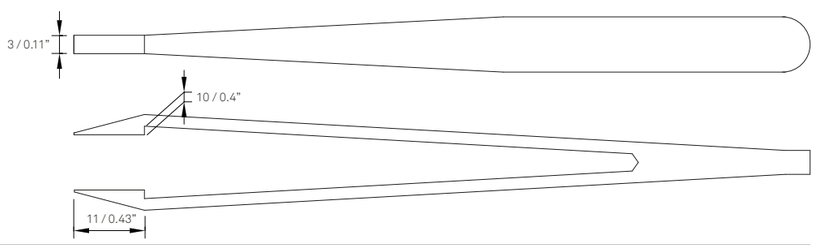
K7 120 mm 4 3/4"

	M	N	P
mm	9	2	70
inch	1/3	1/12	2 3/4



KR 120 mm 4 3/4"

	M	N	P
mm	9	2	70
inch	1/3	1/12	2 3/4



258 Peek see page 62 / siehe Seite 62

TWEEZER TIPS IN VARIOUS HIGH TECH POLYMERS AND CERAMICS

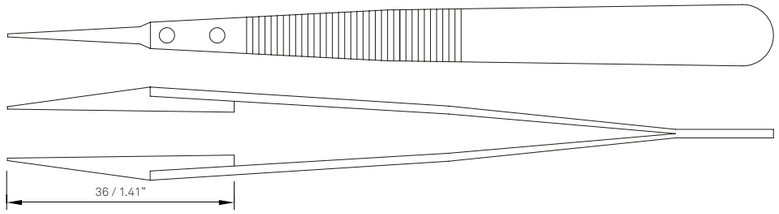
PINZETTENSPITZEN AUS VERSCHIEDENEN HIGH-TECH POLYMEREN UND KERAMIK

258 Peek 125 mm 5”

	M	N	P	R	S
mm	10	1.5	65	38	35
inch	1/3	1/16	2 1/2	1 1/12	1 3/8

With 30% Carbonfibers. ESD safe, 10^5 Ω x cm soft, anti-magnetic, anti acid. High resistant to abrasion. Temperature resistance up to 250°C (short exposure up to 300°C). Can be sterilized at 143°C. Often used in the disc drive industry and for ceramic parts.

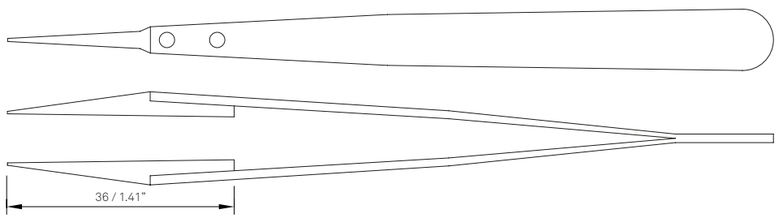
Mit 30% Carbonfaser verstärkt, ESD sicher, 10^5 Ω x cm weich, antimagnetisch, säurebeständig, hoch abriebfest, temperaturbeständig bis 250°C (kurzzeitig bis 300°C), kann bei 143°C sterilisiert werden. Kommt bei der Herstellung von CD Laufwerken und keramischen Bauteilen zum Einsatz.



258S 120 mm 5 1/3”

	M	N	P
mm	19.5	8	50
inch	3/4	1/3	2

See above. Wie oben.

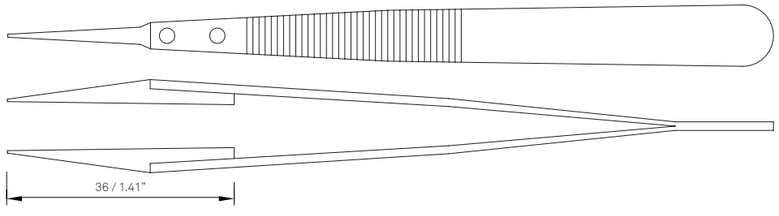


258PPS 125 mm 5”

	M	N	P	R	S
mm	10	1.5	65	38	35
inch	1/3	1/16	2 1/2	1 1/12	1 3/8

Xtel material reinforced with 30% fibre-glass. ESD safe, anti-static 10^8 Ω x cm, silicone and chlorine free, Clean room suitable. Heat resistant up to 300°C, non scratching, antimagnetic, good resistance to wear and tear.

Mit 30% Fiberglas verstärktes Xtel, ESD sicher, antistatisch 10^8 Ω x cm, silikon- und chlorfrei, Reinraum geeignet, hitzebeständig bis 300°C, kein Kratzen, antimagnetisch, verschleissarm.

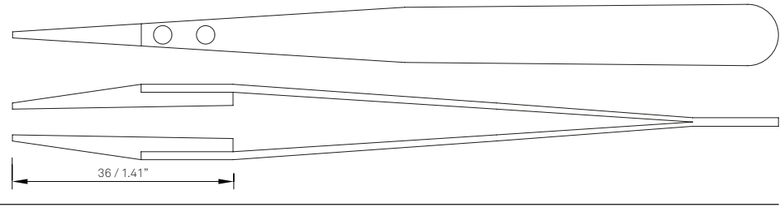


49D 125 mm 5”

	M	N	P
mm	10	1.5	60
inch	1/3	1/16	2 1/3

Delrin tips. Temperature resistant up to 115°C . Very soft material, non scratching, nicking or marring. Excellent use in Biotech applications.

Delrin Spitzen, temperaturbeständig bis 115°C, weiches Material für sehr schonendes Handling. Speziell empfohlen für Biotech-Anwendungen.

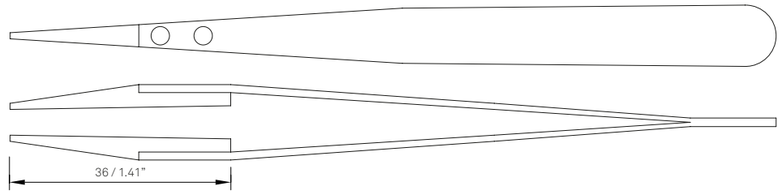


49E 125 mm 5”

	M	N	P
mm	10	1.5	60
inch	1/3	1/16	2 1/3

Epoxy resin. A very strong, resistant material, density crystalline 1.49. Can be exposed up to 155°C temperature. 10^{12} Ω x cm, good electrical insulation.

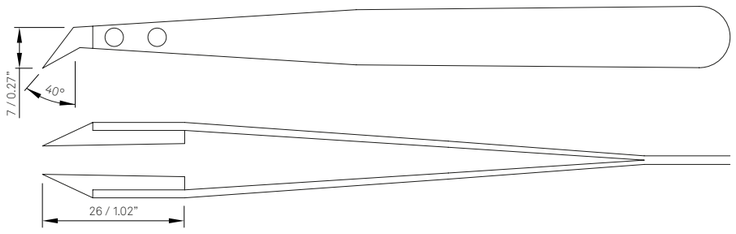
Epoxidharz-Glas. Ein sehr starkes, sehr widerstandsfähiges Material, kristalline Dichte 1.49, temperaturbeständig bis 155°C, 10^{12} Ω x cm, gute elektrische Isolation.



49B 110 mm 4 1/3”

	M	N	P
mm	10	1.5	48
inch	1/3	1/16	1 3/4

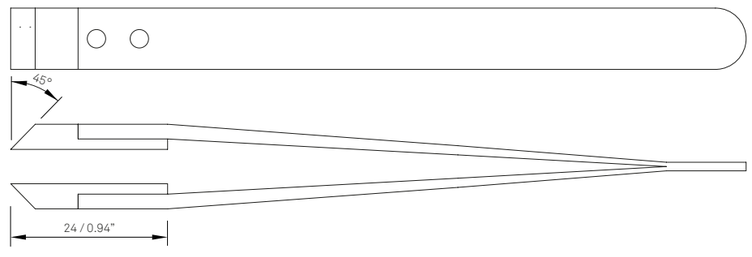
See above. Wie oben.



49J 120 mm 4 3/4”

	M	N	U
mm	10	2.5	10
inch	1/3	1/10	1/3

See above. Wie oben.

