AVEN

1983 – 2008
25
YEARS OF EXCELLENCE
AVEN INC.

Products:
for Optical Inspection, Assembly and Field Services

AVEN

25th Anniversary

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Aven Inc. | 4595 Platt Road | Ann Arbor, MI 48108
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About AVEN

With a product line that features more than 750 tools for optical inspection and precision assembly, Aven, Inc. has made a name for itself as a leading precision technology provider.

When Aven was founded in 1983, our objective focused on the importing and wholesaling of specialty tools. As the business evolved, we expanded our product portfolio to include more high technology tools, thus allowing us to engage in new market segments.

In 1997, Aven underwent its first progression, shifting from traditional workbench tools to industrial electronics supplies. We then turned our focus to precision tools for optical inspection and precision assembly.

Today, Aven's product line includes stationary and portable microscopes, video inspection systems, specialty high-resolution digital and video cameras, lenses, illuminated magnifiers, software for image analysis and tools for precision assembly.

The AVEN Advantage

While we offer a broad product line of optical inspection equipment components, Aven's true value to customers is realized in our positioning as a full-service technology provider.

As a result of years of comprehensive research and development, Aven has expanded its expertise in the realm of design and customized configuration of advanced video inspection systems. Our solution-based experts possess the ability to recommend and create complete optical systems according to customer's needs and budgets. We also develop new products based on the specifications of our customers.

To form a clearer understanding of our customers and their needs, Aven's specialists make on-site visits to evaluate client's testing and/or quality control stations. Based on the findings, we are able to recommend application improvements and demonstrate the latest advances in testing equipment technology.

A highly experienced sales staff and our diverse and extensive product mix allow us to meet the needs of the optical measurement and electronic equipment markets. Aven also provides a variety of ancillary services such as product assembly, custom parts and tooling, and distribution, all of which are coordinated from our Michigan headquarters.

iSeries

From the world's first compact portable microscope to tools that are as simple as "plug and play," Aven's iSeries line of digital microscope technology offers a variety of functions and capabilities that are applicable to a number of industries.

The iSeries product line includes:

iLoupe

The world's first compact portable field microscope/camera combination with zoom capability of up to 150x.

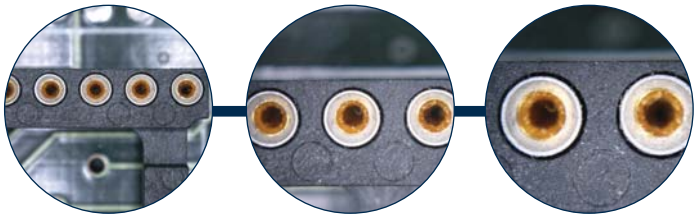
i360

A 3-D microscope featuring enhanced viewing capabilities, including a 360-degree rotational view and oblique viewing angles up to 55 degrees.

iGauge

Video imaging and measurement software that enables the user to measure, annotate and analyze images with just a few clicks.

iLoupe



10x 20x 30x

26700–501S

- **World's first compact portable field microscope, available anytime and anywhere**
- **2 in 1 device. Standard Digital Camera & a High Power Microscope**
- **Built in Adjustable LED Lighting**
- **High Resolution 7 mega-pixel Canon Camera**
- **10x, 20x and 30x objective lenses available giving a magnification range of 10x to 150x**
- **Cost Effective Offering with Powerful Functions**

The first compact portable field microscope utilizes a digital camera with a patented module and specially designed lenses with built in high intensity adjustable LED Lights. The iLoupe can clearly capture objects from 6mm to 10 microns. This 2 in 1 device allows you to quickly interchange between a standard digital camera and a microscope. You can now carry a portable field microscope and a digital camera in your pocket with ease. Three objective lenses are available to meet a variety of different applications. Using the optical and digital zoom range of the camera the following magnification ranges are produced:

With the 10x objective lens: 10x to 60x
With the 20x objective lens: 20x to 100x
With the 30x objective lens: 30x to 150x

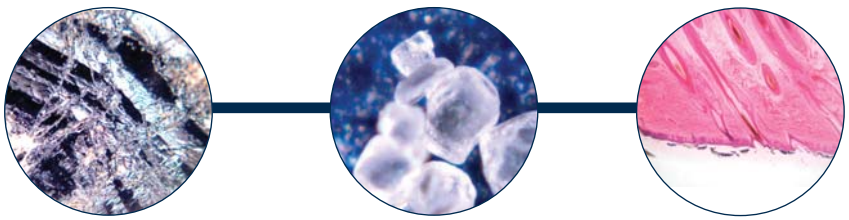
The iLoupe is available in Starter Pack and Pro Pack Versions. The iLoupe Starter Pack includes the Canon Camera with the Adapter Ring, Module and a 10x–60x Objective Lens. The iLoupe ProPack includes the Canon Camera with the Adapter Ring, Module and three objective lenses (10x–60x), (20x–100x) and (30x–150x). Both the Starter Pack and Pro Pack are supplied in a Plastic Carrying Case.

Applications

QC Inspection
Research

Medical
Forensics

Archaeology,
Forestry and Much More



Visit **www.aveninc.com** *to see more images taken with the iLoupe.*

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iLoupe Accessories

iLoupe Carrying Case

26700–506

iLoupe Pro Pack

26700–501P

iLoupe Stand

26700–505

Specifications

	iLoupe Starter Pack	iLoupe Pro Pack
Objective Lenses included	10x	10x, 20x, and 30x
Magnification Range	10x –60x	10x-150x
Field of View	10x: 16x12mm, 20x: 9x6.5mm, 30x: 5.7x4.5mm	
Lens Design	Schott No-Lead Optical Grade Glass	
Coating	Multi-Layer Anti-Reflective Coating	
Built in Dimmable Illumination	4 White LED Lights	
Batteries	Two Li-ion Rechargeable Batteries Included	

Order #	Description
26700-501S	**iLoupe Starter Pack** w/ Plastic Carrying Case
26700-501P	**iLoupe Pro Pack** w/ Plastic Carrying Case
26700-505	**iLoupe Stand**
26700-506	**iLoupe Carrying Case**
26700-501-10	**Replacement Lens 10x-60x**
26700-501-20	**Replacement Lens 20x-100x**
26700-501-30	**Replacement Lens 30x-150x**

i360

- **3D 360 degree rotational view with a 45 degree oblique viewing angle.**
- **Zoom 50x-300x with great depth of field**
- **Built in LED lighting with intensity control**
- **Rotate clockwise or counter clockwise**
- **Ideal for SMT, Semiconductor IC, Medical Devices, Research and Failure Analysis**

i360 3D Microscope is designed to give you a 3D perspective with rotation to your inspection process. The user can now view the specimen from all angles without having to move it. This helps reduce evaluation times and improves the QC process.

i360 also comes with our optional PC Link software that allows for image capture and measurement. It can also be connected directly to a PC with our optional USB Camera. Our USB Camera comes with our Infinity Analyze Imaging Software. Infinity analyze allows you to quickly and easily process images which can be entered into an archive application or saved in a variety of formats. Measurements and annotations are easy to perform, highly reproducible and can be customized to your needs.

i360 standard version comes with a 50x–300x lens with a 45 degree oblique viewer, high resolution analog color CCD Camera with BNC and S-Video Outputs, Control Box for controlling the LED light intensity, rotation (i.e. counter clockwise or clockwise), and rotational speed, 15" color flat panel monitor, and stand with focusing control. All cables and adapters are also included.

i360 Optional Accessories

- **USB Cameras with 1.4 and 2.0 megapixel resolution**
- **USB Video Link with Software for image capture, processing and archiving**

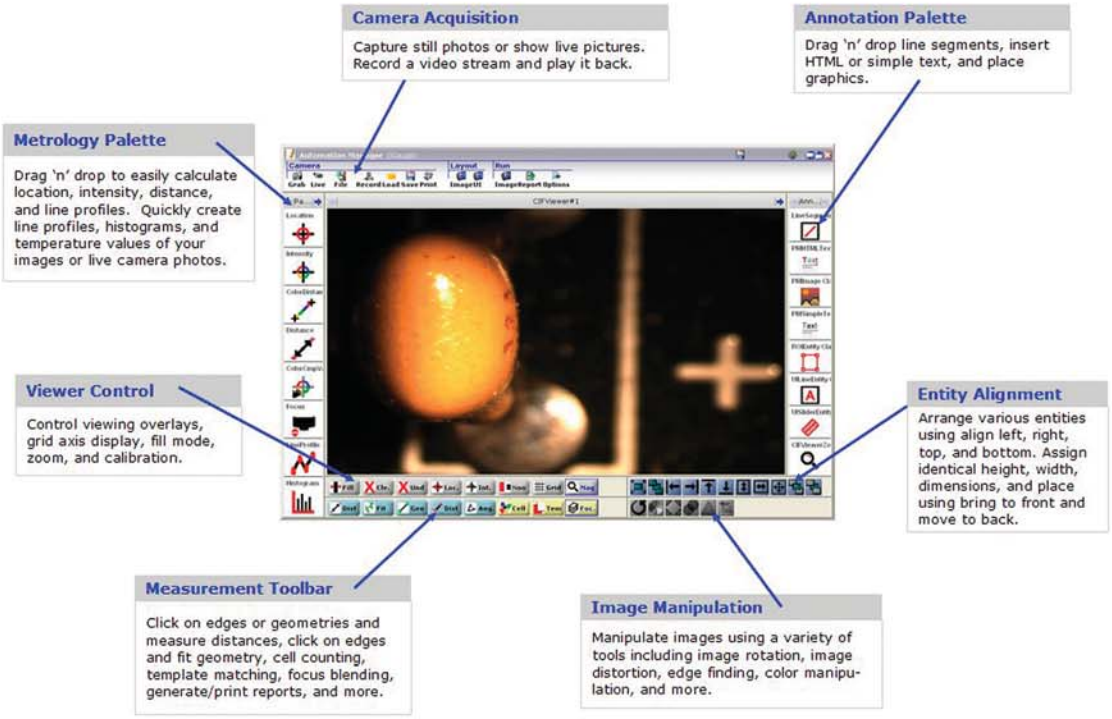
i360 Dimensions: Base – 13"x13" Height – 16 1/4"

Specifications

Magnification Range	50x-300x
Lighting	LED with Intensity Control
Camera	1/3" CCD Color Camera
Working Distance	55.5mm
Depth of Field	8mm to 1.2mm
Field of View	9.2mm to 1.3mm

Order #	Description
26700-106-10	**i360 3D Microscope** with 45 degree Viewer, 1/3" CCD Color Camera, Controller, Stand with Focus Control, and 15" Flat Panel Color Monitor.
26700-106-14	**i360 3D Microscope** with 45 Degree Viewer, USB 1.4 Mega Pixel Camera with Infinity Analyze Imaging Software, Controller, Stand with Focus Control
26700-106-20	**Same as 26700-106-14** USB 1.4 Megapixel Camera replaced with our USB 2.0 Megapixel Camera
26100-403	**USB Video Link with Software** for Image Capture, Processing and Archiving for use with our Analog CCD Camera. Basic measurement functions are included.

iGauge Video Imaging and Measurement Software



iGauge allows you to measure, annotate and analyze your images with just a few clicks. iGauge will dramatically increase the capability of any video camera based system. **Test Drive iGauge by downloading a 30 day trial version from our website www.aveninc.com**

SIMPLE AND EASY TO USE

Features:

- Image Capture, Record & Playback
- Viewing Tools
- Toolbar Geometry/Metrology
- Geometry Tools
- Annotation Tools
- Metrology Tools
- Image Processing Tools
- Reporting Tools
- Image Manipulation Tools
- Intuitive Interface

Order #	Description
26100-405	**iGauge Video Software**

Video Inspection Systems

Aven's Video Inspection Systems can be used for several applications, including inspection, defect analysis and quality assurance. Our products feature a wide range of lenses, cameras, lighting options, video capture cards and stands to enable us in creating a custom solution for you.

This product line includes:

Aven Micro Zoom Systems
Designed for high magnification and high resolution applications.

Aven Macro Zoom Video Inspection Systems
Designed for large field of view applications.

Aven Micro and Macro Systems now feature our NEW **miniVue** high resolution color camera with instant image capture and a built-in 2" high resolution LCD Screen.

Create Your Own Custom System @ **www.aveninc.com**

Aven Micro Zoom Video Inspection System VIS-6000

26700-102-00

Create Your Own Custom System @ **www.aveninc.com**

- **Designed for high magnification and high resolution applications**
- **Modular design allows you to vary magnification, field of view, and working distance**
- **Easily upgradeable**
- **Magnification Range: 10x–67x** (with 0.5x adapter and auxilary lens) **(20x–134x with the 0.5x lens removed)**
- **Working Distance: 143mm (5.6") to 187mm (7.36") (81-93mm with the 0.5x lens removed)**
- **Field of View: 34.32mm (1.35") to 5.32mm (0.2") (17.16–2.67mm with the 0.5x lens removed)**
- **miniVue 3.1 megapixel camera with instant image capture on built-in SD card and 2" high resolution LCD screen. Connect to a PC via USB, as well as to a larger LCD Monitor for detailed viewing**

Applications
Inspection of a wide range of objects such as integrated circuits, solder joints, surface analysis, quality control and laboratory inspection.

Customization
A variety of adapters & auxiliary lens, cameras, lighting options, video capture cards, and stands are available to provide a custom solution.

Magnification Range
2x to 2735x possible.
Call for more information.

High Accuracy Measurement
Detented Lenses are available for high accuracy measurements.

12x Zoom Lenses
For customers requiring the highest combination of zoom range and resolution. Visit www.aveninc.com for more information.

Order #	Description
26700–102–00	**VIS 6000** with Zoom 6000 lens, 0.5x adapter tube and auxilary lens, miniVue Camera and 150 watt FOI with Ring Light. Mounted on the Ergo Stand with 11"x18" base. With our miniVue camera, images can be saved directly onto a SD Card.

Micro Zoom Video Inspection System on Articulating Arm
26700-102-15

Micro Zoom Video Inspection System on Boom Stand
2700-102-10

Specifications

Lens Attachment	Mag/Field of View (mm)	.5x Adapter		1x Adapter		2x Adapter		5x Adapter	
		Low	High	Low	High	Low	High	Low	High
0.25x	Magnification	5x	33x	10x	67x	21x	134x	52x	329x
	Field of View	68.64	10.64	34.32	5.32	17.16	2.66	6.88	1.08
0.5x	Magnification	10x	67x	21x	133x	41x	267x	104x	671x
	Field of View	34.32	5.32	17.16	2.67	8.58	1.33	3.43	0.53
0.75x	Magnification	16x	100x	31x	200x	62x	400x	155x	1016x
	Field of View	17.16	2.67	8.58	1.33	4.29	0.67	1.72	0.27
None	Magnification	21x	133x	41x	267x	83x	531x	207x	1317x
	Field of View	17.16	2.67	8.58	1.33	4.29	0.67	1.72	0.27
1.5x	Magnification	31x	200x	62x	400x	124x	808x	312x	1976x
	Field of View	11.43	1.78	5.72	0.89	2.86	0.44	1.14	0.18
2x	Magnification	41x	267x	83x	531x	165x	1078x	413x	2735x
	Field of View	8.58	1.33	4.29	0.67	2.15	0.33	0.86	0.13

* Note magnification data calculated based on 1/3" CCD camera and a 15" LCD Monitor.

Order #	Description
26700–102-10	**VIS 6000 –** Same system as 2700-102-00 but mounted on a Dual Arm Ball Bearing Stand with a 1.3 Megapixel USB Camera with Image Capture and Measurement Software. *Monitor not Included.*
26700–102-15	**VIS 6000 –** Same system as 2700-102-10 but mounted on an Articulating Arm with Mounting Clamp. *Monitor not Included.*

* Systems 26700-102-10 and 26700-102-15 can also be ordered with our new miniVue Camera. Go to www.aveninc.com to configure a system.

Aven Macro Zoom Video Inspection System

Create Your Own Custom System @ **www.aveninc.com**

- **Designed for Large Field of View Applications**
- **6x Macro Zoom Lens with Adjustable Iris and Close-Up Lens**
- **Magnification: Up to 71x with a 15" Monitor Working Distance 5"**
- **Field of View: 291.6 to 213.8mm (11" to 8.4") (at 48" working distance allows Inspection of large samples.)**
- **System available with High Resolution USB Digital Cameras with Software**
- **Focal Range: 18mm – 108mm**
- **Working Distance: 5" – 12" with Close Up Lens, 24" to Infinity without close-up lens**

Applications
Quality Assurance, biomedical imaging or assembly applications where an easy to view, sharp and true-to-life magnified image is required.

Customization
A variety of adapters & auxiliary lens, cameras, lighting options, video capture cards, and stands are available to provide a custom solution. See chart on next page for more information on magnification and FOV ranges possible.

Macro Zoom Video Inspection System on Boom Stand

2700-103-00

Specifications

w/Close-Up Lens

Working Distance	FOV(mm) @ Low Mag.	FOV(mm) @ High Mag.	Magification Range
5″	25.9x19.4	4.3x3.2	12x – 71x
7″	38.9x29.2	6.5x4.9	8x – 47x
8″	45.5x34	7.6x5.7	7x – 40x
10″	58.3x43.7	9.7x7.3	5x – 31x

w/o Close-Up Lens

Working Distance	FOV(mm) @ Low Mag.	FOV(mm) @ High Mag.	Magification Range
24″	136.1x97.2	22.7x21.1	2x – 13x
36″	213.8x155.5	35.6x25.9	1.5x – 9x
48″	291.6x213.8	48.6x35.6	1x – 6x

Order #	Description
26700-103-00	**6x Macro Lens** mounted on a SS Dual Arm Ball Bearing Boom Stand, 1/3″ CCD Camera, 15″ LCD Monitor, PC Link Device and Software for Image Capture.