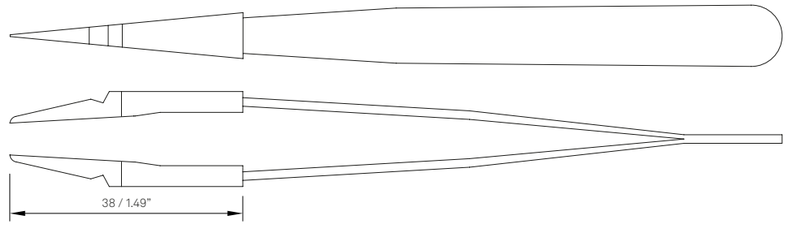


258C 126 mm 5”

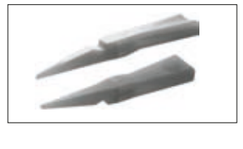
	M	N	P
mm	10	1.5	65
inch	1/3	1/16	2 1/2

Zirconia oyxde cramic, stabilized with Yttrium ZrO2Y203.

Zirkonoxidkeramik stabilisiert mit Yttrium ZrO2Y203.



258CR



Ceramic replacement tips. Easy to replace with a practical clip on/ off system. No screwdriver needed.

Austauschbare Keramikspitzen, sehr leicht auszuwechseln auch ohne Schraubenzieher.

WAFER HANDLING TWEEZERS

WAFERPINZETTEN

Designed with care for all different and delicate appliances of Gallium or Silicon Wafers. Smooth polished surface on the inside of the paddle in order to prevent chipping and marring the wafer. Satin finish on the outside of the paddle for glare prevention. Stopping pins, turned up lateral edges and graduated lower paddles prevent the Wafers from slipping. Each Wafer size has its corresponding tweezers size (e.g. for an 8" Wafer take tweezers with a No.8). Teflon coating or other available.

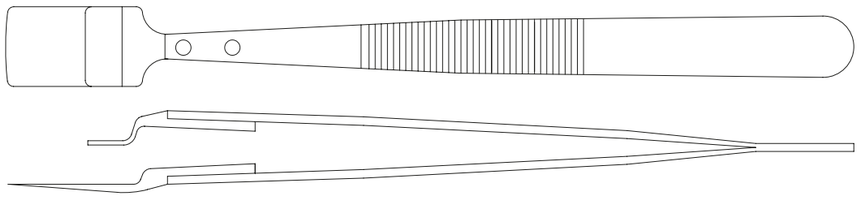
Für das sanfte Handling empfindlicher Gallium oder Silizium Wafer. Innen mit glatt polierter Oberfläche, um Beschädigungen am Wafer zu vermeiden, aussen eine glasperlengestrahlte, satinierte Oberfläche für blendfreies Arbeiten. Stopp-Bolzen, nach oben gebogene seitliche Kanten und eine untere Schaufel mit Anschlagwinkel verhindern das Wegrutschen der Wafer. Jede Wafer-Grösse hat ihre Pinzettengrösse (z.B. 8" Wafer /Pinzette Nr. 8). Teflon- und andere Beschichtungen lieferbar.

43LB-4 Peek 138 mm 5 1/2"
43LB-4 Polyamide 138 mm 5 1/2"

	B	C	D	E	F	M	N	R	S
mm	13	21	4	6	5	9	1.5	61	35
inch	1/2	3/4	1/6	1/4	1/5	1/3	1/16	2 1/3	1/38

Peek: ESD safe, 105 Ω x cm soft, conductive fiber tips, heat resistance up to 250°C (short exposure 300°C).
Polyamide: ESD safe, 103 Ω x cm, heat resistance up to 175°C.

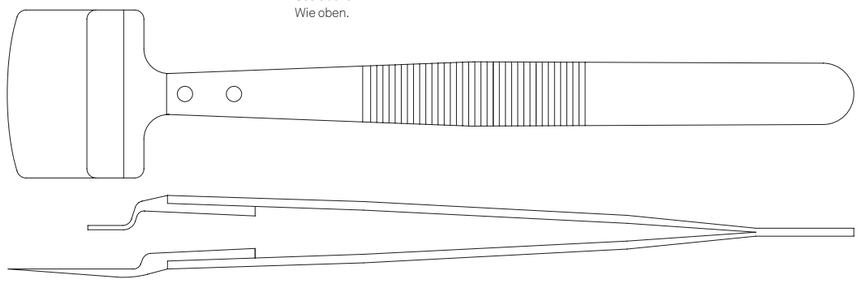
Peek: ESD sicher, 105 Ω x cm weiche, leitfähige Fiberspitzen, hitzebeständig bis 250°C (kurzzeitig bis 300°C).
Polyamide: ESD sicher, 103 Ω x cm, hitzebeständig bis 175°C.



43LB-8 Peek 138 mm 5 1/2"
43LB-8 Polyamide 138 mm 5 1/2"

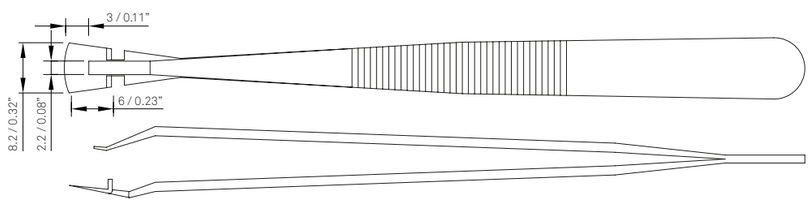
	B	C	D	E	F	M	N	R	S
mm	27	21	4	6	5	11	1.5	61	35
inch	1	3/4	1/6	1/4	1/5	1/2	1/16	2 1/3	1/38

See above.
Wie oben.



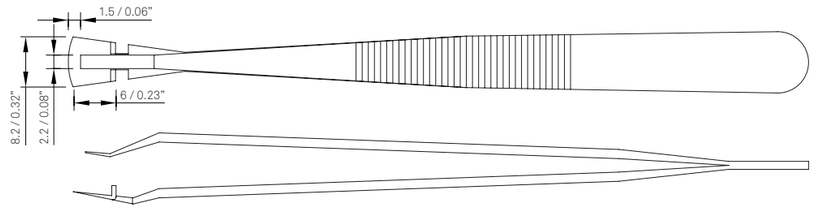
37S-1 120 mm 4 3/4"

	E	M	N	P	R	S
mm	3	10	1.5	50	46	35
inch	1/8	1/3	1/16	2	1 3/4	1 3/8



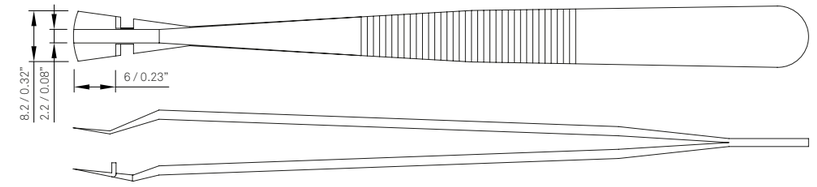
37S-2 120 mm 4 3/4"

	E	M	N	P	R	S
mm	4.5	10	1.5	50	46	35
inch	1/8	1/3	1/16	2	1 3/4	1 3/8



37S-3 120 mm 4 3/4"

	E	M	N	P	R	S
mm	6	10	1.5	50	46	35
inch	1/4	1/3	1/16	2	1 3/4	1 3/8

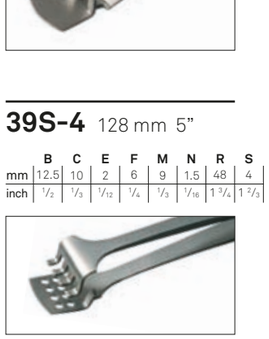


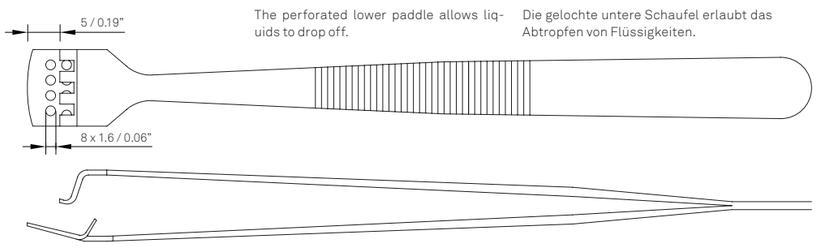
39S-4 128 mm 5"

	B	C	E	F	M	N	R	S
mm	12.5	10	2	6	9	1.5	48	4
inch	1/2	1/3	1/12	1/4	1/3	1/16	1 3/4	1 2/3

The perforated lower paddle allows liquids to drop off.

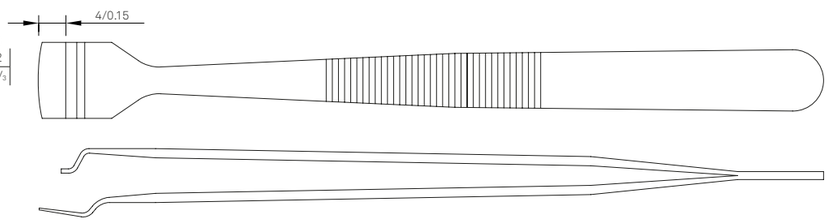
Die gelochte untere Schaufel erlaubt das Abtropfen von Flüssigkeiten.





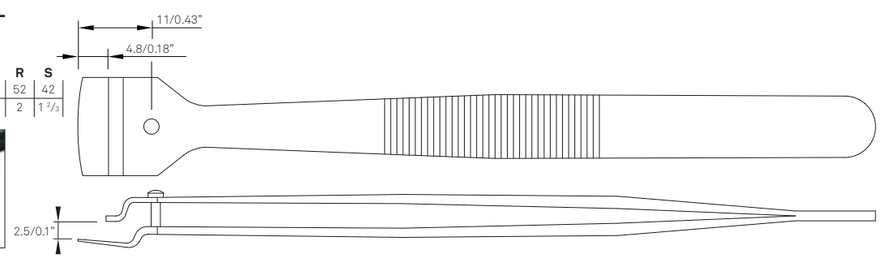
2LB/4 128 mm 5"

	B	C	D	E	F	M	N	R	S
mm	12.5	10	3	2	4	9	2	48	42
inch	1/2	1/3	1/8	1/12	1/6	1/3	1/12	1 3/4	1 2/3



2LB-P 130 mm 5 1/8"

	B	C	D	E	F	M	N	R	S
mm	16	9	3	2	4	11	2	52	42
inch	2/3	1/3	1/8	1/12	1/6	1/2	1/12	2	1 2/3

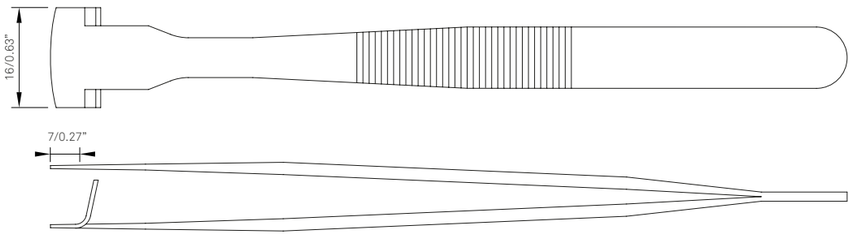


WAFER HANDLING TWEEZERS

WAFERPINZETTEN

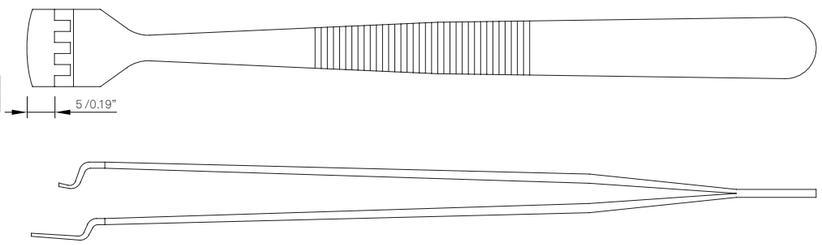
NW 130 mm 5 1/3”

	B	C	M	N	R	S
mm	16	6	11	2	52	42
inch	2/3	1/4	1/2	1/12	2	1 2/3



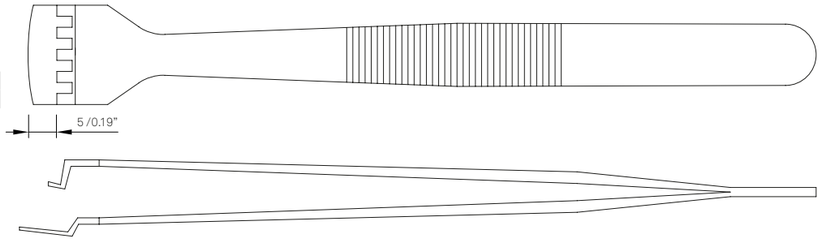
42LB-4 128 mm 5”

	B	C	D	E	F	M	N	R	S
mm	12.5	8	3	2	5	9	1.5	48	42
inch	1/2	1/5	1/8	1/12	1/5	1/3	1/16	1 3/4	1 2/3



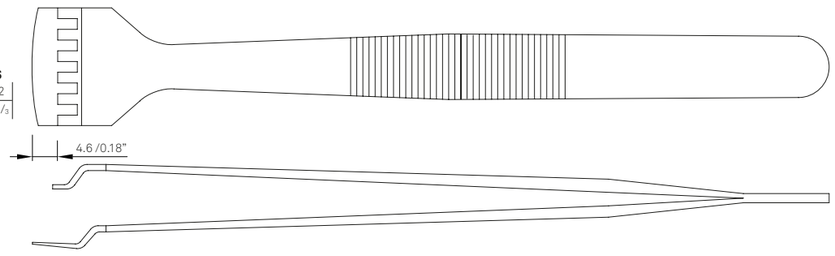
42LB-5 128 mm 5”

	B	C	D	E	F	M	N	R	S
mm	16	9	3	2	4	11	2	52	42
inch	2/3	1/3	1/8	1/12	1/6	1/2	1/12	2	1 2/3



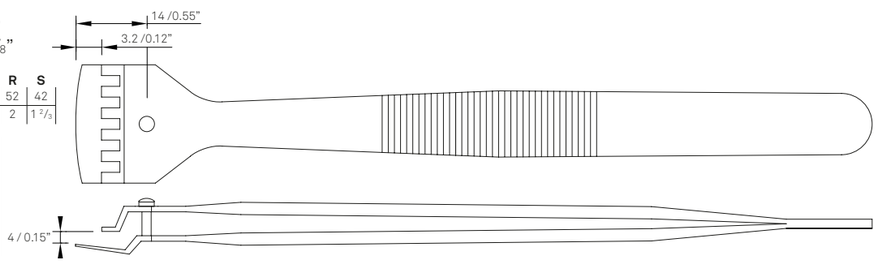
42LB-6 130 mm 5 1/8”

	B	C	D	E	F	M	N	R	S
mm	19.5	8	3	3	4	11	2	52	42
inch	3/4	1/3	1/8	1/8	1/6	1/2	1/12	2	1 2/3



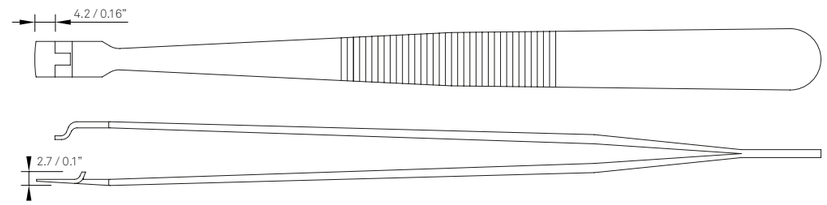
41LB-6P 130 mm 5 1/8”

	B	C	D	E	F	M	N	R	S
mm	19.5	8	3	3	4	11	2	52	42
inch	3/4	1/3	1/8	1/8	1/6	1/2	1/12	2	1 2/3