***** *Please note, in most applications additional illumination is not required for this lens system.*

Stereo Zoom Microscopes

Our stereo zoom and stereo microscopes are manufactured exclusively for Aven by Carton Optical of Japan. Carton Optical has been manufacturing microscopes for over 40 years. Their microscopes have gained a reputation for providing the very best in optical performance, durability, and versatility. With a diverse selection of bodies, stands, and lighting techniques a system can be configured to fit any application.

To configure your system select:

1. The microscope body that meets your magnification, field of view and working distance requirements. Note with a combination of eyepieces and auxiliary lens you can tailor a system to meet your requirements.
2. Focusing Mount.
3. Stand (please take into account the working distance and the height of the stand).
4. Illumination - Fiber Optic, Fluorescent or LED.
5. Camera and or adapter if you are using a trinocular body.
6. Monitor if necessary.

All stereo zoom bodies feature:

- Crisp high resolution precision optics that provide an erect, non-reversed stereoscopic image.
- Binocular eyepieces inclined at 45 degrees for fatigue free viewing.
- Diopter adjustments on both eyepieces.
- Interpupilary distance adjustment 52mm to 75mm.
- Body can be rotated a full 360 degrees and locked in any position.
- Trinocular zoom bodies feature a beamsplitter. When engaged 100% of the light from the left optical path is directed to the phototube. The image can still be viewed through the right eye tube.

Configure Your Own Custom Microscope System @ **www.aveninc.com**

SPZ-50 Series

- **Outstandingly large zoom ratio 7.46:1-best zoom ration in this class**
- **Magnification range: 6.7x to 50x**
- **Field of View 34.3mm to 3.6mm (1.35" to 0.14")**
- **Working distance 108mm (4.25") - the best in this class**
- **Magnification range of 2.25x to 200x with optional lenses**
- **17mm (0.67") high eye point wide field 10x eyepieces (field number 23) for comfortable viewing even for operators with eyeglasses.**
- **Trinocular version has diopter adjustment on vertical tube for fine focusing of image**

** Note specifications mentioned above are with Wide Field 10x eyepieces.*

[BEST SELLER]

SPZ-50

Binocular stereo zoom body with 10x eyepieces, rubber eye guards and dust cover

Optical Data

Eyepiece	DHW10X (F.N. 23)				
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	6.7x-50x	3.35x-25x	5x-37.5x	10.72x-80x	13.4x-100x
Working Dist.	108mm	240mm	132mm	50mm	41mm
Field of View	34.3-4.6mm	68.9-9.2mm	45.7-6.1mm	21.4-2.8mm	17.1-2.3mm

Eyepiece	DHW15X (F.N.15)				
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	10.05x-75x	5.02x-37.5x	7.53x-56.25x	16.08x-120x	20.1x-150x
Working Dist.	108mm	240mm	132mm	50mm	41mm
Field of View	22.3-3mm	44.7-6mm	29.8-4mm	16-1.8mm	11.1-1.5mm

Eyepiece	DHW20X (F.N. 11.4)				
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	13.4x-100x	6.7x-50x	10.05x-75x	21.44x-160x	26.8x-200x
Working Dist.	108mm	240mm	132mm	50mm	41mm
Field of View	17-2.2mm	34-4.5mm	22.6-3mm	10.6-1.4mm	8.5-1.1mm

[BEST SELLER]

SPZT-50

Trinocular stereo zoom body with 10x eyepieces, rubber eye guards and dust cover

Order #	Description
SPZ-50	**SPZ-50 Binocular**
SPZT-50	**SPZT-50 Trinocular**

DSZ-44 Series

DSZ-44

Binocular stereo zoom body with 10x wide field eyepieces, Rubber eye guards and dust cover

DSZT-44

Trinocular stereo zoom body with 10x wide field eyepieces, Rubber eye guards and dust cover

- **Zoom Ratio of 4.4:1**
- **Magnification range: 10x to 44x**
- **Field of View of 23mm to 5.3mm (0.90" to 0.20")**
- **Working distance 90mm (3.54")**
- **Magnification range of 2.5x to140.8x with optional lenses**
- **Wide Field 10x Eyepieces (field number 23)**

** Note specifications mentioned above are with Wide Field 10x eyepieces.*

Optical Data

Eyepiece	DSW5X (F.N. 22.5)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	5x-22x	2.5x-11x	3.75x-16.5x	8x-35.2x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	22.5-5.1mm	45-10.2mm	30-6.8mm	14-3.1mm

Eyepiece	DSW10X (F.N. 23)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	10x-44x	5x-22x	7.5x-33x	16x-70.4x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	23-5.2mm	46-10.4mm	30.6-6.9mm	14.3-3.2mm

Eyepiece	DSW15X (F.N. 15)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	15x-66x	7.5X-33X	11.25X-49.5X	24X-105.6X
Working Dist.	90mm	150mm	105mm	45mm
Field of View	15-3.4mm	30-6.8mm	20-49.5mm	9.3-2.1mm

Eyepiece	DSW20X (F.N. 11.4)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	20x-88x	10x-44x	15x-66x	32x-140.8x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	11.4-2.5mm	22.8-5.1mm	15.2-3.45mm	7.1-1.6mm

Order #	Description
DSZ-44	DSZ-44 Binocular
DSZT-44	DSZT-44 Trinocular

DSZ-70 Series

- **For high magnification applications**
- **Zoom Ratio of 3.5: 1**
- **Magnification range: 20x to 70x**
- **Field of View of 10mm to 2.8mm (0.39" to 0.11")**
- **Working distance 80mm (3.15")**
- **Magnification range of 5x to 224x with optional lenses**
- **Wide Field 10x Eyepieces (field number 20)**

** Note specifications mentioned above are with Wide Field 10x eyepieces.*

DSZ-70

Binocular stereo zoom body with 10x wide field eyepieces, Rubber eye guards and dust cover

DSZT-70

Trinocular stereo zoom body with 10x wide field eyepieces, Rubber eye guards and dust cover

Optical Data

Eyepiece	DSW5XZ (F.N. 20)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	10x-35x	5x-17.5x	7.5x-26.25x	16x-56x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	10-2.9mm	20-5.7mm	13.3-3.8mm	6.2-1.7mm

Eyepiece	DSW10XZ (F.N. 20)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	20x-70x	10x-35x	15x-52.5x	32x-112x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	10-2.8mm	20-5.7mm	13.3-3.8mm	6.2-1.7mm

Eyepiece	DSW15X (F.N. 15)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	30x-105x	15x-52.5x	22.5x-78.75x	48x-168x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	7.5-2.1mm	15-4.2mm	10-2.8mm	4.6-1.3mm

Eyepiece	DSW20X (F.N. 11.4)			
Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	40x-140x	20x-70x	30x-105x	64x-224x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	5.7-1.6mm	11.4-3.2mm	7.6-2.1mm	3.5-1mm

Order #	Description
DSZ-70	**DSZ-70 Binocular**
DSZT-70	**DSZT-70 Trinocular**

NSW Series Stereo Microscopes

Configure Your Own Custom Microscope System @ **www.aveninc.com**

- **Dual Magnification of 6x & 20x, 10x & 20x, 10x & 30x and 20x & 40x bodies available**
- **Single Magnification of 10x or 20x bodies available**
- **10x Wide Field Eyepieces standard (field number 23)**
- **Field of View: 38.3mm (1.50") at 6x, 23mm (0.91") at 10x, 11.5mm (0.45") at 20x, 7.6mm (0.30") at 30x and 5.7mm (0.22") at 40x**

Order #	Description
NSW-1	**Single 10x Stereo Body**
NSW-2	**Single 20x Stereo Body**
NSW-20	**Dual Magnification** 10x & 20x Stereo Body
NSW-30	**Dual Magnification** 10x & 30x Stereo Body
NSW-40	**Dual Magnification** 20x & 40x Stereo Body
NSW-620	**Dual Magnification** 6x & 20x Stereo Body**

* Each Body comes with Wide Field 10x eyepieces
Rubber Eye Guards and dust cover

** NSW-620 will not work with stand T

Large stage to accommodate large parts (220mmx284mm). A long life and low temperature 9W fluorescent lamp is used for the built-in incident light.
Magnification: 10x & 30x

Order #	Description
26800B-361	**NSW-30PF Microscope**

Features a large stage to accommodate large parts (220mmx284mm). For illumination, we recommend our fluorescent ring lights or our fiber optic illuminator with our annular ring light. If an auxiliary lens is not used a ring light adapter will be required to install the fluorescent ring light or the annular ring light.
Magnification: 10x & 30x

Order #	Description
26800B-362	**NSW-30P Microscope**

Preconfigured Systems

Shown below are some of our popular systems or you can configure a system to match your application.
Configure a system online at www.aveninc.com

Stand Systems

Order #	26800B-305

Model DSZ-44P

DSZ-44 Stereo Zoom Binocular Microscope 10x to 44x, with 10x eyepieces. Mounted on Stand P. For illumination we recommend fluorescent or LED Ring Lights or our fiber optic illuminators.

Stand base is 220mm x 284mm

Order #	26800B-371

Model SPZ-50PFM

SPZ-50 Stereo Zoom Binocular Microscope 6.7x to 50x, with 10x eyepieces. Mounted on Stand PFM. Has built in 9W Fluorescent ring light.

Stand base is 220mm x 284mm

Boom Stand Systems

Order #	26800B-370

SPZ-50 Stereo Zoom Binocular Microscope

6.7x to 50x, 10x eyepieces, 0.5x lens, Ring Light Adapter, and LED Ring Light with Intensity Control. Mounted on our Double Arm Stainless Steel Ball Bearing Boom Stand.

Order #	26800B-369

SPZT-50 Stereo Zoom Trinocular Microscope

6.7x to 50x 10x eyepieces, 0.5x lens, Ring Light Adapter, Fiber Optic Illuminator with Annular Ring Light, USB Infinity 1, 1.3 Megapixel Camera with Infinity Image Analysis Software. Mounted on our Double Arm Stainless Steel Ball Bearing Stand. Computer not included.

Preconfigured Systems

Shown below are some of our popular systems or you can configure a system to match your application.
Configure a system online at www.aveninc.com

Examples of other Popular Systems

Systems shown below can be ordered using individual part #s.
Call us, we can help configure a system to meet your requirements

Trinocular Scope on an Articulating Arm with an 17"x20" base and Fiber Optic Illumination.

Trinocular Scope on Stand PF with Built in Fluorescent Illumination and USB Camera.

Binocular Scope on Single Arm Boom Stand with Fiber Optic Illumination.

Trinocular Scope on Single Arm Stand with 10"x10" base and miniVue Camera.

Trinocular Scope Double Arm Ball Bearing Stand with miniVue Camera.

Trinocular Scope mounted on PF Stand with miniVue Camera.

Optional Accessories

Eyepiece Lenses and Rubber Eye Guards

Order #	Description
26800B-444	**DSW-5X eyepieces** for DSZ-44, DSZT-44 and NSW series bodies. F.N. 22.5
26800B-446	**DSW-5XZ eyepieces** for DSZ-70 and DSZT-70 series bodies. F.N. 20.

Order #	Description
26800B-441	**DSW-10X eyepieces** for DSZ-44, DSZT-44 and NSW series bodies. F.N. 23.
26800B-448	**DHW-10X eyepieces** for SPZ-50 and SPZT-50 series bodies. F.N. 23.
26800B-445	**DSW-10XZ eyepieces** for DSZ-70 and DSZT-70 series bodies. F.N. 20.

Order #	Description
26800B-442	**DSW-15X eyepieces** for DSZ-44, DSZT-44, DSZ-70, DSZT-70 and NSW series bodies. F.N. 15
26800B-449	**DHW-15X eyepieces** for SPZ-50 and SPZT-50 series bodies. F.N. 15.

Order #	Description
26800B-443	**DSW-20X eyepieces** for DSZ-44, DSZT-44, DSZ-70, DSZT-70 and NSW series bodies. F.N. 11.4
26800B-450	**DHW-20X eyepieces** for SPZ-50 and SPZT-50 series bodies. F.N. 11.4.

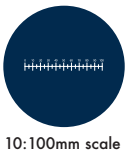
** Eyepieces listed above are sold in pairs only.

Rubber Eye Guards

Order #	Description
26800B-452	Rubber Eye Guards for DSW eyepieces
26800B-453	Rubber Eye Guards for DHW eyepieces

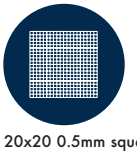
Focusing Eyepiece 10x with Reticle

Order #	Description
26800B-455	**10x with 5:100mm scale**
26800B-456	**10x with 10:100mm scale**
26800B-457	**10x with 20 x 20 0.5mm squares**
26800B-458	**10x with 10 x 10 1mm squares**
26800B-459	**10x with 10:100mm scale with cross line**

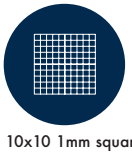


10:100mm scale

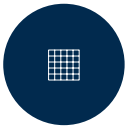
5:100mm scale



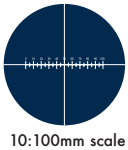
20x20 0.5mm squares



10x10 1mm squares



5x5 1mm squares



10:100mm scale with crossline

*Above eyepieces are for the DSZ/NSW series bodies.

To order focusing eyepieces for the SPZ Series bodies, please **add -10** to the end of the above mentioned part numbers.

Optional Accessories

Auxilary Objective Lenses

Order #	Description
26800B-461	**Auxiliary lens 0.5x**
26800B-462	**Auxiliary lens 0.75x**

Order #	Description
26800B-463	**Auxiliary lens 1.6x**
26800B-464	**Auxiliary lens 2x**

Order #	Description
26800B-465	**Lens Cover** for protection of objectives

Order #	Description
26800B-460	**Adapter** to mount Fluorescent Ring Light or Fiber Optic Annular Ring Light

* Please note 0.5x lens cannot be used with SPZ series bodies with stand P and PF. 0.5x lens cannot be used for stands T and TL and with NSW series with stand P

** 2x lens cannot be used with the DSZ and NSW series bodies.

Camera Adapters

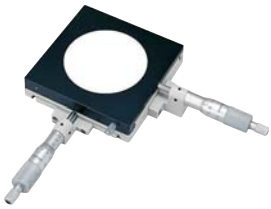
Order #	Description
26800B-435	**Adapter** to Mount CCD Camera to our Trinocular bodies

* Various Adapters are available for mounting Digital Cameras. Please call with the type of camera you want to use with our trinocular microscopes.

Gliding Stages

Order #	26800B-475
Stage size 350mm x 250mm x 103mm. Base Size: 520mm x 480mm. Range of movement 360mm x 418mm.	

Order #	26800B-476
Stage size: 300mm x 210mm x 40mm. Base Size 250mm x 250mm. range of movement 250mm x 250mm.	



Order #	26800B-471
Gliding stage with attachments for micrometers. Mitutoyo No. 150-192 (MHN1-25). Size 114mm x 114mm. Range of movement 25mm x 25mm.	

Order #	26800B-474
Rotatable. Size 135mm. Range of movement 25mm x 25mm.	

Order #	Description
26800B-472	Size 140mm x 114mm. Range of movement 94mm x 66mm.

Illumination

Standard Frequency Fluorescent Ring Lights

26200B-201 to 206

26200B-207 to 208

Aven fluorescent ring lights are designed for applications requiring a high quality illuminator. Provides 360° shadow free illumination. Our reflector housing is cast from high quality aluminum alloy (except for model 26200B-201) for durable and cool operation. Operates at 115V AC.

Order #	Description
26200B-201	**Fluorescent Ring Light** Economy, 8 watt Lamp
26200B-202	**Fluorescent Ring Light** Standard, 17 watt Lamp
26200B-203	**Fluorescent Ring Light** with UV Lamp
26200B-206	**Fluorescent Ring Light** ESD Safe, 17 watt Lamp
26200B-207	**Fluorescent Ring Light** with Focus mount for DSZ & NSW Series
26200B-208	**Fluorescent Ring Light** with Focus mount for SPZ Series

White LED Ring Light w/Brightness Control

Designed to be used with standard microscopes and video lenses. Provides a stable bright light with 54 LEDs. These long life LEDs operate at very low temperature, are flicker free and do not change color over time. 110V

Order #	Description
26200B-210	**White LED Ring Light** with Brightness Control

White LED Ring Light w/Brightness & Sector Control

Designed to be used with standard microscopes and video lenses. Has a 7 step brightness control feature and four lighting modes, 1/4, 2/4, 3/4, and Full. Excellent for applications requiring a high degree of lighting control. Incorporates 60 Long Life LEDs that are flicker free and operate at low temperature and do not change color over time. 110V.

Order #	Description
26200B-211	**White LED Ring Light** with Brightness & Sector Control

Model L Fiber Optic Illuminators

26200A-205

26200A-207

Features

- High output 150 Watt Lamp
- Variable Intensity Control
- Approximately 200-2000 Hours Lamp Life (not guaranteed)
- Supplied with Ring Light (39") or Double Pipe Light (19.5")
- Illuminator with double pipe light has a focusing lens included, providing an illumination distance of 20-200mm and an illumination area of 10-40mm
- Input Voltage 110VAC

Dimensions: 11"x6.5"x5" **Weight:** 9.6lbs.