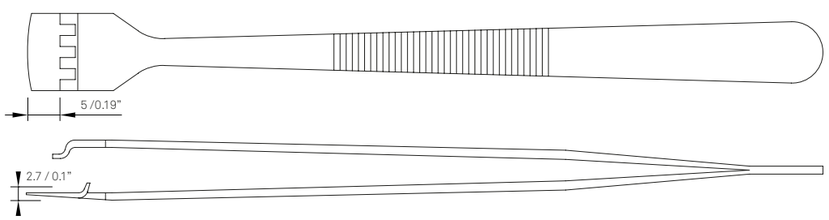
41LB-2 128 mm 5”

	B	C	E	F	M	N	R	S
mm	6	7	2	3	9	1.5	52	42
inch	1/4	1/4	1/12	1/8	1/3	1/16	2	1 2/3



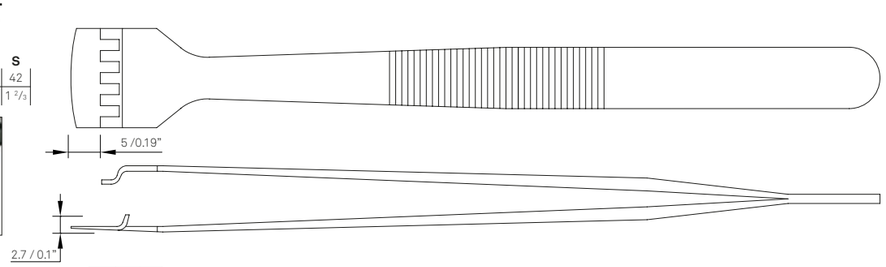
41LB/4 130 mm 5 1/8”

	B	C	E	F	M	N	R	S
mm	12.5	9	2	3	10	1.5	48	42
inch	1/2	1/3	1/12	1/8	1/3	1/16	1 3/4	1 2/3



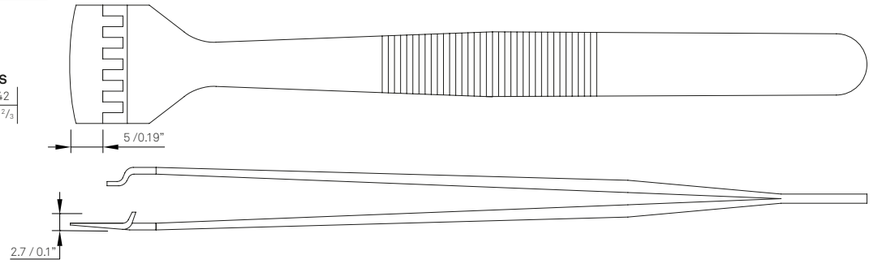
41LB-5 132 mm 5 1/4”

	B	C	E	F	M	N	R	S
mm	16	9	2	3	11	2	52	42
inch	3/4	1/3	1/12	1/8	1/2	1/12	2	1 2/3



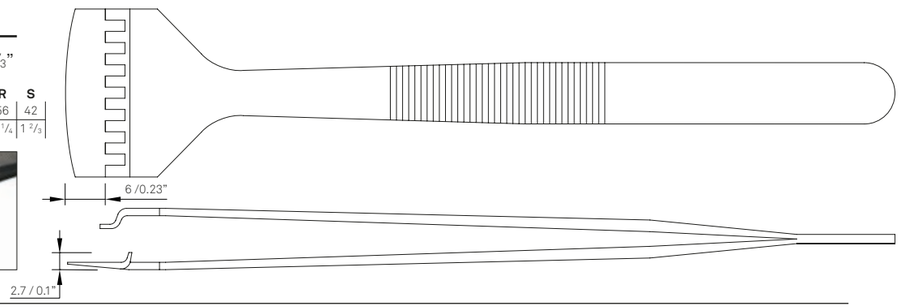
41LB-6 130 mm 5 1/8”

	B	C	E	F	M	N	R	S
mm	19.5	9	2	3	11	2	52	42
inch	3/4	1/3	1/12	1/8	1/2	1/12	2	1 2/3



41LB-8 135 mm 5 1/3”

	B	C	E	F	M	N	R	S
mm	27	9	2	3	12	2	56	42
inch	1	1/3	1/12	1/8	1/2	1/12	2 1/4	1 2/3

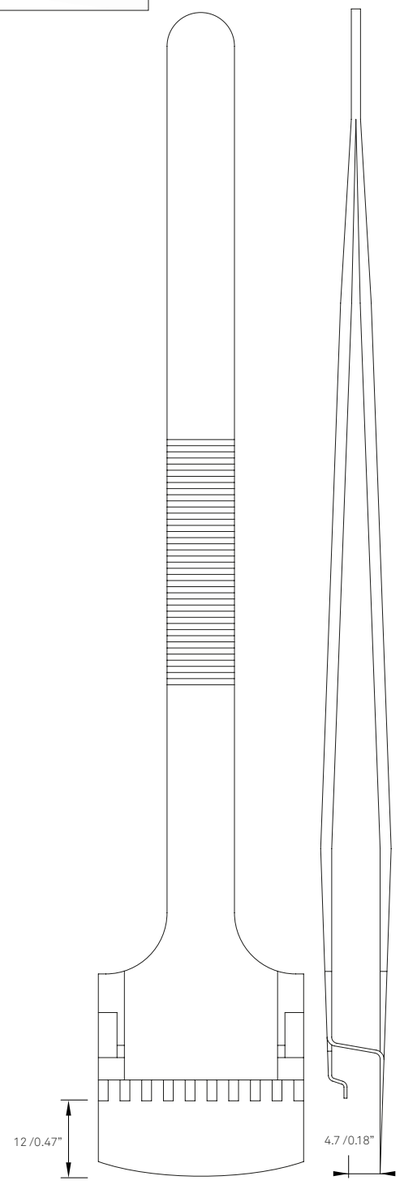


WAFER HANDLING TWEEZERS

WAFERPINZETTEN

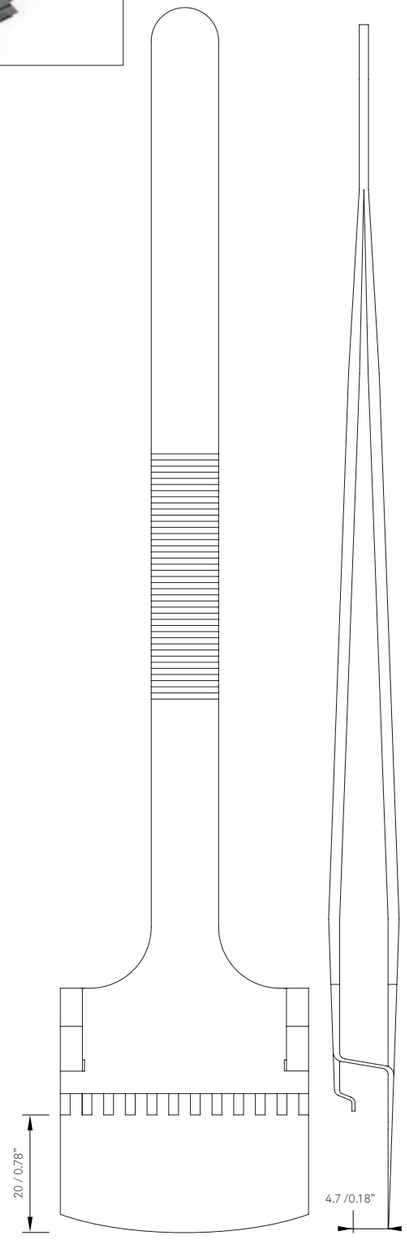
43LB-10 190 mm 7 1/2”

	B	C	D	E	F	M	N	R	S
mm	33.5	20	7	2	3	13	2	77	42
inch	1 1/3	3/4	1/4	1/12	1/8	1/2	1/12	3	1 2/3



43LB-12 200 mm 7 3/4”

	B	C	D	E	F	M	N	R	S
mm	40	26	7	2	3	13	2	86	42
inch	1 1/2	1	1/4	1/12	1/8	1/2	1/12	3 1/2	1 2/3

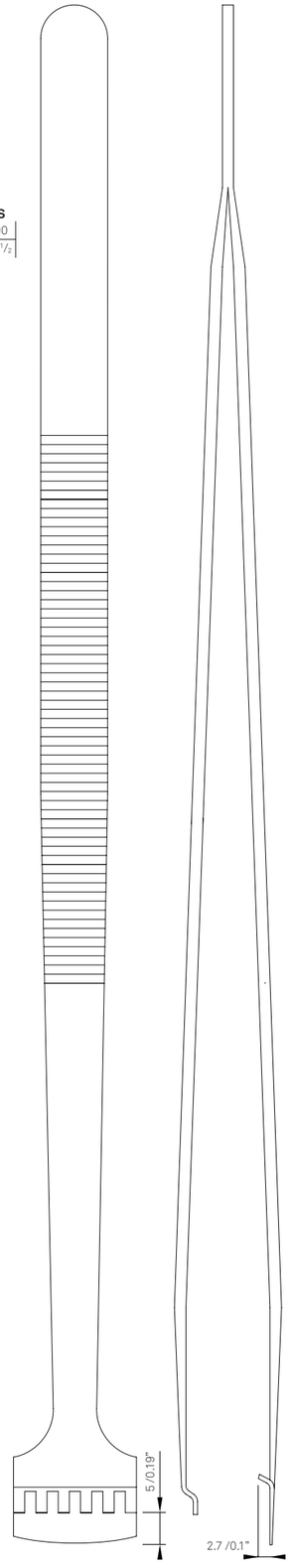


43LB-14 208 mm 8 1/4”

	B	C	D	E	F	M	N	R	S
mm	48.5	35	8	2	3	13	2	95	42
inch	2	1 3/8	1/3	1/12	1/8	1/2	1/12	3 3/4	1 2/3

41LB-6/8 215 mm 8”

	B	C	E	F	M	N	R	S
mm	19.5	9	2	3	11	2	70	90
inch	3/4	1/3	1/12	1/8	1/2	1/12	2 3/4	3 1/2

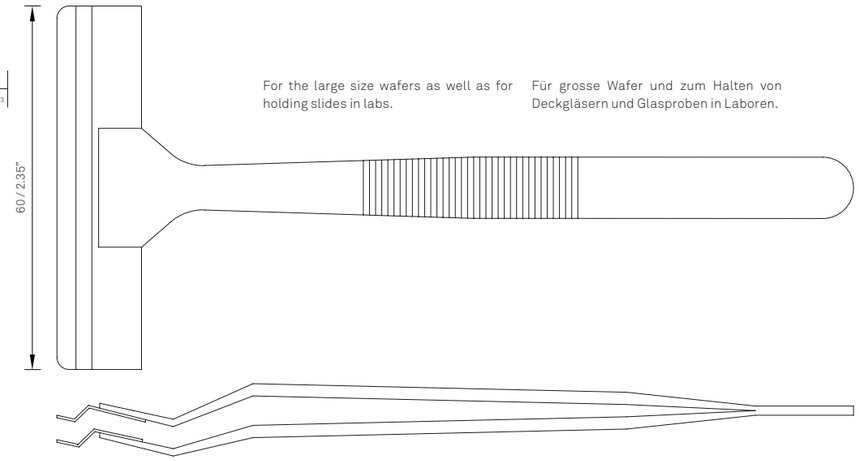


WAFER HANDLING TWEEZERS

WAFERPINZETTEN

ARG 130 mm 5 1/8”

	B	C	D	E	F	M	N	R	S
mm	60	3	3	3	3	11	2	52	42
inch	2 1/3	1/8	1/8	1/8	1/8	1/2	1/12	2	1 2/3

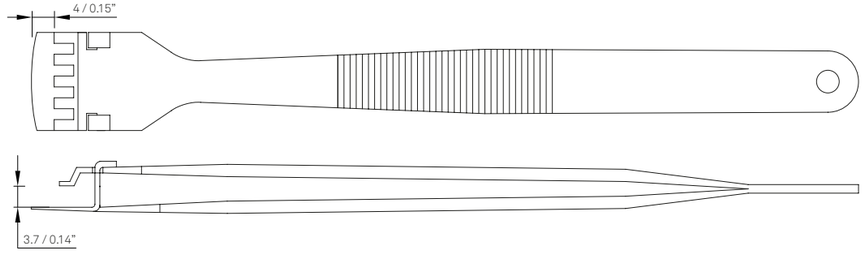


For the large size wafers as well as for holding slides in labs.

Für grosse Wafer und zum Halten von Deckgläsern und Glasproben in Laboren.

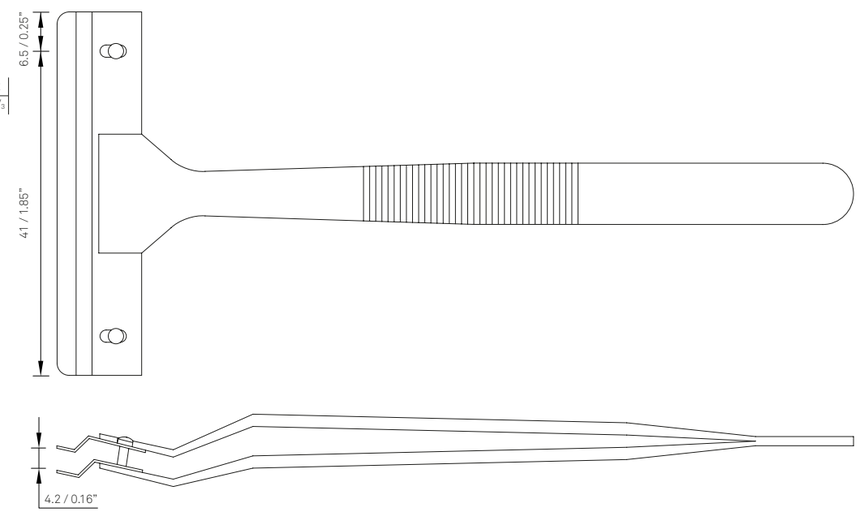
43LB-5 135 mm 5 1/3”

	B	C	E	F	M	N	R	S
mm	16	9	2	3	11	2	56	42
inch	3/4	1/3	1/12	1/8	1/2	1/12	2 1/4	1 2/3



ARG/P 130 mm 5 1/8”

	B	C	D	E	F	M	N	R	S
mm	60	3	3	3	3	11	2	52	42
inch	2	1/8	1/8	1/8	1/8	1/2	1/12	2	1 2/3



1C300 see page 77 / siehe Seite 77

LONG TAIL TWEEZERS

EXTRA LANGE PINZETTEN

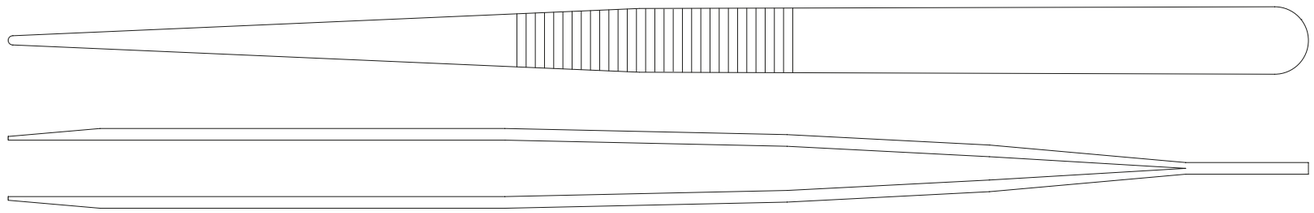
Different shapes of long tail tweezers in different executions for special applications.

Lange Pinzetten in verschiedenen Ausführungen für Spezialanwendungen.