Order #	Description
26200A-205	**Model L Fiber Optic Illuminator** w/Ring Light
26200A-207	**Model L Fiber Optic Illuminator** w/Double Pipe Light & Focusing Lens

Illumination

Model 150 Fiber Optic Illuminator

Features

- High quality ball bearing fan for low noise and vibration
- High output 150 watt bulb
- Variable intensity control
- Easy lamp change
- Color/ Daylight Filters available
- Color Beige

Specifications

Input voltage.....110 VAC
Color Temperature.....3250 kelvin
Lamp life.....200-2000 hours
Weight.....7.5 lbs. (3.4 kgs.)
Dimensions.....7.0" x 7.5" x 6.5"

Order #	Description
26200A-200	**Model 150 Fiber Optic Illuminator**
26200A-212	**Adapter** for 1.125" ID Ring Light

Fiber Optic Ring Lights

Features

- Uniform Lighting
- Streamlined Design
- 360° shadow free illumination
- 3 thumb screw for easy mounting
- Accepts polarizer and darkfield adapters
- Black anodized aluminum housing
- Crimped Stainless Steel terminations
- 36" cable length

Order #	Description
26200A-402	**Ringlight 2.31" ID** Can be mounted on all SPZ, DSZ and NSW Series Microscopes
26200A-403	**Ringlight 1.125"ID** Can be mounted on Video Lenses

Fiber Optic Goosenecks

These light guides are constructed with high quality glass fiber optics and provide the highest degree of adjustable and interference free uniform illumination of focused white light. Focusable lenses allow for variable spot light adjustments making these ideal for situations where intense illumination is required. Our light guides are offered in a standard stainless steel obedient sheathing which offers "stay-put" positioning.

Order #	Description
26200A-523	**Double Gooseneck** with Focusing lens 18" Long

Fiber Optic Area Backlights

These high-output, uniform backlights are made of the highest quality components and offer a sleek, slim design, which makes them highly versatile for mounting in tight spaces. The housing consists of black, electrocoated steel and the sheathing is PVC covered metal hose. Backlights have a ±10% uniformity. 36" long cable length.

Order #	Description
26200A-532	**FOA Backlight 4" x 4"** (101.6 x 101.6mm)

Digital Color Camera

miniVue Camera

World's first digital color camera for microscopy and video inspection applications with a built in 2" LCD Screen and instant image capture feature with the built in SD Card. A PC is not required for image capture or image viewing, saving bench space and money. A 2.0 USB outlet is provided to connect to a PC.

Can be used with **any microscope** or video lens with a C-Mount

Features

- 3.1Megapixel Camera
- Built in High Resolution 2" Screen
- Full Digital Signal Processing
- Capture Images and Video on the built in SD Card. Transfer to a PC at your convenience
- Connect via USB to a PC or Printer
- Friendly User Interface
- Crosshair feature for location and measurement
- TV Out allows the connection of an external LCD monitor for detailed viewing
- Wireless and wired USB Shutter control
- Many stand alone features on camera (see www.aveninc.com for more details)

Specifications

Sensor Resolution.....3.1 megapixels
Maximum Resolution.....8 megapixels
Sensor Type.....1/2" CMOS
Frame Rate.....28 fps at TV/PC Out
LCD Screen Size.....2"
Memory Card.....SD/MMC Card
TV Output.....NTSC/PAL
USB Interface.....Yes
Controller.....Remote and USB
Picture Format.....jpeg
Video Format.....mpeg4
Printer Support.....Pictbridge and DPOF
Mount.....C-Mount
Power Supply.....DC 12V, 1.5A

Order #	Description
26100-230	**miniVue Camera**

CCD &CMOS Cameras

High Resolution DSP CCD Color Cameras

Our color cameras use single integration type CCD complemented by a digital signal processing system to provide both high quality images and a host of compensation functions. These cameras are ideal for machine vision, video inspection and microscopy applications.

Highlights

- CCD Total Pixels: 881(h) x 508 (v)
- Resolution: 470 TVL / 580 TVL Enhanced
- On Screen Display
- 26100-100 has S-Video and Composite Outputs
- 26100-102 has Y/C and Composite Outputs
- C & CS Mount
- Detail Specs at www.aveninc.com

Order #	Description
26100-100	**1/3" CCD Camera** with power supply
26100-102	**1/2" CCD Camera** with power supply

Infinity 1 CMOS Color Cameras

The Infinity CMOS USB 2.0 cameras are designed to be a cost effective, versatile solution for a variety of microscopy imaging applications. Features include auto white balance, full exposure control, programmable gain, sub-windowing and region of interest. It is excellent for documentation and archiving applications.

Highlights

- 1 and 3 Meagpixel. 6 also available upon request
- Perfect for documentation and archiving applications
- Fast frame rate
- C-mount
- Infinity Analyze Software Included. For more details of this software please visit our website at www.aveninc.com

Order #	Description
26100-215	**Infintiy 1 CMOS 1.3 Megapixel Camera**
26100-216	**Infintiy 1 CMOS 3.1 Megapixel Camera**

Specifications

Megapixel	Resolution	FPS	Sensor
1.3	1280 x 1024	15	1/2" CMOS
3.1	2040 x 1536	6	1/2" CMOS

Infinity 2 CCD Color Cameras

Equipped with a high quality Sony CCD Sensor, these USB 2.0 cameras offer excellent sensitivity, high dynamic range and a 12-bit digital output. Features include binning, auto white balance, full exposure control, programmable gain, sub-windowing and region of interest. It is ideal for higher-end scientific, medical, ophthalmic and life science applications.

Highlights

- 1, 2 and 3 megapixel resolution
- Higher dynamic range for quantitative analysis
- Fast frame rate
- Low noise electronics
- C-Mount
- Infinity Analyze Software Included. For more details of this software please visit our website at www.aveninc.com

Order #	Description
26100-220	**1.4 Megapixel CCD Camera**
26100-221	**2.0 Megapixel CCD Camera**
26100-222	**3.3 Megapixel CCD Camera**

Specifications

Megapixel	Resolution	FPS	Sensor
1.4	1390 x 1040	15	1/2" CCD
2.0	1616 x 1216	12	1/1.8" CCD
3.0	2080 x 1536	5	1/1.8" CCSD

CCD &CMOS Cameras

Infinity Lite Camera

INFINITY lite is a compact, affordable microscopy camera that delivers outstanding image quality and excellent value. Highlights include live video preview and real-time focus for the efficient capture of optimal images, an intuitive user application for camera control, full integration to popular third-party imaging applications through our TWAIN drivers, USB 2.0 interface, standard C-mount and compact design for trouble-free installation, and one standard cable for power and data to minimize clutter. As with all INFINITY cameras, no costly framegrabber is required.

Highlights

- 1.5 megapixel camera
- High-speed USB 2.0 interface eliminates a framegrabber and facilitates ease of installationon both laptop and desktop computers
- INFINITY CAPTURE software application included
- Mac compatible
- On-board image processing of the INFINITY lite's progressive scan 1.5 megapixel image sensor results in accurate color fidelity
- Full color sub-windowing allows for rapid, focus and scanning of samples: 15 fps at full 1440x1080 resolution and 60 fps at 640x480 resolution
- 8-bit pixel data
- Rugged dependability and versatility

Order #	Description
26100-212	**Infinity Lite Color Camera** 1.5 Megapixel

LCD Monitors

Produces only the sharpest and most brilliant color images. Featuring easy to use OSD controls and built in speakers. You will find this monitor both easy to use and a pleasure to look at. This monitor offers a maximum resolution of 1280 x 1024 pixels and a refresh rate up to 75KH translating into a flicker free monitor that is easy on your eyes.

Comes with

- 12V DC adapter /power chord
- D-Sub 15 pin VGA connector cable
- Audio Cables

Inputs

- Video Input: 15-pin D sub/ AV/ S-Video

Order #	Description
26700-402	**17" LCD Monitor**
26700-404	**15" LCD Monitor**

Stands and Focus Mounts

Focus Mount

Focus mount to hold our SPZ, DSZ and NSW Series bodies. Rack & Pinion mechanism allows for precise focusing over a 55mm travel. Coarse focus mechanism incorporates a slip clutch and tension adjustment. Fits a 25mm mounting post and has an opening to accept bodies of diameter 74mm (2.9")

Order #	Description
SCW-PA	**Focus Mount**

Stand Type PF with Focus Mount and Built in Fluorescent Light

Features:

- Large stage 220mm(8.66") x 284mm (11.18") to accommodate a variety of parts
- Built in 9 watt low temperature fluorescent light in focus mount
- Length of Post 250mm (9.84")

Order #	Description
Stand PF	For DSZ-44, DSZT-44, and NSW Series Bodies
Stand PFM	For SPZ-50 and SPZT-50 Series Bodies
Stand PFL	For DSZ-70 and DSZT-70 Series Bodies

Pole Type Stand with Focus Mount

Features:

- Large stage 220mm (8.66") x 284mm (11.18") to accommodate a variety of parts
- Length of Post 250mm (9.84")

Order #	Description
Stand P	For SPZ, DSZ, and NSW Series Bodies

Stands and Focus Mounts

Stand Type T and L with Focus Mount

Features:

- Transmitted and Incident Lights are built in the Type T stand as shown
- Type T stand has Fluorescent 9 watt incident light and Tungsten Transmitted light
- Base 160mm x 219mm (6.30" x 8.62")
- Stage Plate: Frosted glass plate (diameter 80mm (3.15")) and Frosted blue filter (diameter 37mm (1.46"))
- Stand Type L same as stand T but Incident Light is Tungsten (not shown)
- Rack and Pinion Focus Mount, tension control pin included

Order #	Description
Stand T	For DSZ-44, DSZT-44, and NSW Series Bodies
Stand L	For DSZ-44, DSZT-44, and NSW Series Bodies

Standard Boom Stand with Mounting Post

Features:

- Perfect for stationary video and microscopy applications
- Heavy Duty Steel Base 10" x 10" x 0.75" (254mm x 254mm x 19mm), 21lbs
- 16" (406mm) Vertical Post with 16" (406mm) Horizontal Post. Diameter of Post and Bar 1-3/16" (30.16mm). Nickel plated
- Safety Clamp Included
- Mounting Post with tilt feature for Focus Mount SCW-PA
- Sturdy and stable
- Requires focusing mount to mount microscope bodies

Order #	Description
26800B-520	**Standard Boom Stand** with Mounting Post

Deluxe Boom Stand with Mounting Post

26800-525

26800-530

Features:

- Perfect for stationary video and microscopy applications especially where vibrations can disrupt your work
- Heavy Duty Steel Base 10" x 10" x 0.75" (254mm x 254mm x 19mm), 21lbs or 17" x 20" Heavy Duty Base , 27lbs to accommodate large parts on base
- 16" (406mm) x 1-1/2" OD (38mm) stainless steel vertical post
- 18" (457mm) x 1-1/2" OD(38mm) aluminum horizontal post
- Post with tilt feature for Focus Mount SCW-PA included
- Quick release red anodized aluminum safety clamp
- Optional 25" Vertical Post and 25" Horizontal Bars available
- Optional table mount and C-clamp mounts available

Order #	Description
26800B-525	**Deluxe Boom Stand** with Tilt Mounting Post and 10" x 10" base
26800B-530	**Deluxe Boom Stand** with Tilt Mounting Post and 17" x 20" base

Stands and Focus Mounts

Standard Dual Arm Ball Bearing Boom Stand with Mounting Post

Features:

- Stability of the standard boom stand but with ultra smooth movement of a ball bearing slide
- Great for inspection applications where magnification adjustment and the ability to move across a specimen are important
- Heavy duty base 11" x 10" x 1.25" (285mm x 260mm x 32mm), 21lbs
- Main Vertical post 15" (380mm) long, extension post 9" (225mm) long. OD 1-1/2' (37mm) for a total post length of 24"
- Horizontal Post 22.5" (570mm) long from end to end.
- Safety Clamp included
- Post with Tilt Feature for Focus Mount SCW-PA included

Order #	Description
26800B-535	**Double Arm Ball Bearing Boom Stand**

Deluxe Dual Arm Ball Bearing Boom Standing with Mounting Post

26800B-540

26800B-545

Features:

- Ultra smooth movement of a ball bearing slide
- Two types of bases available 10" x 10'(254mm x 254mm) and 17" x 20" (432mm x 508mm) Weights 21 lbs and 27 lbs respectively
- 16" (406mm) Stainless Steel Vertical Post (OD 1-1/2"). Other sizes available on request
- Thomson linear ball bearing and dual hardened stainless steel shafting for the horizontal axis. Total horizontal motion 12-1/2" (317.5mm)
- Safety Clamp included
- Optional table mount clamps and C-Clamps available
- Post with tilt feature for focus mount SCW-PA included

Order #	Description
26800B-540	**Deluxe Dual Arm Ball Bearing Boom Stand** with Mounting Post and 10" x 10" base
26800B-545	**Deluxe Dual Arm Ball Bearing Boom Stand** with Mounting Post and 17" x 20" base

Stands and Focus Mounts

Lift Articulating Arm Boom Stand

26800B-550

26800B-555

Features:

- Designed to allow maximum freedom of movement
- Perfect for video and lighting applications that require a lot of movement
- Flexible arm can easily be adjusted into hard to reach locations and out of the way again
- Various mounts and bases available to suit your application
- Vertical Post 16" (406mm). OD 1-1/2"
- Lift Articulating boom arm approximately 30"(762mm) horizontal reach, and approximately 15"(381mm) vertical travel ± 40° movement from horizontal
- Adjustable gas spring counter balance allows "free floating" of 0-20 lbs. Ambidextrous vertical position lock. Gas spring provides controlled "safe" lift and decent
- Mount post with tilt feature included for focus mount SCW-PA
- Safety Clamp included

Order #	Description
26800B-550	**Lift Articulating Arm Boom Stand** with Table Clamp
26800B-555	**Lift Articulating Arm Boom Stand** with 17" x 20" base

Articulating Arm

Features:

- Adjustable, counter-balanced articulating arm moves easily up or down through 14.5".
- Heavy-Duty construction allows for maximum of 20 lbs of weight.
- Wide range of horizontal and vertical movements. Scanning area can reach 3"
- Adjustable counter-balanced arm which allows easy, hand guided up and down movement, works in spaces where a conventional boom stand will not fit.

Order #	Description
26800B-560	**Articulating Arm**

Standard Stand

Features:

- Aluminum powder coated base 11" x 13" x 1/2" (279mm x 330mm x 12.7mm), 8lbs.
- 10 tapped holes for mounting X-Y stages
- 16" Stainless Steel vertical post (OD 0.96", 24.5mm) with safety clamp
- Compatible with focus mount SCW-PA

Order #	Description
26800B-570	**Standard Stand** with Safety Clamp

Ergo Stand

Features:

- Aluminum powder coated base 13" x 13" x 1/2", 8lbs. (330mm x 330mm x 12.7mm) with Black & White glass plate
- 16" Stainless Steel vertical post (OD 0.96", 24.5mm) with safety clamp
- Compatible with focus mount SCW-PA

Order #	Description
26800B-575	**Ergo Stand** with Safety Clamp

Shop Microscopes

Shop Microscope 40x and 100x

Designed for quick and precise measurements in laboratories, workshops and assembly lines. Comes with a dual scale reticle graduated in both inches and millimeters. A turn of the eyepiece brings the reticle in sharp focus. No calibration is needed. Reticle can be rotated for measurement in any direction. Dual knobs with rack and pinion focusing lets you quickly refine the image. Includes a fully adjustable battery operated penlight illuminator. Scope has a cutaway opening at base for subject manipulation.

Specifications

MODEL	Shop Microscope 40x	Shop Microscope 100x
Magnification (Field of View)	40X (4.5 mm)	100 (1.8 mm)
Objective Lenses	4x	10x
Focusable Eyepiece	10x with Scale	10x with Scale
Measuring Range	3.0 mm/0.1"	1.0 mm/0.05"
Minimum Gradation	0.02 mm/0.001"	0.01 mm/0.001"
Working Distance	15 mm	5.5 mm
Height	200 mm	200 mm
Width	65 mm	65 mm
Net Weight	570 g	580 g
Accessory	Penlight	Penlight

Order #	Description
26800C-531	**Shop Microscope 40x** with 3.0mm/0.1" Scale
26800C-532	**Shop Microscope 100x** with 1.0mm/0.05" Scale

Pocket Microscopes 25x

"Pen Size" powerful direct measuring pocket scope for quick, close examination. Excellent for detecting flaws or imperfections, surface measurements, examination of fibers, print, etc.

Comes with a measuring metric glass reticle. Has beveled opening for gathering and focusing light. Scope has an aluminum case with a satin finish and pocket clip. Furnished in a vinyl sleeve.

Order #	Description
26800C-533	**Pocket Microscopes 25x**

Specifications

Magnification	Field of View	Scale Calibration	Measurement Range	Length	Diameter
25x	3.24mm	0.05mm	0-3mm	127mm (5")	11.10mm (7/16")

Shop Microscopes

Illuminated Pocket Microscopes

26800C-534

26800C-536 to 540

Perfect carry-with microscope. Ideal for on site detailed examination of small areas and objects. Useful for engineers, tool makers, quality control inspectors, field researchers etc.

Has a built in light source. In addition a clear acrylic stand allows ambient light to the object under examination.

Operates on two AA batteries not included. Case Included.