232/8 215 mm 8”

	M	N	R	S	T	U
mm	10,5	8	84	44.5	16.5	1.9
inch	3/4	1/3	3	5/16	3/4	21/32

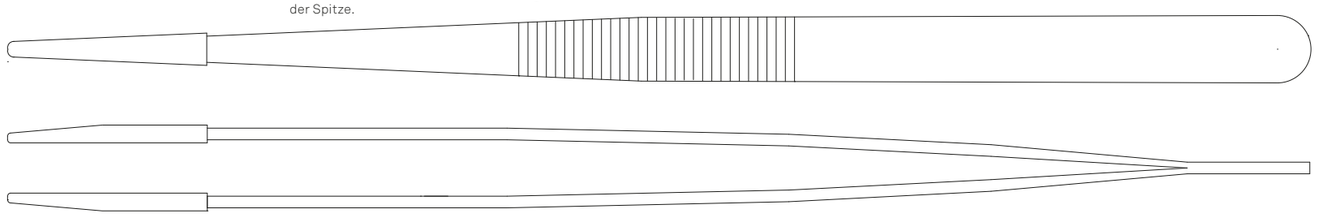
Tips grooved inside. Spitzen innen gerillt.



232PL8 215 mm 8”

	M	N	R	S	U
mm	10,5	1.9	83.5	45	3
inch	3/4	21/32	3	1/4	1/8

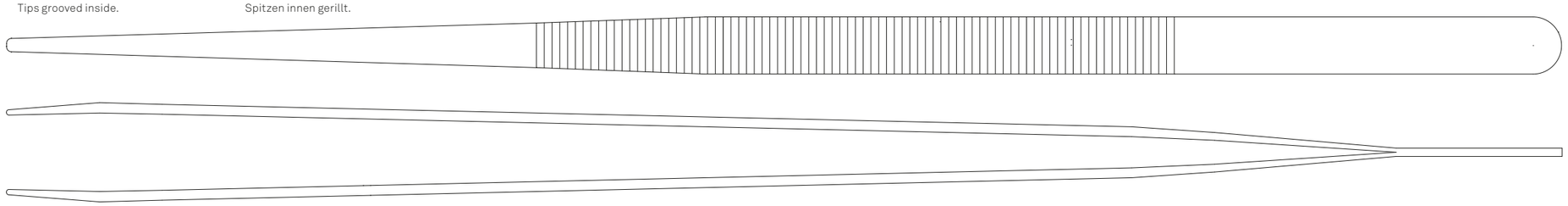
With an isolation plastic cover tips. Mit isolierender Kunststoffbeschichtung der Spitze.



232/12 300 mm 12”

	M	N	R	S	T	U
mm	10,5	1.9	103	124	19	2.6
inch	3/4	21/32	4	4	3/4	7/64

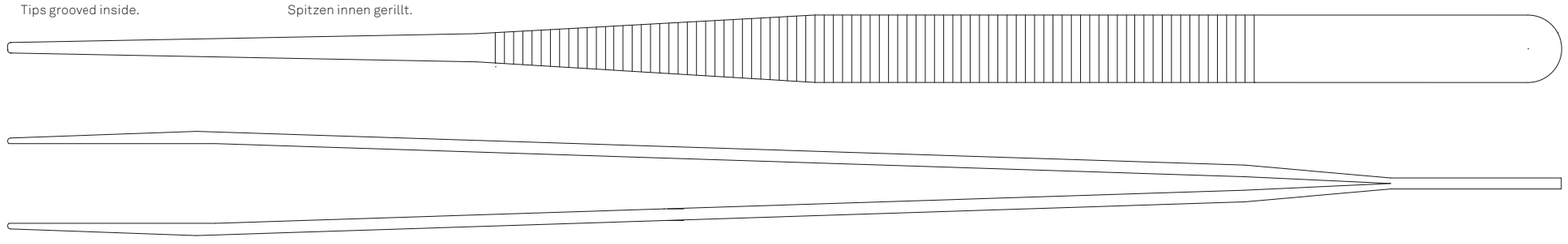
Tips grooved inside. Spitzen innen gerillt.



232/10 255 mm 10”

	M	N	R	S	T	U
mm	10,5	1.9	80	125	19	2.4
inch	3/4	5/64	3	5	3/4	3/32

Tips grooved inside. Spitzen innen gerillt.



SPECIAL WATCHMAKING TOOLS

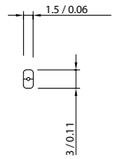
UHRMACHERWERKZEUG

Extraordinary traditional watch making tweezers that are still used for the manufacturing of the world`s most prestigious Swiss watches. Only with the utmost skill and traditional workmanship it is still possible to manufacture them. A dying art form; yet Rubis still stands up to this challenge.

Noch heute werden traditionelle Uhrmacherpinzetten eingesetzt, um die weltbekannten Schweizer Uhren herzustellen. Nur dank überlieferter Handwerkskunst können diese Pinzetten in der notwendigen Qualität und Präzision hergestellt werden. Eine aussterbende Kunst, die bei Rubis weiterlebt und gepflegt wird.

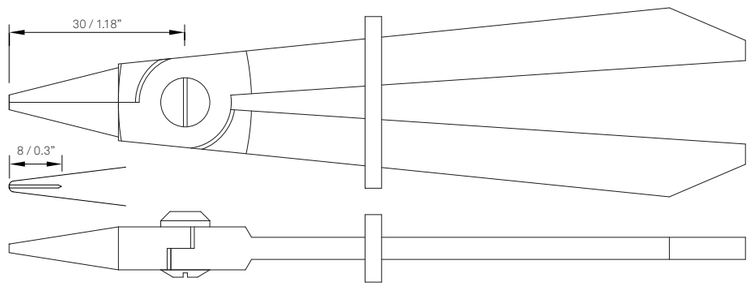
24 120 mm 4 ¾”

	N
mm	35
inch	1/8



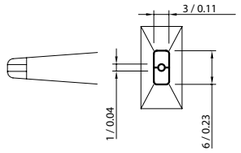
Minute wheels studs tong tool.

Zange für Wechselradstifte.



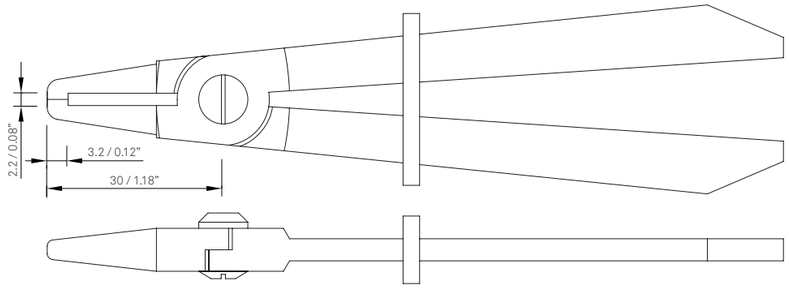
25 120 mm 4 ¾”

	N
mm	35
inch	1/8



Minute wheels studs tong tool.

Zange zum Schraubenhalten.

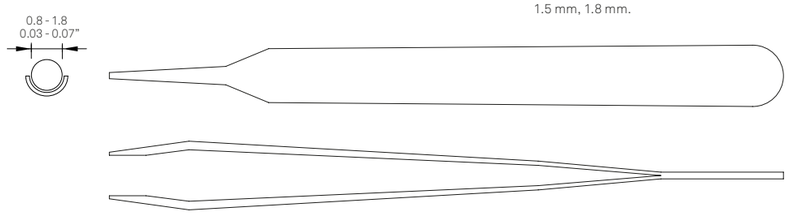


10 110 mm 4 1/3”

	M	N	P
mm	10	1.5	26
inch	1/3	1/16	1

Breguet tweezers outside dia. of 0.8 mm, 1 mm, 1.2 mm, 1.5 mm, 1.8 mm.

Breguet Pinzette, lieferbar mit Aussendurchmesser 0.8 mm, 1 mm, 1.2 mm, 1.5 mm, 1.8 mm.

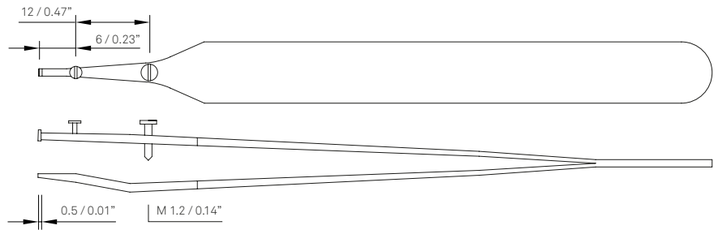


9 110 mm 4 1/3”

	M	N	P
mm	10	1.5	26
inch	1/3	1/16	1

Breguet tweezers available in outside dia. 1 mm, 1.3 mm, 1.6 mm.

Breguet Pinzette, lieferbar mit Aussendurchmesser 1 mm, 1.3 mm, 1.6 mm.

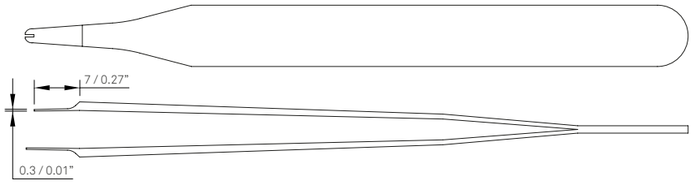


10H 108 mm 4 1/4”

	M	N	P	U
mm	10	1.5	26	2.3
inch	1/3	1/16	1	1/10

Breguet tweezers available in outside dia. 0.03 mm.

Breguet Pinzette, lieferbar mit Aussendurchmesser 0.03 mm.

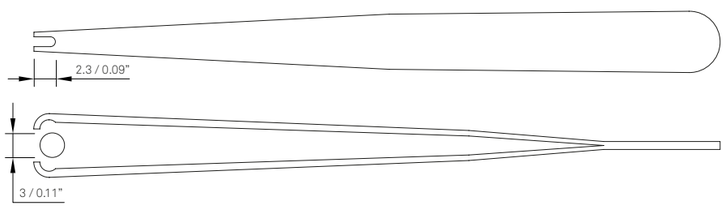


15S 112 mm 4 1/2”

	M	N	P	U
mm	10	1.5	55	2.5
inch	1/3	1/16	2 1/8	1/10

Breguet tweezer.

Breguet Pinzette.

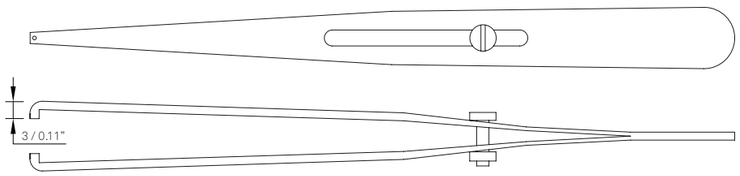


SPECIAL WATCHMAKING TOOLS
UHRMACHERWERKZEUG

23B 115 mm 4 1/2”

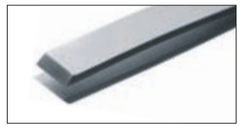
	M	N	P	U
mm	10	1.5	40	2
inch	1/3	1/16	1 1/2	1/12

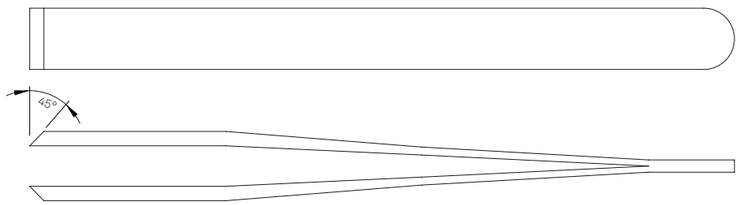
Breguet tweezer. Breguet Pinzette.



8 115 mm 4 1/2”

	M	N
mm	10	2.5
inch	1/2	1/10

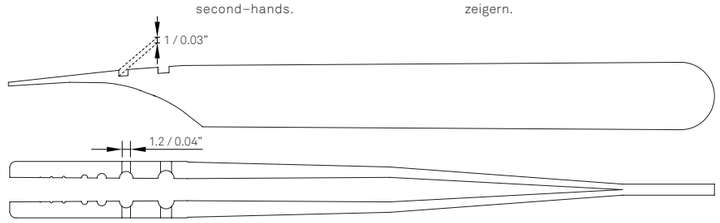




14 115 mm 4 1/2”

	M	N	P
mm	11	3	31
inch	1/2	1/10	1 1/4

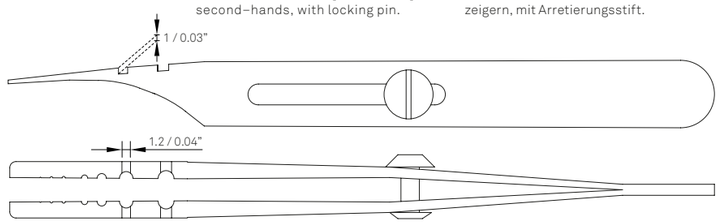
Tweezers for removing and holding second–hands. Pinzette zum Festhalten von Sekundenzeigern.



14A 115 mm 4 1/2”

	M	N	P
mm	11	3	31
inch	1/2	1/10	1 1/4

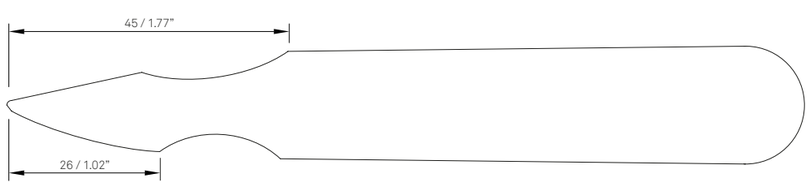
Tweezers for removing and holding second–hands, with locking pin. Pinzette zum Festhalten von Sekundenzeigern, mit Arretierungsstift.



52 130 mm 5 1/8”

	M	N
mm	19	1.5
inch	3/4	1/16

Watch case opener. Uhrengehäuseöffner.



MICRO SCISSORS
MIKROSCHEREN

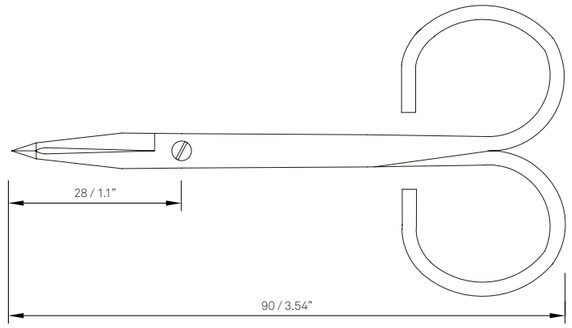
Quality precision scissors, manufactured from hardened, best anti acid, stainless, martensitic steel, creating high precision blades that provide a perfect cut. The Rubis Twist® grip has been ergonomically designed for comfort and control.

Hochwertige Spezialscheren mit Präzisionsscherenblättern aus bestem, hoch gehärtetem, korrosions- und säurebeständigem martensitischem Stahl für den perfekten Schnitt. Der ergonomisch gestaltete Rubis Twist® Griff bietet besten Komfort und Kontrolle.

1K603 90 mm 3 1/2”

	N	U
mm	5.4	2.8
inch	1/4	1/8

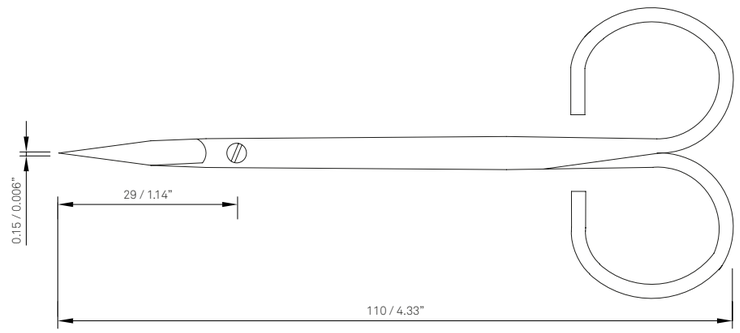
Precision tweezers engineered into a scissors-movement. Scherenpinzette. Statt Scherenblättern Spitze einer Präzisionspinzette.



1C300 110 mm 4 1/3”

	N
mm	5.4
inch	1/4

Sharp pointed micro scissors. Spitze Mikroschere.