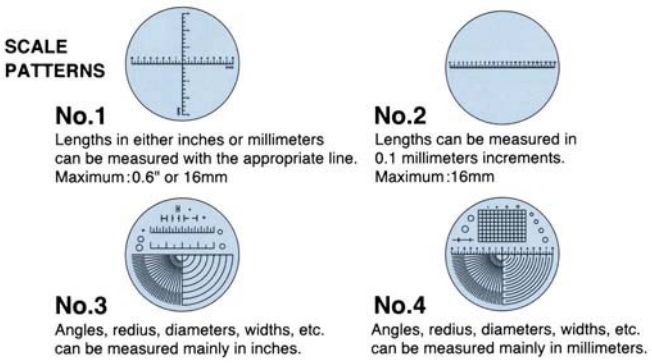
Order #	Description
26800C-534	**Illuminated Pocket Microscope 40x** w/Scale: Measuring Range 4mm, Graduation: 0.1mm
26800C-536	**Illuminated Pocket Microscope 20x**
26800C-538	**Illuminated Pocket Microscope 30x** w/Scale: Measuring Range 4mm, Graduation 0.1mm
26800C-540	**Illuminated Pocket Microscope 50x** w/Scale: Measuring Range 4mm, Graduation 0.1mm

Loupes & Magnifiers

Loupes with Scales

Loupes with reticles for measurement and inspection. Comes with ReticleScale No.1 and Vinyl Case. Optional reticle scales are available.

Order #	Description
26001	**Loupe with Scale 7x**
26002	**Loupe with Scale 10x**
26003	**No. 1 Reticle Scale**
26004	**No. 2 Reticle Scale**
26005	**No. 3 Reticle Scale**
26006	**No. 4 Reticle Scale**



Loupes & Magnifiers

Inspection Eye Loupes

26034

26041-43

Great for close inspection. Rests comfortably in the eye socket. Lightweight yet sturdy. Plastic mount. Our 8x, 6x and 4x loupes come with rubber cushion for additional comfort.

Order #	Description
26034	**10x Eyeloupe** 1" WD
26041	**8x EyeLoupe** with Cushion 1" WD
26042	**6x EyeLoupe** with Cushion 2" WD
26043	**4x EyeLoupe** with Cushion 2.5" WD

Inspection Eye Loupes

26051

26052

Fixed focus magnifiers with clear acrylic bases that permit ambient light to illuminate subject for clear bright viewing.

Order #	Description
26051	**10x Inspection Magnifier** with 1" Diameter Lens
26052	**3x Inspection Magnifier** with 3" Diameter Lens

Swing Out Inspection Loupes

26011

26010

26012

Order #	Description
26010	**10x Hex Loupe** 18mm Diameter Triplet Lens
26011	**10x Loupe** 16mm Diameter Triplet Lens
26012	**20x Loupe** 12mm Diameter Triplet Lens

Giant Folding Loupe

Double glass lens provides a large viewing area. Lens diameter is 1-3/4" and has a magnification of 6x.

Order #	Description
26013	**Giant Folding Loupe,** 6x

Magnifier with Clamp

Has an adjustable 2 1/2" diameter magnifying glass. Allows for close observation of work during soldering operation.

Order #	Description
26000	**Magnifier with Clamp**

Loupes & Magnifiers

Magnifier with Tweezers

Magnifying glass mounted onto stainless steel, anti acid, anti magnetic tweezers. Lens diamter is 1.25" and the power is 3x. Available with pointed or curved tweezer tips. Excellent for working on small parts that require magnification.

Order #	Description
26030	**3x Magnifier** with Curved Tips
26031	**3x Magnifier** with Straight Tips

Headband Magnifier with LED Illumination

Comes with 1.5x, 2x, 2.5x and 3.5x clip-on lenses. LED light provides 50,000 hours of illumination. Light operates with 3 AAA batteries (not included).

Order #	Description
26221	**Headband Magnifier** with LED Illumination

Headband Magnifier with Light

Comes with 1.2x, 1.8x , 2x and 3.5x clip on lenses. Features a 2.2v bulb and operates with 4 AAA batteries (not included).

Order #	Description
26222	**Headband Magnifier** with Light

Optivisor

Soft pliable wide headband for ultimate comfort. Easily adjusts to any head size. Self locking, remains in place. Glass lens.

Order #	Description
26101	Magnification: 1-1/2x Working Distance: 20" (#2)
26102	Magnification: 1-3/4x Working Distance: 14" (#3)
26103	Magnification: 2x Working Distance: 10" (#4)
26104	Magnification: 2-1/2x Working Distance: 8" (#5)
26105	Magnification: 2-3/4x Working Distance: 6" (#7)
26106	Magnification: 3-1/2x Working Distance: 4" (#10)

Accessories

Order #	Description
26107	**Replacement Lens #2** (1-1/2x)
26108	**Replacement Lens #3** (1-3/4x)
26109	**Replacement Lens #4** (2x)
26110	**Replacement Lens #5** (2-1/2x)
26111	**Replacement Lens #7** (2-3/4x)
26112	**Replacement Lens #10** (3-1/2x)
26113	**Auxiliary Lens 2-1/2x**

Magnification & Task Lighting

Aven's Magnification & Task Lighting products are for the demanding professionals who need the flexibility to view objects from a variety of angles.

Magnifying Lamps

Our magnifying lamps enable users to magnify objects up to four times. Some of the features among products within this line also include lighting that is positioned so that shadows will not hinder your ability to inspect and analyze.

Task Lighting

All of our task lighting products come equipped with a flexible, adjustable arm that allows users to direct light where they need it most for assignments in such areas as manufacturing, assembly and inspection.

Magnification Lighting

ProVue Magnifying Lamps

Our most popular magnifying lamp is designed for professionals. It is equipped with an ultra-bright 22-watt circular fluorescent bulb and a Crystal Clear 5", 3-diopter (1.75x) glass lens to provide 360° distortion free viewing. Metal housing is mounted on a 45" spring balanced arm that stays set in any position. Lamp operates at 115V-AC and comes complete with mounting clamp and a 5-foot power cord. 1 year warranty (excludes bulb).

Optional Accessories

- Weighted Base
- Swing-Away Lens – 5 diopter (2.25x)
- Auxiliary Lens – 3 diopter (1.75x)

Swing-Away Lens

Auxiliary Lens

Order #	Description
26501-SIV	**ProVue Magnifying Lamp-Ivory–**3 Diopter
26501-WB	**Weighted Base**
26501-B22	**22-watt Replacement Bulb**
26501-SLA	**Swing-Away Lens – 5 Diopter (2.25x)**
26501-AL3	**Auxiliary Lens – 3 Diopter (1.75x)**

ProVue Deluxe Magnifying Lamp 'Features a Heavy Duty Spring Balanced Arm'

Designed for demanding professionals. It is equipped with an ultra-bright 22-watt circular fluorescent bulb, a Crystal Clear 5", 3-diopter (1.75x) lens, mounted on a silver-grey metal housing. The fluorescent bulb is protected with a clear plastic diffuser/splash guard. The heavy-duty adjustable arm with tempered steel springs allows for easy positioning. When fully extended the arm has a reach of 35". Comes with a mounting clamp. Can also be mounted directly on the working surface. Operates at 115V-AC and comes with a 5-foot power cord. 1 year warranty (excludes bulb).

Optional Accessories

- Swing-Away Lens – 5 diopter (2.25x) for total magnification of 8 diopter (4x)
- Auxiliary Lens – 3 diopter (1.75x) for total magnification of 6 diopter (3.5x)

Swing-Away Lens

Auxiliary Lens

Order #	Description
26501-DSG	**ProVue Deluxe Magnifying Lamp-Silver**
26501-B22	**22-watt Replacement Bulb**
26501-SLA	**Swing-Away Lens – 5 Diopter (2.25x)**
26501-AL3	**Auxiliary Lens – 3 Diopter (1.75x)**

Magnification Lighting

Maxi-Mag Magnifying Lamp

Super large 7", 3-diopter lens gives you unrivaled field of view and work space. Comes with a powerful 32-watt circular fluorescent bulb. This lamp can show you things that you have never seen before! The Ivory mar-resistant engineered plastic housing is mounted on a 45" spring balanced arm for easy positioning. Lamp operates at 115V-AC and comes complete with a mounting clamp and a 5-foot power cord. 1 year warranty (excludes bulb).

Optional Accessories

- Weighted Base
- Swing-Away Lens – 5 diopter (2.25x) for total magnification of 8 diopter (4x)

Swing-Away Lens

Order #	Description
26503-SIV	Maxi-Mag Magnifying Lamp – Ivory
26503-B32	Replacement Fluorescent Bulb
25501-WTB	Weighted Base
25501-SLA	Swing-Away Lens – 5 Diopter (2.25x)

Mighty Mag Magnifying Lamps

The Mighty Mag features a large 7" x 5.2", 3-diopter (1.75x), distortion free Crystal Clear lens mounted in a high tech style mar-resistant engineered plastic housing with dual light sources. The large, rectangular viewing area of the glass enables comfortable viewing with both eyes and provides shadow-free magnification with light coming from both sides. The housing is mounted to an internal spring balanced arm with a 30" reach that will set in any position. Unit operates at 115V-AC and comes complete with mounting camp and a 5-foot power cord. 1 year warranty (excludes bulb). Available in Ivory and Black (ESD safe).

Optional Accessories

- Swing-Away Lens – 5 diopter (2.25x) for additional magnification

Swing-Away Lens

Order #	Description
26505-SIV	Mighty Mag Magnifying Lamp – Ivory
26505-ESD	Mighty Mag Magnifying Lamp – Black
26505-B09	Replacement Bulb
26501-SLA	Swing-Away Lens – 5 Diopter (2.25x)
26506-BT4	Black Light Bulb

Magnification Lighting

MaxiVue Magnifying Lamp

The MaxiVue offers a fully adjustable magnifier lens (can be rotated) for full range inspection capabilities. Unnecessary slouching is eliminated. Three 9-watt compact fluorescent lamps provide two light levels: 27-watts from top and both sides of the magnifier or 18-watts of side-to-side lighting. Features a large 6.9"x4.2", 3-diopter (1.75x) Crystal Clear lens, mounted on a mar-resistant engineered plastic housing. The spring balanced arm has a 40" reach and stays in any position. Operates at 115V-AC and comes complete with a mounting clamp and a 5 foot power cord. 1 year warranty (excludes bulbs).

Optional Accessories

- Weighted Base

Order #	Description
25506-SIV	**MaxiVue Magnifying Lamp – Ivory**
26501-WB	**Weighted Base**
26505-B09	**Replacement Bulb**
26506-BT4	**Black Light Bulb**

VuePlus Magnifying Lamp

VuePlus features a 4", 3-diopter Crystal Clear lens. Comes with a 60-watt incandescent bulb which provides "incident lighting" for viewing irregular work surfaces. Comes with a 30" spring balanced arm with a tension control knob at the arm joint and a table mounting clamp. Operates at 115V-AC.

Order #	Description
26504-SBK	**VuePlus Magnifying Lamp - Black**

Task Lighting

OptiVue Magnifying Lamp

OptiVue combines function and form in one small package. With a powerful 13-watt fluorescent bulb, an all capable 3-diopter lens and a highly flexible gooseneck, this small "goes anywhere" dynamo provides illumination and magnification wherever you need.

Order #	Description
26507-SBK	**OptiVue Magnifying Lamp – Black-**3 Diopter

Titan Halogen 150 Watt Task Light

Provides clean and crisp light. Features a powerful 150-watt bulb mounted in a black metal housing. Comes complete with a 35" spring balanced arm with tension control and mounting clamp. Operates at 115V-AC.

Order #	Description
26512-SBK	**Titan 150-watt Task Light**

Elumina 50 Watt Task Light

With a contemporary design, the Elumina task light allows you to direct light where you need it. Adjustable arm extends 23 inches from the weighted base. Lamp includes a 50-watt halogen bulb. Silver Satin Finish. Comes with a 5-foot power cord. Operates at 115V-AC.

Order #	Description
26511-SSL	**Elumina 50-watt Task Light**

Task Lighting

Aurora Combo Lamp

Features a 9 1/2" shade with a 22-watt fluorescent and a 60-watt incandescent bulb. A 3-way switch permits selection of fluorescent or incandescent or both. A 42" adjustable spring balanced arm with tension control allows you to position the lamp exactly where you require. Ivory color. Comes with a mounting clamp and a 5-foot power cord. Operates at 115V-AC.

Order #	Description
26515-SIV	**Aurora Combo Lamp**

Magna Fluorescent Lamp

Features a flexible 42" spring balanced arm supplied with two 15-watt fluorescent tubes that provide uniform light. 19" rectangular head features a handle that permits easy positioning. Comes with a mounting clamp and a 5-foot power cord. Operates at 115V-AC.

Order #	Description
26516-SIV	**Magna Fluorescent Lamp**

Magna Deluxe Fluorescent Lamp

A whole new class of elegant looking fluorescent light from Aven designed to give you crisp, flicker-free lighting, and a maximum uniformity together with a larger lighting area. The 20" lighting head is totally enclosed and features a 55 watt fluorescent bulb. Features a built-in electronic ballast for increased lumen.

The heavy duty industrial grade adjustable arm with tempered steel springs and tension control knobs allows you to easily position the lamp where you want it. The head swivels 310° and tilts 210° for maximum adjustment. Comes with a mounting clamp and a 5 ft power chord. Operates 115V-AC. 1 year warranty (excludes bulb).

Order #	Description
26516-D155	**Magna Deluxe 20" Fluorescent Lamp**

Task Lighting

Magna Deluxe XL 3 Tube Fluorescent Lamp

Features:

- 45 watt fluorescent lamp (3 tubes, 15 watts each) for demanding visual tasks.
- Switches allow you to turn on one, two, or three lamps to suit your needs.
- Spring balanced 35" arm allows rapid positioning of the light and will stay in position needed for your application
- All metal construction with baked on enamel finish.
- Built-in electronic ballast
- C-clamp included for mounting to tables up to 2" thick.
- 3-cord plug

Order #	Description
26516-D3T	**Magna Deluxe XL 3 Tube Fluorescent Lamp**

Sirus Quartz Halogen Task Lights

Excellent for all types of applications requiring high intensity illumination, such as manufacturing, assembly, and inspection. Round tube arms are vibration resistant but can be adjusted to provide the lighting angle you require (Also available with a flex arm). Lamp Head can be moved in up and down direction. 20 Watt Halogen bulb included. Can accept up to 50 watt bulb. C-Clamp is included. Optional Magnetic Base also available. Industrial Grade Quality. 1 year warranty (excludes bulb).

Order #	Description
26521	**Short Arm Task Light**
26522	**220mm (8.66") Arm Task Light**
26523	**440mm (17.32") Arm Task Light**
26524	**800mm (31.5") Arm Task Light**
26525	**520mm (20.5") Flex Arm Task Light**
26520-MB	**Magnetic Base**

Precision Tools

To provide years of worry-free service, we have selected only the best tools for our kits and provide them with a lifetime guarantee.

Our tool kits range from 22 to 163 pieces and can be used in such fields as electronics, engineering and any other task that requires precision assembly.

Tools can also be purchased individually from the following available categories:

Ergo Pliers & Cutters

Featuring scientifically designed handles to provide exceptional comfort, this product is made from stainless steel with a non-reflective black finish. Dual-leaf springs, a box joint construction for exceptional durability and induction-hardened cutting edges are among the other attributes.

Precision Tweezers

Designed to meet applications in areas such as electronics, aircraft and aerospace, miniature assembly, precision engineering, optics and microscopy, these tools come in a variety of materials and can be custom made.

Alignment Tools, Knives & Blades, Scissors, Desoldering/Soldering Tools

Featuring a range of speciality "hard to find" tools for assembly and field service applications.

Precision Screwdrivers

Specifically designed for electronics, our precision screwdrivers include such features as a black tip, nylon engineered plastic, duplex component handle designed for rapid rotation, greater comfort and control, fast turning swivel caps and imprinted sizes on the handle for easy selection.

Crimping Tools & Wire Strippers

Featuring a broad selection to meet all your data com requirements. Special dies and crimpers are also available on request.

Tool Kits

Ergonomically designed screwdrivers

Included in all Aven Kits for fatigue free work and high torque. The fine textured grip has excellent anti-slip properties, and the blades are made from chrome vanadium steel hardened throughout for long life.

Lifetime Warranty on Tools

We have selected only the best tools for our kits to give you years of worry free service. Should any hand tool from your kit fail under normal use, we will replace it free of charge.

Rugged Hard Cases

High density polyethylene for outstanding toughness and attractive styling. The thick walls of our cases are reinforced with a full length piano hinge and a continuous tongue-and-groove aluminium valance. Cases come in a rich pebble grain finish that absorbs scratches without chipping or fading. (1 Year Warranty)

Compact and Durable Soft Cases

Our soft cases are manufactured from tough ballistic nylon. They are lightweight, yet strong, featuring oversized self healing zippers, large pockets for all your extras, nylon web handles and shoulder straps.

Tool Kits

163-peice Master Field Service Kit

This kit has all the essential tools required by field service professionals and in-house technical support groups for onsite support of electronic equipment. Built-in cart for easy transportation.