1C200 146 mm 5 3/4”

	N
mm	6.4
inch	1/4

Long legged bandage scissors with rounded off tips. Verbandschere mit langen Scherenblättern und abgerundeter Spitze.

DIAMOND SCRIBERS

MARKIERSTIFTE

High quality, precision scribing pens for marking, engraving glass, silicon, gallium, ceramics, metals and circuit boards. Used in laboratory, electronics and R & D.

Sehr hochwertige Präzisionsmarkierstifte zum Markieren und Gravieren von Glas, Silizium, Gallium, Keramik, Metall und Leiterplatten. Einsatzgebiete in Laboren, Elektronik und F & E.

DS1F 150 mm 6”

	N
mm	6.5
inch	1/4

Aluminum hex handle diamond scriber. Extreme fine and bent diamond tip.

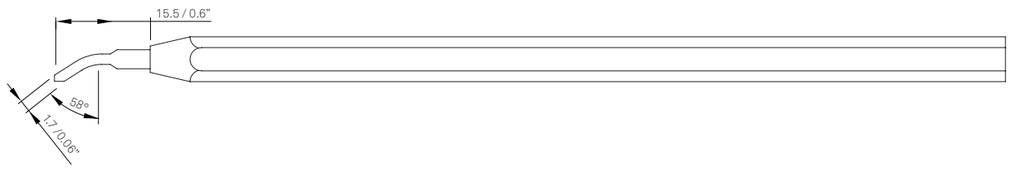
Markierstift mit Sechskant-Griff aus Aluminium. Extrem feine und gebogene Diamantspitze.

DS1H 155 mm 6”

	N
mm	6.5
inch	1/4

Aluminium hex handle diamond scriber. Sturdy, resistant and bent diamond tip.

Markierstift mit Sechskant-Griff aus Aluminium. Robuste und gebogene Diamantspitze.

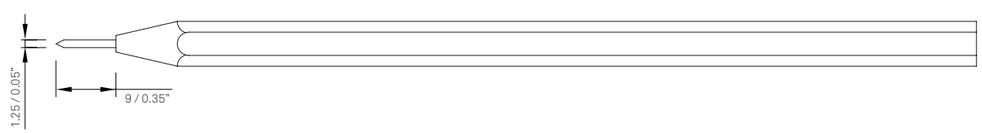


DS2F 150 mm 6”

	N
mm	6.5
inch	1/4

Aluminum hex handle diamond scriber. Very fine straight diamond tip.

Markierstift mit Sechskant-Griff aus Aluminium. Extrem feine gerade Diamantspitze.

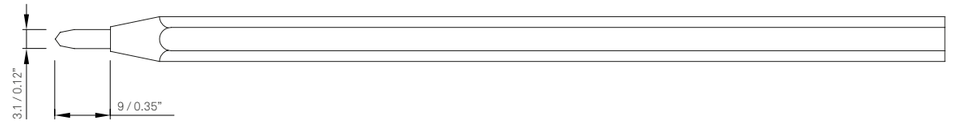


DS2H 145 mm 5 2/3”

	N
mm	6.5
inch	1/4

Aluminum hex handle. Large resistant straight diamond tip.

Markierstift mit Sechskant-Griff aus Aluminium. Sehr robuste gerade Diamantspitze.



DS3 130 mm 5 1/8”

	N
mm	8
inch	1/3

Diamondscriber pen with refill. Fine diamond tip.

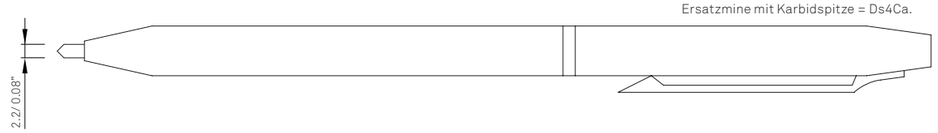
Markierstift in Drehkugelschreiberform mit Mine mit feiner Diamantspitze. Ersatzminen lieferbar.

DS4 138 mm 5 1/2”

	N
mm	8
inch	1/3

Diamond and Carbide Scriber.
Twist right = it’s a Diamond scriber (for marking hard material).
Twist left = it’s a Carbide scriber (for marking soft material). Refills available.
Diamond refill= Ds4D1.
Carbide refill= Ds4Ca.

Markierstift in Drehkugelschreiberform mit 2 Minen mit Diamant- und Karbidspitze. Dreht man rechts, wird die Diamantspitze zum Markieren harter Materialien ausgefahren, dreht man links, die Karbidspitze für weiche Materialien. Ersatzminen lieferbar.
Ersatzmine mit Diamantspitze = Ds4D1.
Ersatzmine mit Karbidspitze = Ds4Ca.



SWEEZER - ALUMINUM TWEEZERS

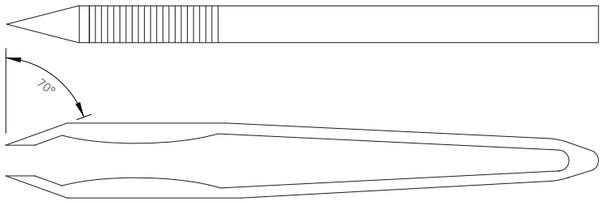
PINZETTE AUS ALUMINIUM

The world's first seamless aluminum tweezers. Virtually weightless and very economical. No hand fatigue! A perfect blend of quality, technical advances and contemporary design. Encased in an unique transparent protective tube.

Die erste nahtlose Pinzette aus Aluminium. Ultraleicht, beugt sie der Erschöpfung der Hand vor. Eine perfekte Mischung aus Qualität, technischem Fortschritt und zeitgenössischem Design. Geschützt in einer transparenten Hülle.

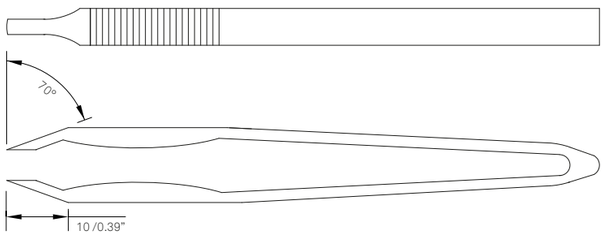
EW 00 95 mm 3 3/4"

	M	N	P	R	S
mm	6	1.8	10	12	22
inch	1/4	1/12	1/3	1/2	3/4



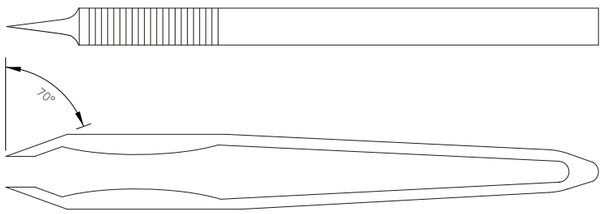
EW 2A 95 mm 3 3/4"

	M	N	P	R	S	U
mm	6	1.8	10	12	22	2.5
inch	1/4	1/12	1/3	1/2	3/4	1/10



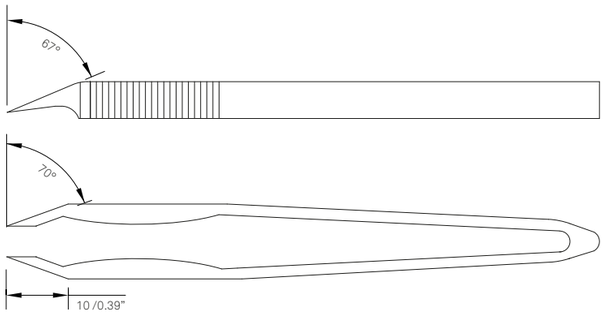
EW 3 95 mm 3 3/4"

	M	N	P	R	S
mm	6	1.8	10	12	22
inch	1/4	1/12	1/3	1/2	3/4



EW 5A 95 mm 3 3/4"

	M	N	P	R	S
mm	6	1.8	10	12	22
inch	1/4	1/12	1/3	1/2	3/4



DESIGN AWARD "FORM 2001" FRANKFURT:

FORM

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