Dimensions (LxWxH)
14.5"x18"x10.5"

Weight
28lbs. (with tools)

TOOLS:
- Alignment Tool, 2-piece
- Brush
- Bit Set, 33-piece Security
- Crimping Tool, w/wire stripper, bolt cutter
- Cutters, 4" & 5" Diagonal
- Desoldering Pump
- Dispenser, 2 oz. Leak Proof
- Driver Blade Extension 4"
- Driver Blade Handle
- Duplex Outlet Tester
- Feeler Gauge
- File Set, Square, Round & Flat
- Hammer, 4 oz. Ball Pein
- Hemostat, 6" Straight
- Hex Driver Blades, 9-piece .050-3/16"
- Hex Key Set, 7-piece
- IC Extractor, 8-24 Pin
- Inspection Mirror
- Knife, w/pack of 5 precision utility blades
- Nut Driver Blades, 9-piece, 3/16"-1/2"
- Measuring Tape, 1" x 25 ft
- Parts Box, 8 Compartments
- Penlight with Batteries
- Pick Up Tool 8 1/2" Magnetic
- Punches, Drive Pin 1/16" and 1/8"
- Ruler, 6" Stainless Steel
- Scissors, Electrician
- Scribe
- Soldering Aid, 3-piece
- Soldering Iron, 25-Watt
- Socket Set, 13-piece
- Solder Pack
- Solder Wick
- Spring Tool Push & Pull
- Torx Blade Set, 6-piece T6-T25
- Utility Knife
- Wire Stripper, Adjustable Stop

PLIERS:
- 4" Chain Nose
- 10" Groove Joint
- Retaining Ring, Internal/External
- 5" Vise Grip
- 6" Long Nose with cutter

SCREWDRIVERS:
- Slotted: 3/32" x 2", 1/8" x 4", 1/8" x 8", 3/16" x 4", 1/4" x 4", 5/16" x 6", 1/4" x 4", 5/16" x 6", 1/4" Stubby
- Phillips: #0 x 2", #0 x 8", #1 x 3", #2 x 4", #2 Stubby
- Ratchet Offset
- Jeweler's Set, 6-piece
- Pocket: 3/32" & #0 Phillips

TWEEZERS:
- 6 1/2" Angle Point
- Reverse Action

WRENCHES:
- 4" Adjustable
- 6" Adjustable
- Wrench Set: 10-piece
- Combination 5/32" - 7/16"

Order #	Description
15201	**163-piece Master Field Service Kit**

Tool Kits

140-piece Information Systems Service Kit

Service PCs, workstations, file servers, LANs, Telco and RS232 line sharing devices, printers, plotters, and monitors. This kit contains the key tools to service equipment that processes, transmits, and displays information. Included are specialty tools for extracting DIPs, PLCC and RS232 pins, tamperproof drivers needed for accessing computers and monitors and two function testers for power and telephone lines.

Dimensions (LxWxH)
14.5"x18"x10.5"

Weight
24lbs. (with tools)

TOOLS:
- Alignment Tools, 3-piece set
- Crimping Tool, Wire/Bolt
- Bit Sets: 11-piece & 33-piece Security
- Cutters, 4" Diagonal & 5" Diagonal
- Drive Blade Handle 4"
- Drive Blade Extension 4"
- Feeler Gauge
- File Set, 3-piece: Square, Round, Flat
- Hemostat 6"
- Hex Driver Blades Ball End, 7-piece .050 - 3/32"
- IC Inserter/Extractor
- Interface Card Int/Ext Tool
- Key Cap Puller
- Knife #1 with 5 Precision Utility Blades
- Magnifier with Light
- Mirror/Magnetic Pick Up Tool 6"-18" Telescopic
- Nut dirver Blades, 8-piece 3/16" - 1/2"
- Penlight with Batteries
- Pick Up Tool, 4 1/2" 3-Prong
- Scissor
- Socket Set, 13-piece 1/4" Driver
  (9) Sockets 3/16" - 1/2"
  (2) Extensions 3" and 6"
  (1) Reversible Ratchet
  (1) Spinner Handle
- Solder Pack
- Soldering Iron with Tip
- Solder Pump Anti-static
- Spring Hook Tool Set 2-piece
- Spudger
- Storage Box
- Tester, Duplex Outlet
- Tester, Telephone Line
- Tweezers Reverse Action
- Wire Stripper: 16-26 AWG
- Wrench 6" Adjustable

PLIERS:
- 4" Chain Nose
- 8" Groove Joint
- 5" Locking
- 6" Long Nose with Cutter
- RS232 Contact Insert/Removal Tool
- Retaining Ring

SCREWDRIVERS:
- Slotted: 3/32" x 2" Pocket, 1/8" x 8", 3/16" x 4", 1/4" X 6", 5/16 x 6"
- Phillips: #0 x 2" Pocket, #1 x 8", #2 x 4"
- Stubby 2-piece PH/ST
- Ratchet Offset
- Jeweler's Set, 6-piece

EXTRACTORS:
- 8-24 pin IC
- PLCC

RULERS:
- 6" Stainless Steel
- 1" x 25' Tape

Order #	Description
15210	**140-piece Information System Kit**

Tool Kits

85-piece Master Electronic Tool Kit

One of our most popular kits offering the best value. We have included in this kit a multimeter, a high-speed drill set with accessories, a vice for holding small objects, battery-powered vacuum cleaner, 30 watt soldering iron, and much more, all supplied in a sturdy aluminum case for years of service.

Dimensions (LxWxH)
13"x18"x6"

Weight
18lbs. (with tools)

TOOLS:
- Brush
- Plastic Box for Components
- Cleaning Solution (20 ml)
- Desoldering Pump
- Drill Set 15-piece
- File Set 5-piece
- Crimping Tool 9" 5-way
- Cutter 4.5"
- Flashlight
- Head Cleaning Fluid
- Hex Key Wrench 7-piece
- Holder 3-prong
- Knife Utility (Snap-Off Blade)
- IC Inserter/Extractor
- Multimeter Digital
- Nut Drivers: 5 and 6 mm
- Scissor 6"
- Solder
- Solder Aid Kit, 3-piece
- Soldering Iron, 30-Watt Ceramic
- Soldering Iron Stand
- Tape, Electrical
- Tweezers 6.5" Cross Lock
- Wrench 6" Adjustable
- Wrench Set Ignition 10-piece
- Wrist Strap Anti-Static
- Vacuum Cleaner, 5-piece
- Vice

PLIERS:
- 5" Flat Nose Serrated
- 5" Bent Nose Serrated
- 5" Long Nose Serrated
- 8" Linesman

SCREWDRIVERS:
- Electrical Test
- Slotted: 3 x 75 mm; 5 x 75 mm, 6 x 38 mm, 6 x 100 mm
- Phillips: #0 x 75 mm, #1 x 75 mm, #1 x 150 mm, #2 x 100 mm, #2 x 200 mm, #2 x 38 mm
- Safety Torx: T10 & T15

PRECISION SCREWDRIVERS:
- Slotted: 2.4 x 75 mm; 3.0 x 100 mm, 3.8 x 150 mm
- Phillips: #0 x 75 mm, #1 x 100 mm; #2 x 150 mm

Order #	Description
15018	**85-piece Master Electronic Tool Kit**

93-piece Premier Field Service Kit

A full complement of tools for maintaining, upgrading and repairing electronic equipment. Supplied in double-sided, durable nylon case with large external pockets.

Dimensions (LxWxH)
17"x12"x5.5"

Weight
13lbs. (with tools)

TOOLS:
- Cutters: 4 1/4" & 6" Diagonal
- Desoldering Pump
- DIP IC Extractor
- DIP IC Inserter
- Feeler Gauge
- Flashlight, with batteries
- Hammer, 4 oz. Ball Pein
- Hex Key Set BP, 9-piece
- Hemostat, 5"
- Jeweler's Screwdrivers, 6-piece Phillips/Slotted
- Metal Scribe
- Microwick
- Mirror/Magnetic Retriever
- Needle Files, 3-piece
- Driver Handle 4"
- Nutdriver Blades, 9-piece: 3/4", 9/32", 3/8", 7/32", 5/16", 7/16", 1/4", 11/32", 1/2"
- Punch Pins 1/16", 1/8"
- Ruler, 6" Stainless Steel
- Scissors, Technik Electricians
- Socket Set, 13-piece 1/4" Drive
- Solder Aid Kit, 3-piece
- Soldering Iron
- Solder
- Spring Tool Combination, 2-piece
- Tape Measure
- Wire Stripper 16-26 AWG
- Wrench 6" Adjustable
- Wrench Set, Mini Ignition, 8-piece 7/32", 7/16"

PLIERS:
- 41/2" Chain Nose Serrated
- 6" Long Nose with Side Cutter
- 5 3/4" Needle Nose
- 6" Slip Joint

SCREWDRIVERS:
- Slotted: 3/32" x 2", 3/8" x 4", 3/16" x 4", 1/4" x 4"
- Phillips: #0 x 2", #1 x 4", #2 x 4"
- Safety Torx: T10, T15, T20
- Stubby Slotted: 1/4"
- Stubby Phillips: #1
- Handle

TWEEZERS:
- 5" Sharp Point
- 41/2" Cross Lock

Order #	Description
15006	**93-piece Field Servcice Kit**

Tool Kits

65-piece Premier Service Engineer's Kit

For those that repair computers, copiers, and any other electronic equipment on-site. Double sided, durable nylon case with large external pockets.

Dimensions (LxWxH)
17"x12"x5.5"

Weight
11lbs. (with tools)

TOOLS:
- Alignment Tool
- Cutters: 4 1/2" Diagonal
- Desoldering Pump
- Flashlight, with batteries
- Hemostat, Technik 5"
- Hex Key Set Fold Up, 9-piece .050 to 3/16"
- Knife, Precision
- Metal Scribe
- Microwick
- Needle Files, 2-pieces
- Nutdriver Blades: 3/16", 9/32" 3/8", 7/32", 5/16", 7/16", 1/4", 11/32", 1/2"
- Prong Holder
- Ruler, 6" Stainless Steel Ruler
- Solder Aid Kit, 3-piece
- Soldering Iron
- Solder
- Scissors, Electricians
- Torx Key Set Fold Up, 7-piece T6 to T20
- Tweezers, 6" Cross lock
- Wire Stripper
- Wrench 6" Adjustable

PLIERS:
- 5" Needle Nose
- 6" Slip Joint
- 6" Long Nose with Wire Cutter
- 4 1/2" Chain Nose-Serrated

SCREWDRIVERS:
- Blades: Phillips - #0, #1, #2
- Blades: Slotted - 1/8", 3/16", 1/4"
- Phillips: #0 x 2"
- Slotted: 3/32" x 2"
- Jeweler's 6-piece Set

Order #	Description
15002	**65-piece Service Engineer's Kit**

67-piece Premier General Electronic Tool Kit

Contains all the essential tools needed to access, troubleshoot and repair electronic equipment.

Dimensions (LxWxH)
15.5"x10.5"x5.5"

Weight
8lbs. (with tools)

TOOLS:
- Brush
- Cutter, 4 1/2" Diagonal
- Flashlight, with batteries
- Hex Keys Fold Up, 9-piece .050 to 3/16"
- Knife Snap Blade, 10-pieces
- Microwick
- Plastic Parts Box
- Rachet
- Ruler, 6" Stainless Steel
- Scissors, Electrician
- Socket Set, 9-piece
- Extension Bars: 4" and 6"
- Solder
- Soldering Iron
- Tape Measure 12'/3M
- Torx Fold Up, 7-piece T6 to T20
- Wire Stripper/Cutter
- Wrench Adjustable 6"

PLIERS:
- 6" Slip Joint
- 6" Long Nose with Wire Cutter
- 4 1/2" Long Nose Pliers with Cutter

SCREWDRIVERS:
- Phillips: #0 x 4", #1 x 4", #2 x 4"
- Slotted: 1/8" x 4", 3/16" x 4", 1/4" x 4"
- Jeweler's 6-piece Phillips & Slotted

Order #	Description
15001	**67-piece Premier General Electronic Kit**

Tool Kits

98-piece Premier Networking Tool Kit

Designed to address the specific requirements of maintaining and troubleshooting data links, LANs and WANS. Kit contains a complete selection of tools to access and troubleshoot a variety of equipment common to all networks.

Dimensions (LxWxH)
17"x12"x5.5"

Weight
11lbs. (with tools)

TOOLS:
- Alignment Tool
- Cable Cutter
- Cable Stripper, Coax
- Cable Tester, Multi Network
- RS232 to w12/45 Converter
- Crimp Tool, with (RG58 & RG59) die set
- Cutters 4 1/2" Diagonal
- Flashlight, with batteries
- Gender Changer: M/M & F/F
- Hex Key Set, 9-piece 5/64" to 1/4"
- Knife, Precision
- Mirror/Magnetic Retriever
- Modular Plugs (24): 4 & 8 Pos
- Nutdriver Blades, Interchangeable: 3/16", 1/4", 5/16"
- Plastic Parts Box (3)
- Pliers: 4 3/4" Long Nose - Serrated Jaws
- Punch Down Tool
- Receptacle Analyzer
- RJ45 Adapter Cable 14'
- Scissors, Electrician
- Solder
- Soldering Iron
- Wire Stripper 16 to 26 AWG
- Wrench 6" Adjustable

SCREWDRIVERS:
- Blades: Slotted - 1/8", 3/16", 1/4"
- Blades: Phillips - #0, #1, #2
- Blades: Torx - T10, T15, T20

PRECISION SCREWDRIVERS:
- Slotted: 2.4 mm
- Phillips: #0

POCKET SCREWDRIVERS:
- Phillips #0
- Slotted 3/32"

Order #	Description
15007	**98-piece Premier Networking Tool Kit**

48-piece Premier Compact Technician's Kit

A compact version of our popular Technician's Kit, with 47 of the most requested tools in a durable nylon case.

Dimensions (LxWxH)
15.5"x10.5"x5.5"

Weight
8lbs. (with tools)

TOOLS:
- Alignment Tools (3)
- Cutter, 4 1/2" Diagonal
- Desoldering Pump
- Driver Handle 4"
- Flashlight, with batteries
- Hex Key Set, 9-piece
- Knife Precision Blade
- Microwick
- Needle File Flat
- Nutdriver Blades: 1/4", 5/16", 3/8"
- Ruler, 6" Stainless Steel
- Solder
- Solder Aid Kit, 6-piece
- Soldering Iron
- Wire Stripper/Cutter
- Wrench 4" Adjustable

SCREWDRIVERS:
- Blades: Slotted- 3/16", 1/4", 5/16"
- Blades: Phillips - #1, #2
- Jeweler's, 6-piece Phillips and Slotted

PLIERS
- 6" Slip Joint
- 4 1/2" Chain Nose - Smooth Jaws
- 5 1/2" Needle Nose
- 6" Long Nose with Wire Cutter

Order #	Description
15004	**48-piece Premier Compact Tech. Tool Kit**

Tool Kits

70-piece Premier Technician's Kit

Ideal for general electronic service, this kit contains tools commonly needed to get at the 'electronics,' including a socket set, an adjustable wrench, and locking pliers and much more.

Dimensions (LxWxH)
15.5"x10.5"x5.5"

Weight
8lbs. (with tools)

TOOLS:
- Alignment Tools (3)
- Cutter, 4 1/2" Diagonal
- Desoldering Pump
- Flashlight, with batteries
- Hex Key Set, 9-piece
- Hemostat, 5"
- IC Inserter/Extractor
- Knife Precision Blade
- Microwick
- Mirror, Inspection
- Needle File Flat
- Nutdriver Blades: 1/4", 5/16", 3/8"
- Ruler, 6" Stainless Steel
- Scissors, Electrician
- Socket Set, 13-piece 1/4"
- Solder
- Spring Hook Tool (2)
- Solder Aid Kit, 6-piece
- Soldering Iron
- Wire Stripper/Cutter
- Wrench 6" Adjustable

PLIERS:
- 5 3/4" Needle Nose-Serrated Jaws
- 4 1/2" Chain Nose-Serrated Jaws
- 6" Vise Grip
- 6" Long Nose with Wire Cutter

SCREWDRIVERS:
- Phillips: #0 x 21/2"
- Slotted: 3/32" x 2"
- Jeweler's, 6-piece Phillips and Slotted
- Blades: Slotted - 3/16", 1/4", 5/16"
- Blades: Phillips - #1, #2
- Screwdriver Handle Drive

Order #	Description
15003	**70-piece Premier Technician's Kit**

55-piece Premier PC Technician's Tool Kit

This kit contains an assortment of tools for the "Pros" servicing computer systems, PC terminals, and peripherals.

Dimensions (LxWxH)
15.5"x10.5"x5.5"

Weight
6lbs. (with tools)

TOOLS:
- Alignment Tool
- Cable Ties
- Cutter, 4 1/2" Diagonal
- Driver handle 4"
- Flashlight, with batteries
- Gender Changers RS232 M/M, F/F
- IC Inserter/Extractor
- Nutdriver Blades: 3/16", 1/4", 5/16", 3/8"
- Needle Files (3)
- Parts Holder 3-Prong
- PLCC Removal Tool
- Pliers: 4 1/2" Chain Nose, Serrated
- Wrench, Adjustable 4"
- Wipes (6)
- Wire Stripper
- Wrist Strap

HEX KEYS
- BP(8) .050 to 5/32"
- BP metric (6) 1.5 to 5 mm

SCREWDRIVERS:
- Phillips #00, #0, #1
- Slotted: 3/32", 1/8"
- Torx - T8, T10, T15
- Blades: Slotted - 1/8", 3/16", 1/4"
- Blades: Phillips - #0, #1, #2

Order #	Description
15005	**55-piece Premier PC Technician's Kit**

Tool Kits

22-piece Personal Computer Tool Kit

A compact tool kit, which has all the necessary tools for performing routine upgrades, maintenance, and repairs on PCs, Macs and workstations, in an attractive and durable case.

TOOLS:
- 3-Prong Holder
- Brush
- Crimp Tool, 7 in 1
- Desoldering Pump
- IC Extraction Tool
- IC Insertion Tool
- Nutdrivers: 5 mm, & 6 mm
- Pliers, 5" Long Nose
- Solder
- Soldering Iron, 30W Ceramic
- Tweezer, Stainless
- Wrench 6" Adjustable
- Wrist Strap, Anti-static

SCREWDRIVERS:
- Slotted: 3 x 75 mm, 5 x 75 mm
- Phillips: #0 x 75 mm, #1 x 75 mm
- Safety Torx: T10, T15

Dimensions (LxWxH)
13"x8"x2.5"

Weight
3lbs. (with tools)

Order #	Description
15014	**22-piece Personal Computer Tool Kit**

22-piece Network Maintenance Kit

All the essential tools to maintain and service computer networks, in a durable case.

TOOLS:
- Cable Stripper, Rotary Coaxial
- Crimping Tool for 4, 6, & 8 position line cords
- Cutter, 4.5" Diagonal
- Desoldering Pump
- Flashlight, Mini
- Forcep, 6" Straight
- Hex Key Set 7-piece
- IC Extractor
- Inspection Mirror
- Nutdrivers: 5 mm & 6 mm
- Pliers, 5" Long Nose
- Soldering Iron, 30W Ceramic
- Wire Stripper (AWG 20-30)

SCREWDRIVERS:
- Slotted: 3 x 75 mm, 5 x 75 mm, 6 x 100 mm
- Phillips: #0 x 75 mm, #1 x 75mm, #2 x 100 mm
- Torx: T10, T15, T20

Dimensions (LxWxH)
15"x10"x3"

Weight
6lbs. (with tools)

Order #	Description
15021	**22-piece Network Maintenance Kit**

22-piece Basic Electronic Tool Kit

Contains the essential tools needed to access, troubleshoot, and repair electronic equipment, supplied in an attractive durable case.

TOOLS:
- Alignment Driver
- Cutter, 6" Diagonal
- Desoldering Pump
- Needle File Set, 2-piece, Round and Flat
- Nutdrivers: 5 mm & 6 mm
- Solder
- Soldering Iron, 30W Ceramic
- Solder Wick
- Tape, PVC Insulated
- Tweezer, Stainless
- Wrench 6" Adjustable

PLIERS
- 6" Long Nose
- 6" Combination

SCREWDRIVERS:
- Slotted: 3 x 75 mm, 5 x 75 mm, 6 x 100 mm
- Phillips: #0 x 75 mm, #1 x 75 mm, #2 x 100 mm, #2 x 200 mm

Dimensions (LxWxH)
14"x9"x2.5"

Weight
6lbs. (with tools)

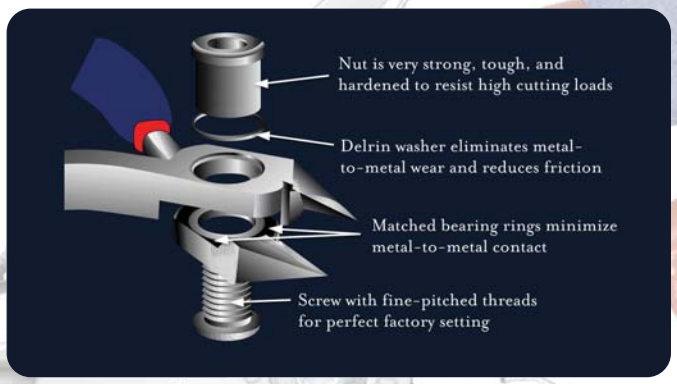
Order #	Description
15019	**22-piece Basic Electronic Tool Kit**

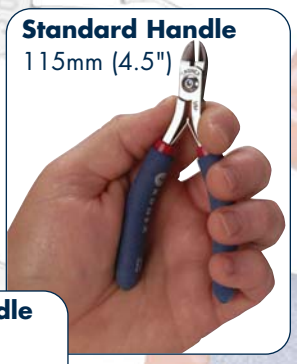
Aven Tronex Series
High Precision Pliers and Cutters

made in the USA

Cutting Edge Technology provides you with superior levels of cutting performance, quality, value and comfort.

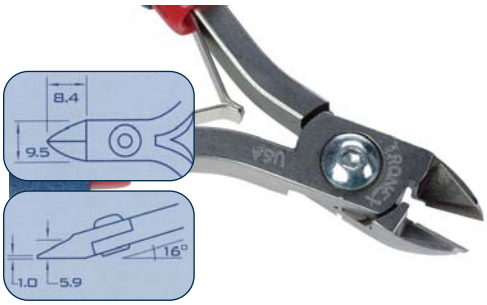
- **Highest quality American made** 1% carbon alloy steel is used for exceptional hardness and toughness. Tools are engineered for precision cutting yet long lasting ruggedness. These tools have the heft and feel that of a luxury car.
- **Special Handles** both standard and long are ergonomically designed to fit most hands with no points of pressure. They are enhanced by soft cushion grips for maximum comfort to reduce cutting fatigue dramatically.
- **Exceptional Cutting Edges.** They are made with by using a proprietary dual sharpening process and then raised to optimum hardness and toughness through a induction heating and tempering process. The result: Sharp, hard and tough cutting edges outcut and outlast all others.
- **Superior Joint System:** Two halves of the tool are joined by a fine thread interlocking screw and nut which mount on precision machined bearing rings. This ensures a tight, perfect alignment with smooth consistent cutting.
- Cutters are available in Semi-Flush, Flush and Razor Flush cutting edges.
- Attractive satin coating protects against corrosion and reduces glare.
- Stainless steel double leaf springs
- ESD Safe cushion grips for exceptional comfort
- Available in Standard and Ergonomic handle lengths. Length of tool with standard handle: 115mm (4-1/2") and with ergonomic handle: 140mm (5-1/2")
- 100% Quality assurance:- Each cutter is checked individually at the factory and are warranted for be free of defects in materials and workmanship for the life of the tool





Tronex Series - High Precision Cutters

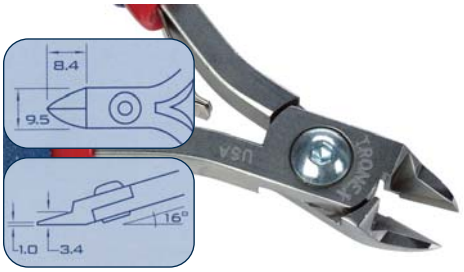
Tronex Oval Head Cutter



Strong versatile and long lasting, this popular shape can be used for many applications. Designed to be durable through hundreds of thousands of cuts.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5111	7111	Semi-Flush	.20 to 1.20mm
5112	7112	Flush	.15 to 1.50mm
5113	7113	Razor Flush™	.10 to 1.00mm

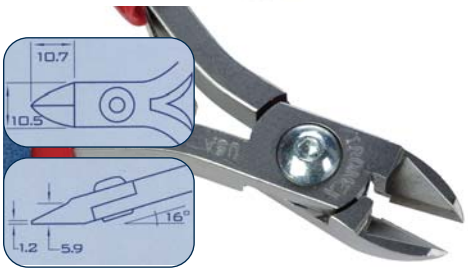
Tronex Oval Head Cutter with Relief



Same features as the oval head cutter but the relief provides extra accessibility.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5121	7121	Semi-Flush	.20 to 1.20mm
5122	7122	Flush	.15 to 1.10mm
5123	7123	Razor Flush™	.10 to 0.90mm

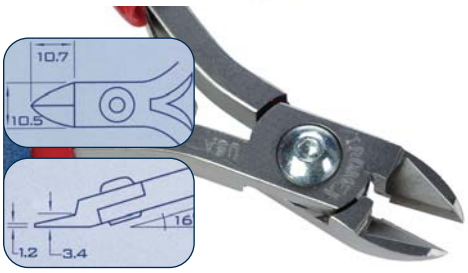
Tronex Large Oval Head Cutter



Popular for wire and cable, extra rugged, 25% larger head than standard oval cutters.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5511	7511	Semi-Flush	.20 to 1.50mm
5512	7512	Flush	.15 to 1.50mm
5513	7513	Razor Flush™	.10 to 1.20mm

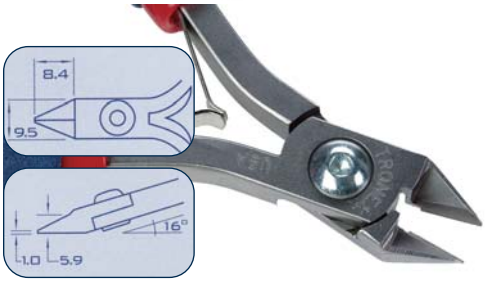
Tronex Large Oval Head Cutter with Relief



Same features as the large oval head cutter but the relief provides extra accessibility.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5521	7521	Semi-Flush	.20 to 1.40mm
5522	7522	Flush	.15 to 1.40mm
5523	7523	Razor Flush™	.10 to 1.20mm

Tronex Tapered Head Cutter



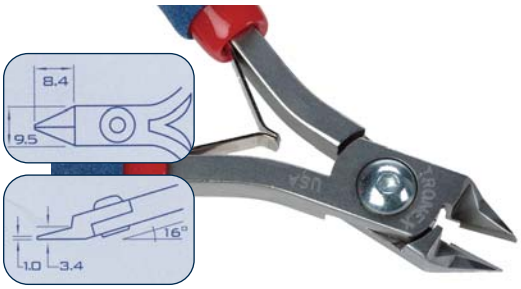
A more compact design pointed head for increased operator access, yet covers a wide cutting range and long tool life.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5211	7211	Semi-Flush	.20 to 1.10mm
5212	7212	Flush	.15 to 1.10mm
5213	7213	Razor Flush™	.10 to 1.00mm

**Diameter of Soft Copper wire*

Tronex Series - High Precision Cutters

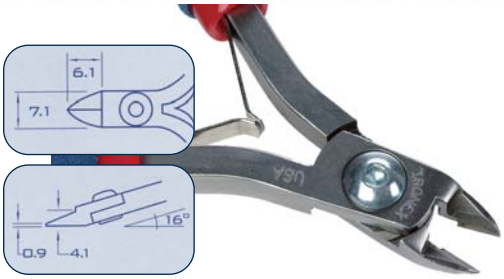
Tronex Tapered Head Cutter with Relief



Same features as the tapered head cutter but with a lower profile for better access and extra visibility.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5221	7221	Semi-Flush	.20 to 1.10mm
5222	7222	Flush	.15 to 1.00mm
5223	7223	Razor Flush™	.10 to 0.90mm

Tronex Miniature Oval Head Cutter



SMT Cutter, 30% smaller head than standard oval cutters.

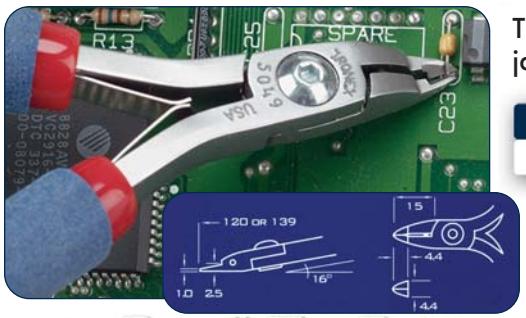
Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5311	7311	Semi-Flush	.20 to 1.10mm
5312	7312	Flush	.10 to 1.00mm
5313	7313	Razor Flush™	.10 to 0.80mm

Tronex Minature Tapered Head Cutter

Miniature Taper Relief cutters are used only for exceptionally fine cutting work. Usually access to the cutting area is difficult, requiring the very low profile of this cutter with full relief.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity*
5421	7421	Semi-Flush	.20 to 1.10mm
5422	7422	Flush	.10 to 1.00mm
5423	7423	Razor Flush™	.10 to 0.80mm

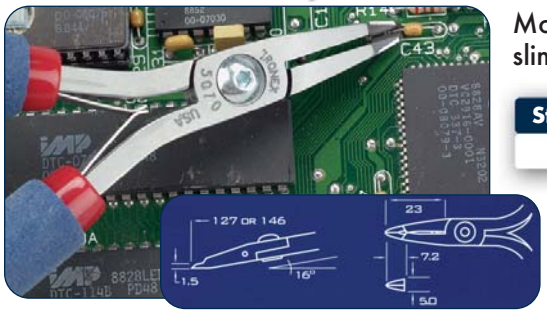
Tronex Tip Cutter High Relief



Tip cutter with a deep relief for an exceptionally low profile. Short sturdy jaw. Razor Flush™ cutting Edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5049	7049	Razor Flush™	.10 to 0.65mm

Tronex Small Tip Cutter



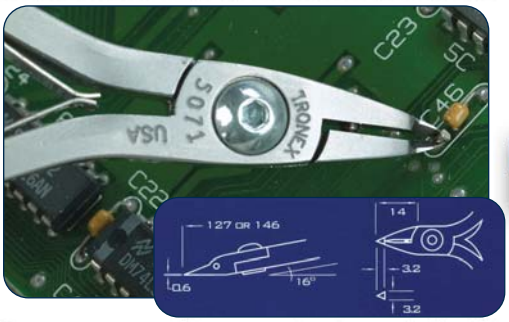
Most popular tip cutter. Jaw is twice as long as standard cutters. Jaw is slim with a low relieved profile. Razor Flush™ cutting edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5070	7070	Razor Flush™	.10 to 0.65mm

*Diameter of Soft Copper wire

Tronex Series - High Precision Cutters

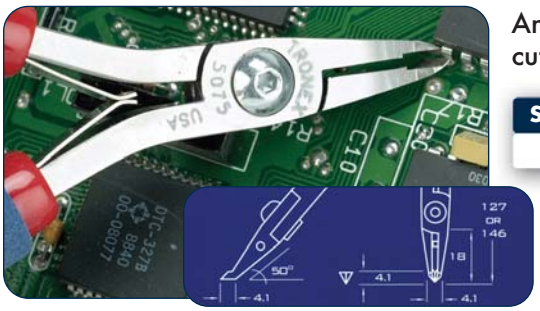
Tronex Subminiature Tip Cutter



SMT Cutter. Extraordinarily small. Fine cutting edges and fine tip. Often used under a microscope. Removes individual leads from fine pitch components. Razor Flush™ Cutting Edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5071	7071	Razor Flush™	.05 to 0.40mm

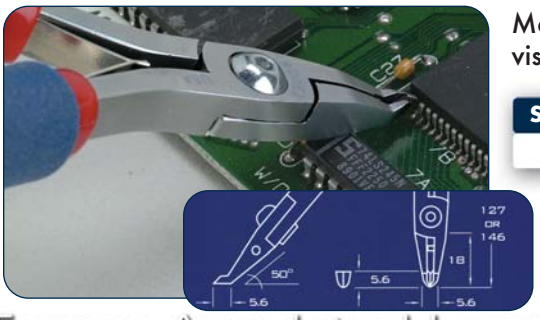
Tronex Angulated Miniature 50° Cutter



An SMT cutter with a very small cutting head. Used for exceptionally fine cutting. Relieved for maximum accessibility. Flush cutting edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5075	7075	Flush	.10 to 0.65mm

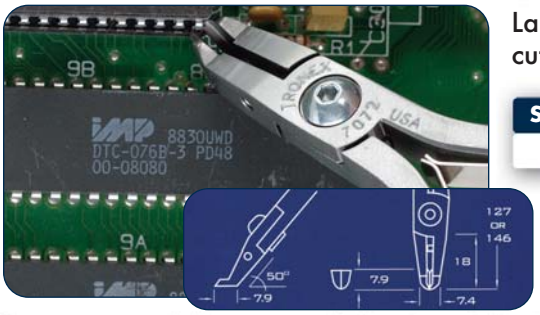
Tronex Angulated Small 50° Cutter



Most popular angulated cutter. Small cutting head with relief for excellent visibility. Durability combined with fine cutting. Flush cutting edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5082	7082	Flush	.10 to 0.65mm

Tronex Angulated Large 50° Cutter



Largest cutting head. Robust. Excellent in cutting several leads in a single cut. Relieved for enhanced visibility. Razor Flush™ cutting edges.

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
5072	7072	Razor Flush™	.10 to 0.65mm

Tronex Heavy Duty Cutter

This cutter, forged of carbon steel, has strength in the head and joint areas needed to cut heavier gauge wire or cable. Cushion grips provide operator comfort. A jaw restraining device is attached to insure spring retention. Overall length 6" (152mm). Length of cutting blade 3/4" (19mm)

Standard Handle	Ergonomic Handle	Cutting Edge	Cutting Capacity
–	7812	Flush	.10 to 1.60mm

**Diameter of Soft Copper wire*

Tronex Series - High Precision Pliers

Tronex Chain Nose Pliers: Standard and Short Jaw

Features very fine tips, "eased" edges of the inner jaw to reduce the risk of damage to the workpiece during forming, and a long jaw for extended gripping power. Available with smooth or serrated jaws. Standard & Short Chain nose pliers have tips dimension of 1.2mm W x 1.4mm H (.050" x .060").

Standard Handle	Ergonomic Handle	Jaw Type	Jaw Length
511	711	Standard Smooth	33mm (1.30")
512	712	Standard Serrated	33mm (1.30")
513	713	Short Smooth	19mm (0.75")

Tronex Needle Nose Pliers

These pliers have exceptionally fine tips. The outer surface of the jaw is rounded to the shape of smooth half cones. This design increases tool access and allows forming of round loops. All edges of the inner jaws are eased. Tip dimensions: 1.0mm W x 1.2mm H. (.040" x .050").

Standard Handle	Ergonomic Handle	Jaw Type	Jaw Length
521	721	Smooth	31.7mm (1.25")

Tronex Round Nose Pliers: Standard and Short Jaw

Available in long and short jaws. The long jaws makes it possible to form a wide range of loop diameters. The short jaw adds more stiffness and strength to allow forming of heavier gauge wire with added control. Long jaw pliers have a tip diameter of 0.7mm(.030") and the short jaw pliers have a tip diameter of 0.9mm (.035").

Standard Handle	Ergonomic Handle	Jaw Type	Jaw Length
531	731	Smooth	31.7mm (1.25")
532	732	Smooth	18.1mm (.715")

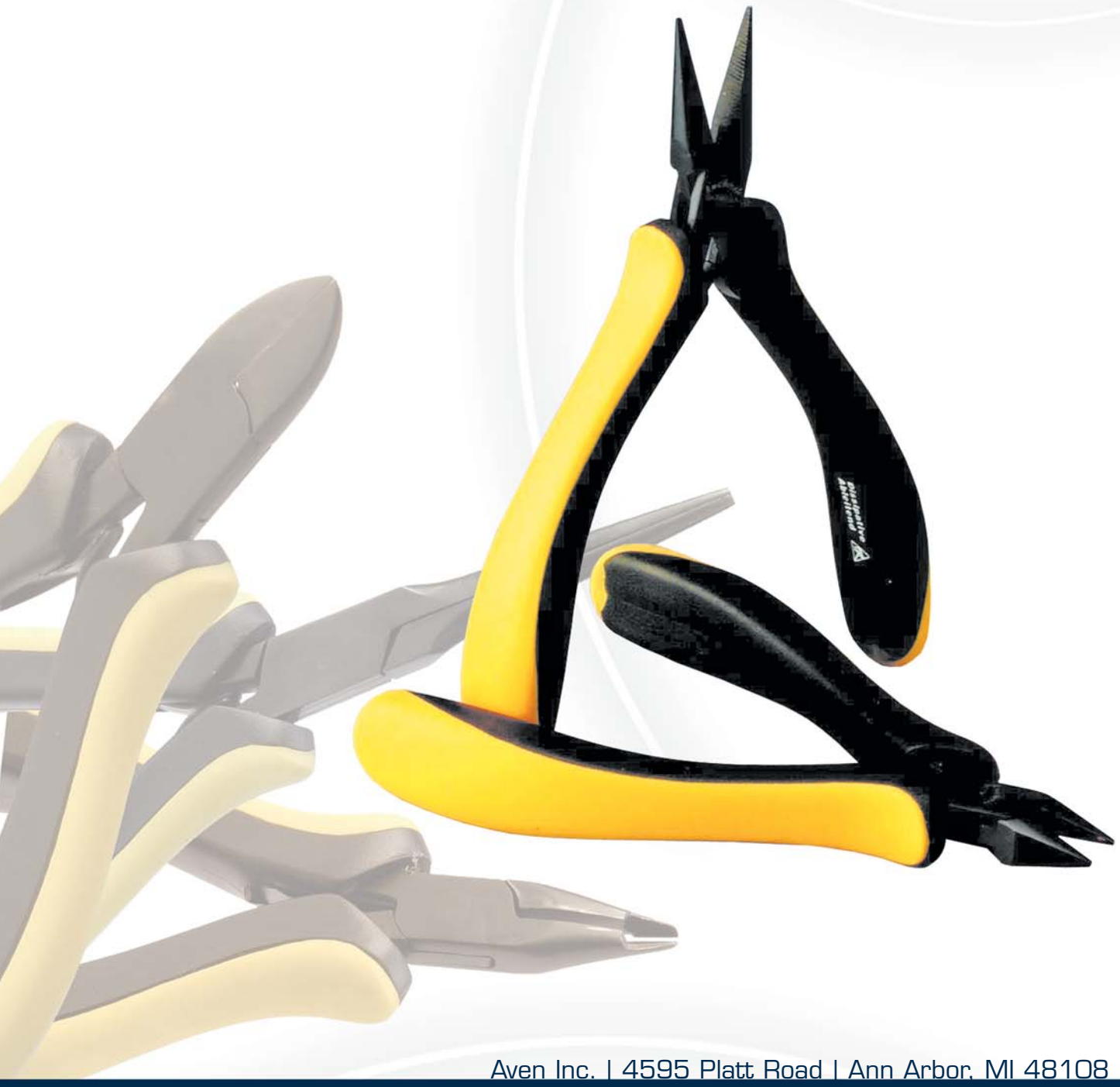
Tronex Flat Nose Pliers: Standard and Wide Tips

These flat nose pliers have a long jaw and very thin tips. The tip gripping area has a smooth finish. All inner edges are "eased" to reduce risk of workpiece damage. Standard flat nose pliers have tips that are 3.5mm (.140") wide and the Wide Tip Flat Nose Pliers have tips that are 6.3mm (.250") wide.

Standard Handle	Ergonomic Handle	Jaw Type	Jaw Length
541	741	Standard Smooth	31.7mm (1.25")
542	742	Wide Smooth	31.7mm (1.25")

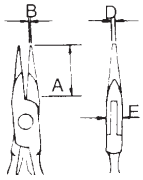
Ergo Pliers & Cutters

- Scientifically designed handles to provide exceptional comfort
- Manufactured from Stainless Steel, will not rust
- Non Reflective Black Finish
- Dual Leaf Springs
- Induction Hardened Cutting Edges



Ergo Pliers & Cutters

Chain Nose Pliers

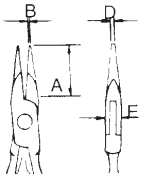


Head Dimensions:
A–.93" B–.04"
D–.06" E–.21"

Ideal for forming, bending and precision assembly work.

Order #	Description
10301-ER	**4.5" Chain Nose,** Smooth Jaws: 0.93" Jaw Length
10307-ER	**4.5" Chain Nose,** Serrated Jaws: 0.93" Jaw Length
10302-ER	**5" Chain Nose,** Smooth Jaws: 1.05" Jaw Length
10308-ER	**5" Chain Nose,** Serrated Jaws: 1.05" Jaw Length

Extra Long Chain Nose Pliers

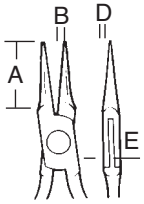


Head Dimensions:
A–1.42" B–.05"
D–.07" E–.25"

Excellent for hard to reach areas.

Order #	Description
10311-ER	**5" Extra Long Chain Nose** Smooth Jaws: 1.42" Jaw Length
10311S-ER	**5" Extra Long Chain Nose** Serrated Jaws: 1.42" Jaw Length

Needle Nose Pliers



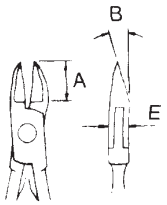
Head Dimensions:
A–1.93" B–.04"
D–.06" E–.22"

Ideal for work in tight places where space and accessibility are limited.

Order #	Description
10314-ER	**5-3/4" Needle Nose** Serrated Jaws: 1.93" Jaw Length

Ergo Pliers & Cutters

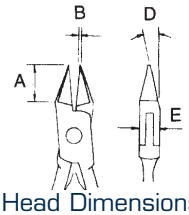
Oval Head Cutters



Head Dimensions:
A-.55" B-13° E-.28"

Order #	Description
10321-ER	**4-1/2" Oval Head Cutter, Semi-Flush** Cutting Capacity: 22 AWG, CBL: 0.55"
10323-ER	**4-1/2" Oval Head Cutter, Flush** Cutting Capacity: 24 AWG, CBL: 0.55"
10332-ER	**4-3/8" Mini Oval Head Cutter, Flush** Cutting Capacity: 24 AWG, CBL: 0.45"

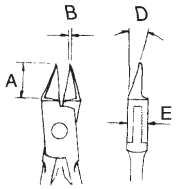
Tapered Head Cutters



Head Dimensions:
A-.55" B-.05"
D-14° E-.28"

Order #	Description
10325-ER	**4-1/2" Tapered Head Cutter, Semi-Flush** Cutting Capacity: 22 AWG, CBL: 0.55"
10326-ER	**4-1/2" Tapered Head Cutter, Flush** Cutting Capacity: 24 AWG, CBL: 0.55"
10331-ER	**4-3/8" Mini Tapered Head Cutter, Flush** Cutting Capacity: 24 AWG, CBL: 0.45"

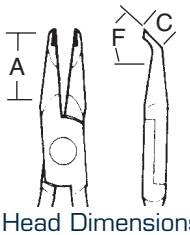
Tapered Head Cutter w/Relieved Head



Head Dimensions:
A-.55" B-.05"
D-13° E-.28"

Order #	Description
10329-ER	**4-1/2" Tapered Head Cutter, RH, Flush** Cutting Capacity: 24 AWG, CBL: 0.55"

Tip Cutter



Head Dimensions:
A-.75" C-.20"
E-.23" F-.45°

Order #	Description
10330-ER	**4-1/2" Tip Cutter, Flush** Cutting Capacity: 24 AWG

* Cutting Capacity stated aboove is for soft copper wire

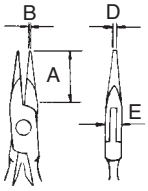
Stainless Steel Pliers & Cutters

- Mirror Polished Stainless Steel
- ESD Safe Grips
- Box Joint Construction
- Dual Leaf Springs For Comfortable Action
- Induction Hardened Cutting Edges
- Large Selection

Stainless Steel Pliers & Cutters

Stainless Steel Pliers

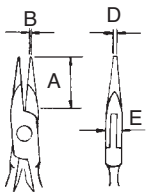
Head Dimensions:
A– .93" B–.04" D–.06" E–.21"



Technik 4-1/2" Chain Nose – Ideal for forming, bending and precision assembly work.

Order #	Description
10301	Technik 4-1/2" Chain Nose, Smooth
10307	Technik 4-1/2" Chain Nose, Serrated

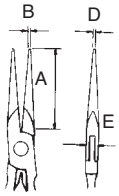
Head Dimensions:
A–1.05" B–.04" D–.06" E–.39"



Technik 5" Chain Nose – Popular pliers for forming, bending and precision assembly work.

Order #	Description
10302	Technik 5" Chain Nose, Smooth
10308	Technik 5" Chain Nose, Serrated

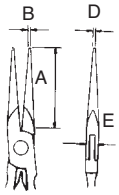
Head Dimensions:
A–1.53" B–.06" D–.08" E–.38"



Technik 6" Chain Nose – For forming, bending and component handling.

Order #	Description
10333	Technik 6" Chain Nose, Serrated

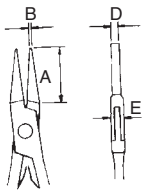
Head Dimensions:
A–1.42" B–.05" D–.07" E–.25"



Technik 5" Extra Long Chain Nose – For forming, bending and precision assembly work. Excellent for difficult to reach areas.

Order #	Description
10311	Technik 5" Extra Long Chain Nose, Smooth
10311S	Technik 5" Extra Long Chain Nose, Serrated

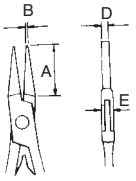
Head Dimensions:
A–.94" B–.02" D–.15" E–.24"



Technik 4-1/2" Flat Nose – For bending and component handling.

Order #	Description
10303	Technik 6" Chain Nose, Smooth

Head Dimensions:
A–.94" B–.02" D–.15" E–.24"

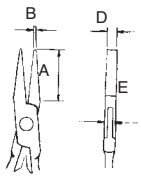


Technik 5" Flat Nose – For bending and component handling.

Order #	Description
10304	Technik 5" Flat Nose, Smooth

Stainless Steel Pliers & Cutters

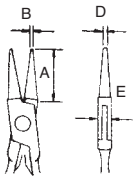
Stainless Steel Pliers



Head Dimensions:
A–1.66" B–.02" D–.21" E–.33"

Technik 6" Flat Nose – For bending and component handling.

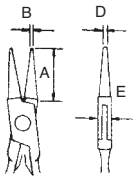
Order #	Description
10335	**Technik 6" Flat Nose, Smooth**



Head Dimensions:
A–.84" B–.05" D–.04" E–.25"

Technik 4-1/2" Round Nose – For forming or coiling fine wire.

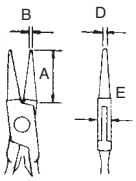
Order #	Description
10305	**Technik 4-1/2" Round Nose, Smooth**



Head Dimensions:
A–.93" B–.05" D–.04" E–.31"

Technik 5" Round Nose – For forming or coiling fine wire.

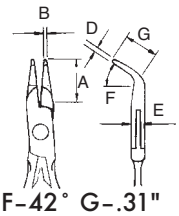
Order #	Description
10306	**Technik 5" Round Nose, Smooth**



Head Dimensions:
A–1.53" B–.05" D–.04" E–.30"

Technik 6" Round Nose – For forming or coiling fine wire.

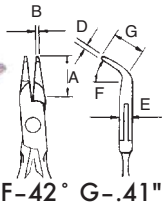
Order #	Description
10334	**Technik 6" Round Nose, Smooth**



Head Dimensions:
A–.90" B–.04" D–.06" E–.24" F–42˚ G–.31"

Technik 4-1/2" Bent Nose – For working in confined areas.

Order #	Description
10309	**Technik 4-1/2" Bent Nose, Smooth**
10310	**Technik 4-1/2" Bent Nose, Serrated**



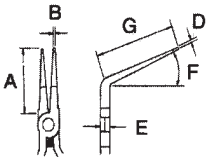
Head Dimensions:
A–1.20" B–.04" D–.05" E–.25" F–42˚ G–.41"

Technik 5" Extra Long Bent Nose – For working in confined, difficult to reach areas.

Order #	Description
10312	**Technik 5" Extra Long Bent Nose, Smooth**

Stainless Steel Pliers & Cutters

Stainless Steel Pliers

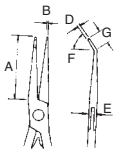


Head Dimensions:
A–1.23" B–.06" D–.05" E–.21" F–25° G–1.67"

Technik 6" Curved Needle Nose (75°)

- Designed for working in out of the way, confined areas.
- Thin bent nose with tapered jaws.
- Lap joint construction.

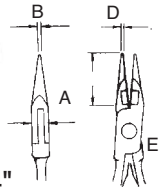
Order #	Description
10953	**Technik 6" Curved Needle Nose (75°), Serrated**



Head Dimensions:
A–1.6" B–.05" D–.08" E–.25" F–50° G–.44"

Technik 6" Extra Long Bent Nose – For confined areas and difficult to reach areas.

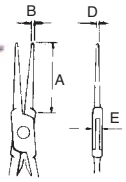
Order #	Description
10313	**Technik 6" Extra Long Bent Nose, Smooth**



Head Dimensions:
A–1.04" B–.05" D–.07" E–.24"

Technik 4-3/4" Long Nose with Cutter – General purpose plier with built in cutting blades.

Order #	Description
10315	**Technik 4-3/4" Long Nose with Cutter, Serrated**

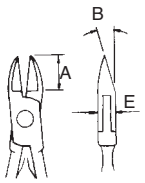


Head Dimensions:
A–1.93" B–.04" D–.06" E–.22"

Technik 5-3/4" Needle Nose – Designed for light work where space and accessibility are limited.

Order #	Description
10314	**Technik 5-3/4" Needle Nose, Serrated**

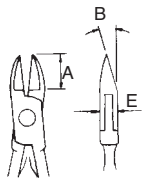
Stainless Steel Cutters



Head Dimensions:
A–.55" B–13° E–.28"

Technik 4-1/2" Standard Oval Head Cutter

Order #	Description
10321	**Technik 4-1/2" Standard Oval Head Cutter,** Semi-Flush, Cutting Capacity: 22 AWG Soft Wire
10323	**Technik 4-1/2" Standard Oval Head Cutter,** Flush, Cutting Capacity: 24 AWG Soft Wire



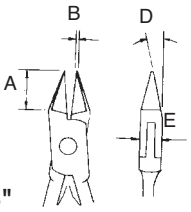
Head Dimensions:
A–.62" B–15° E–.36"

Technik 5" Standard Oval Head Cutter

Order #	Description
10322	**Technik 5" Standard Oval Head Cutter,** Semi-Flush, Cutting Capacity: 20 AWG Soft Wire
10324	**Technik 5" Standard Oval Head Cutter,** Flush, Cutting Capacity: 22 AWG Soft Wire

Stainless Steel Pliers & Cutters

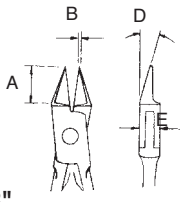
Stainless Steel Cutters



Head Dimensions:
A-.55" B-.05" D-14° E-.28"

Technik 4-1/2" Standard Tapered Head Cutter

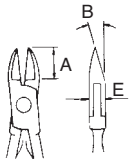
Order #	Description
10325	**Technik 4-1/2" Standard Tapered Head Cutter** Semi-Flush, Cutting Capacity: 22 AWG Soft Wire
10326	**Technik 4-1/2" Standard Tapered Head Cutter** Flush, Cutting Capacity: 24 AWG Soft Wire



Head Dimensions:
A-.55" B-.05" D-13° E-.28"

Technik 4-1/2" Standard Tapered Relieved Head Cutter

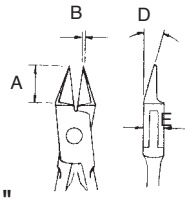
Order #	Description
10329	**Technik 4-1/2" Standard Tapered Relieved Head Cutter** Flush, Cutting Capacity: 24 AWG Soft Wire



Head Dimensions:
A-.45" B-13° D-.25"

Technik 4-3/8" Mini Oval Head Cutter

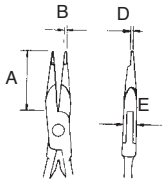
Order #	Description
10332	**Technik 4-3/8" Mini Oval Head Cutter** Flush, Cutting Capacity: 24 AWG Soft Wire



Head Dimensions:
A-.45" B-.04" D-17° E-.23"

Technik 4-3/8" Mini Tapered Head Cutter

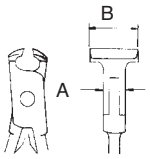
Order #	Description
10331	**Technik 4-3/8" Mini Tapered Head Cutter** Flush, Cutting Capacity: 24 AWG Soft Wire



Head Dimensions:
A-.87" B-.05" D-.07" E-.23"

Technik 4-1/2" Tip Cutter

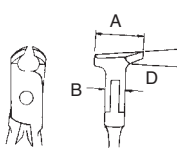
Order #	Description
10330	**Technik 4-1/2" Tip Cutter** Flush, Cutting Capacity: 24 AWG Soft Wire



Head Dimensions:
A-.69" B-.39"

Technik 4-1/2" End Cutter

Order #	Description
10327	**Technik 4-1/2" End Cutter** Semi-Flush, Cutting Capacity: 22 AWG Soft Wire



Head Dimensions:
A-.71" B-.38" D-8°

Technik 4-1/2" Oblique Cutter

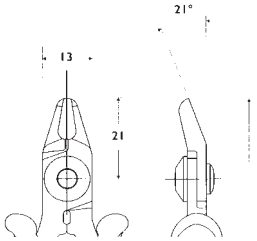
Order #	Description
10328	**Technik 4-1/2" Oblique Cutter** Semi-Flush, Cutting Capacity: 22 AWG Soft Wire

Niptec Cutters

- Manufactured from a special carbon alloy steel, heat treated in a controlled environment for optimum hardness. Has an anti-glare finish to improve work accuracy.
- Niptec Cutters can be distinguished from their competitors by their smooth cutting action with less force, due to the specially designed return spring.
- Our 5000 Series Cutters manufactured with 5mm thick cutting blades are recommended for applications requiring highly durable and long lasting cutters.

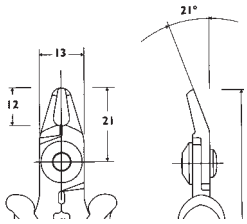
Niptec Cutters

Niptec 5000 Series



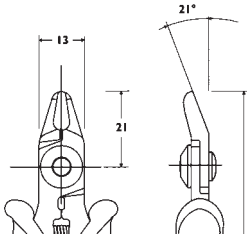
TR 5000 / TR 5000R – Long lasting cutting blades, 5mm thick. TR 5000 produces a semi flush cut and TR 5000 R a clean flush cut. Both have ESD safe handles.

Order #	Description
10501	**TR 5000** Semi-Flush, Cutting Capacity: 12 AWG Steel Wire
10502	**TR 5000 R** Flush, Cutting Capacity: 14 AWG Steel Wire



TR 5000 PG – Pointed long lasting cutting blades, allowing access into tight places. Cutting edges are rounded and well finished. 5mm thick, flush cutting blades. Has ESD safe handles.

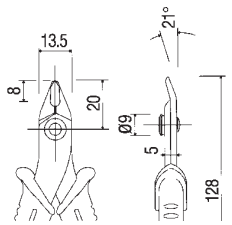
Order #	Description
10503	**TR 5000 PG** Flush, Cutting Capacity: 16 AWG Steel Wire



TRR 5000 – Specially designed blades to cut steel wire up to a diameter of 0.5mm / 24 AWG, 10 AWG copper wire 5mm, flush cutting blades. Has ESD safe handles.

Order #	Description
10504	**TRR 5000** Flush, Cutting Capacity: 24 AWG Steel Wire

Niptec 1000 Series



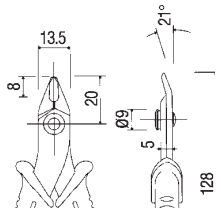
TR 25 E – Our most popular and economical cutter. Has a narrow cutting head for greater access into dense areas. Produces a clean flush cut. Tool handles have regular blue non-slip grips.

Order #	Description
10521EC	**TR 25 E** Flush, Cutting Capacity: 16 AWG Steel Wire

* Dimmensions in mm.

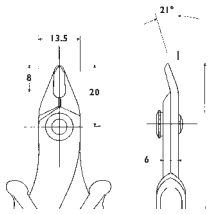
Niptec Cutters

Niptec 1000 Series



TR 25 – A very popular tool. Light weight and easy to handle with narrow cutting head for access into dense areas. Produces a clean flush cut. ESD safe handles.

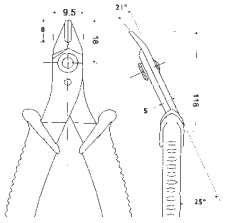
Order #	Description
10521	**TR 25** Flush, Cutting Capacity: 18 AWG Steel Wire



TR 30 15 – Specially designed tool for cutting wires a certain length from the surface. TR 30 15 cuts 1.5mm from the surface. Produces a clean flush cut and has ESD safe handles.

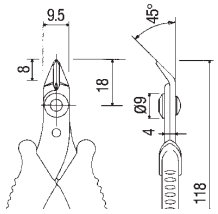
Order #	Description
10523H	**TR 30 15** Flush, Cutting Capacity: 16 AWG Steel Wire

Niptec 1000 Micro Series



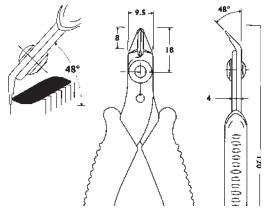
TR 20 M – Small head design allows access into tight places. Produces a clean flush cut. ESD safe handles.

Order #	Description
10527B	**TR 20 M** Flush, Cutting Capacity: 20 AWG Steel Wire



TR-20-50 M – Has the same features as our TR 20 M but the cutting angle is 48° instead of 21°. Ideal for reaching into difficult places. Has ESD safe handles.

Order #	Description
10525	**TR-20-50 M** Flush, Cutting Capacity: 22 AWG Steel Wire



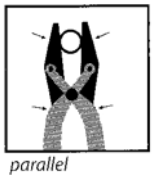
TR 20 TM – Specially designed for cutting integrated circuit pins. The very small size of the cutting blades angled at 45° enables closely placed pins to be cut. Produces a flush cut. Has ESD safe handles.

Order #	Description
10526	**TR 20 TM** Flush, Cutting Capacity: 22 AWG Steel Wire

Parallel Action Pliers

- The unique compound joint design allows the jaws to open and close parallel to one another. This makes them ideal for holding and gripping components and manipulating wire. Comes with anti-rust finish with bright nickel sealed handles and smooth fully heat-treated black jaws for durability.

non-parallel


parallel

- When to Choose Parallel Action Pliers
  Parallel Action Pliers are the right choice when you need to hold an object still while applying pressure on it. Non-parallel pliers let an object slip forward when pressure is applied. The configuration of Parallel Action Pliers holds the object firmly even when the job calls for firm pressure.

Flat Nose with Wire Cutter

Flat nose pliers with a wire cutter. Has serrated jaws with a v-slot. Model 10761 has a maximum jaw opening of 0.4" (10mm) and a soft wire cutting capacity of 0.1"/2.5mm. Model 10764 has a jaw opening of 0.7"/17mm and a soft wire cutting capacity of 0.24" (6.0mm).

Order #	Description
10761	**5" Flat Nose with Wire Cutter** Jaw Length: 1 6/16"/35mm Jaw Width: 1/4"/6.4mm
10764	**8" Flat Nose with Wire Cutter** Jaw Length:1 10/16"/41mm Jaw Width: 1 1/2"/12.5mm

Flat Nose

The 8" Flat Nose plier has serrated jaws with a v-slot that allows you to feed wire down the throat of the plier and hold it firmly in place. The plier has a maximum jaw opening of 0.7" (17mm).

Order #	Description
10756	**8" Flat Nose** Jaw Length: 1 10/16"/41mm Jaw Width: 1 10/16"/41mm

Compound Action 6-1/2" Diagonal Cutter

{Will Cut piano wire}

The essential feature of these diagonal cutters is the accuracy of the cutting edges and the quality of the steel and heat treatment. The compound lever design gives good mechanical advantages allowing the pliers to cut piano wire with handle loads significantly less than conventional forged pliers of equivalent size.

Order #	Description
10754	**Compound Action 6-1/2" Diagonal Cutter** Jaw Type: Semi-Flush Cutting Capacity: 2mm Piano Wire

Precision Tweezers

Precision tweezers to meet applications in electronics, aircraft and aerospace, miniature assembly, precision engineering, optics, microscopy, etc.

- **Large selection in a variety of materials**
- **Special coatings for custom applications**
- **Custom designs**

Precision Tweezers

We Offer a Wide Variety of Tweezers To Meet a Broad Range Of Applications and 2 Different Quality Grades.

In order to choose the best tool for your application:

1. Determine the type of points best suited for your application.
2. Refer to the material guide below and select the correct material for your application.
3. Determine the quality level required for your application if applicable. (Table 1)
4. Remember there is a trade-off between hardness, magnetism and corrosion resistance. (Table 2)

Quality Grades (Table 1)

Brand	Recommend For:
Accutek ★★★★	Made from the finest steels. Perfectly balanced for a superior feel. Light weight with soft tension with accurately finished points. Recommended for work under high power magnification aerospace and micro electronics and in applications where high precision is required. All Accutek precision tweezers are made from anti-acid, anti-magnetic stainless steel.
Technik ★★★	Finely crafted tweezers. Anti-glare finish to reduce eye strain. Hand finished points for accuracy. Recommended for micro electronics and precision assembly.

Material Selection Guide (Table 2)

Material	Tip Hardness	Magnetism	Corrosion Resistance
Carbon Steel	Excellent	Yes	Low
Stainless Steel	Very Good	Some	Good
Stainless Steel, Anti-magnetic, Anti-acid	Good	None to very little	Excellent, Resists Acids
Carbon Composite	Soft	None	Non Corrosive

Ceramic ESD Safe, non magnetic. Resists all chemicals except hydrofluoric acids. Withstands temperatures up to 900°F. Heat sink fighter. For more details on the features of our ceramic tweezers please refer to page 80.

Plastic We offer static dissipative plastic tweezers. Plastic tweezers are non magnetic, resist virtually all commercial solvents. Non absorbent and easy to clean. Tips are non marring.

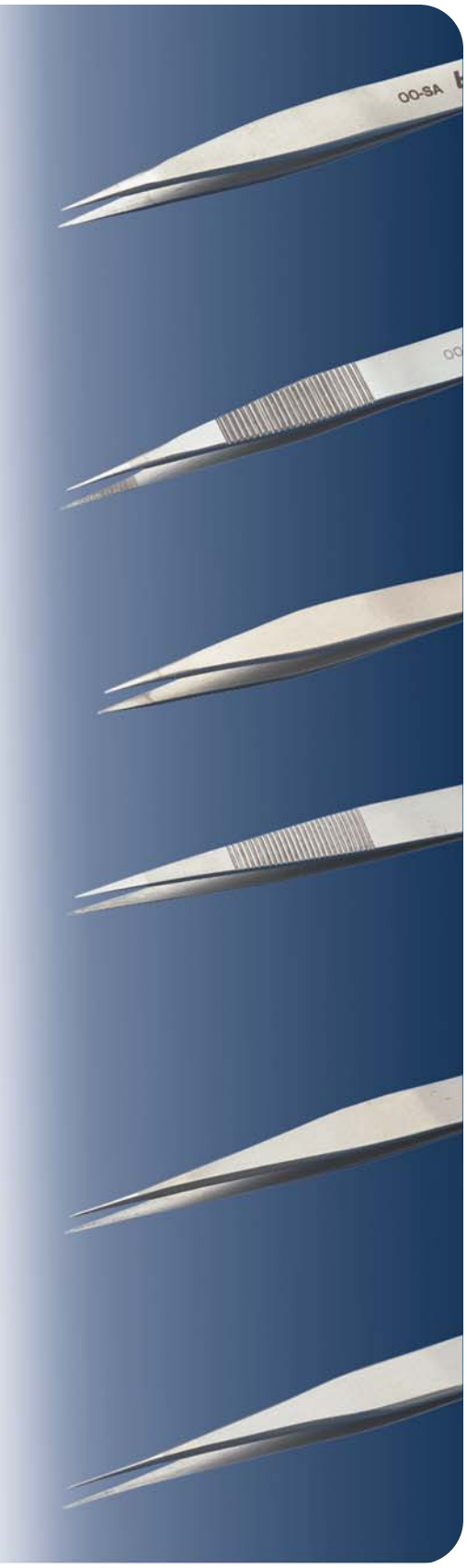
Carpenter 20, Nickel, Titanium, Beryllium, Copper & Brass: Available on special order.

Special Coatings (Available on non magnetic steel only)

TE - Teflon	Superior anti-scratch, non-stick material. Acid resistant. 400°F/200°C
EP - Epoxy	Good electrical insulation and resistance to chemicals. Antiglare. 300°F/150°C
RY - Ryton	Very smooth. Excellent resistance to chemicals and temperature.
PY - Pyron	Water and solder repellent. Non conductive 950°F/500°C
GP - Gold Plating	Very high corrosion resistance. Smooth anti-scratch, anti-glare, no tarnish finish.

* To order tweezers with above mentioned coatings, please add the symbol to the order #.
* Call AVEN for price and delivery time.

Precision Tweezers



Straight: Thick, Flat, Strong Tips

Pattern OO Flat edges, heavy-duty strong blades tapering to regular strong points. Length: 4 3/4" 120mm

Order #	Description	
18032 ACU	**Accutek Pattern OO** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18032 USA	**Technik Pattern OO** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern OOD Same as OO with serrated tips and grips. Length: 4 3/4" 120mm

Order #	Description	
18037 ACU	**Accutek Pattern OOD** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18037 USA	**Technik Pattern OOD** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18036	**Aven Pattern OOD** Carbon Steel, Nickel/Chrome Plated	★★★

Pattern OOC Same as OO except shorter. Length: 4 1/2" 115mm

Order #	Description	
18034	**Aven Pattern OOC** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern AC Sturdy tips for bending and handling very fine wire and components. Has finger serrations. Length: 4 3/4" 120mm

Order #	Description	
18014	**Aven Pattern AC** Carbon Steel, Nickel/Chrome Plated	★★★
18016	**Aven Pattern AC** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Straight: Strong Precise Tips

Pattern AA For general assembly, very strong and precise tips with fine finish. Length: 5" 130mm

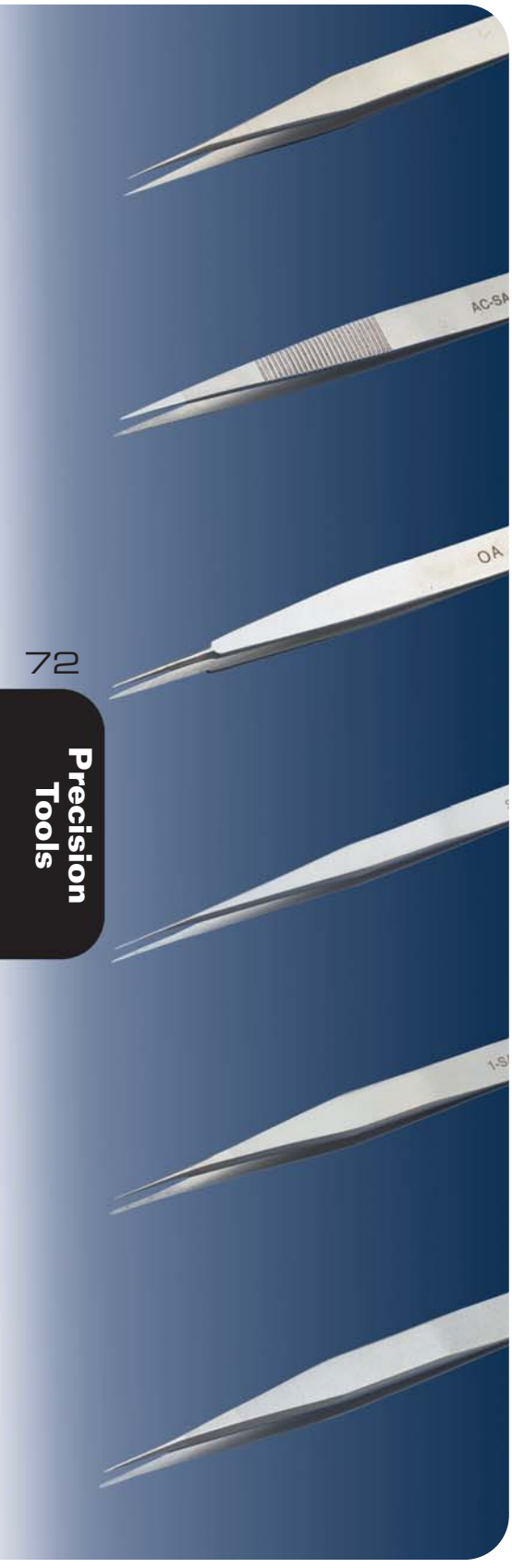
Order #	Description	
18013 USA	**Technik Pattern AA** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18011	**Aven Pattern AA** Carbon Steel, Nickel/Chrome Plated	★★★

Pattern MM Economical general-purpose tweezers slightly larger than AA. Length: 5" 130mm

Order #	Description	
18023 USA	**Technik Pattern MM** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18021	**Aven Pattern MM** Carbon Steel, Nickel/Chrome Plated	★★★

*USA – Ultra Satin Anti-glare Finish

Precision Tweezers



Straight: Fine Tips

Pattern O Fine straight point tweezers for general handling and positioning of miniature parts or fine wire. Length: 4-3/4" 120mm

Order #	Description	
18026 ACU	**Accutek Pattern O** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18026	**Aven Pattern O** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern OC Flat edges, fine tips and short. Length: 3-1/2" 90mm

Order #	Description	
18029 ACU	**Accutek Pattern OC** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18029	**Aven Pattern OC** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern OA Straight point tweezers with radius edges. Designed for dense areas. Length: 4-3/4" 120mm

Order #	Description	
18027	**Aven Pattern OA** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern SS Extra long and narrow straight point tweezers. Provides extended reach and access to confined areas. Length: 5-1/2" 140mm

Order #	Description	
18040 ACU	**Accutek Pattern SS** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18040 USA	**Technik Pattern SS** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern 1 General use, strong blades with fine points. Length: 4-3/4" 120mm

Order #	Description	
18043 ACU	**Accutek Pattern 1** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18043 USA	**Technik Pattern 1** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

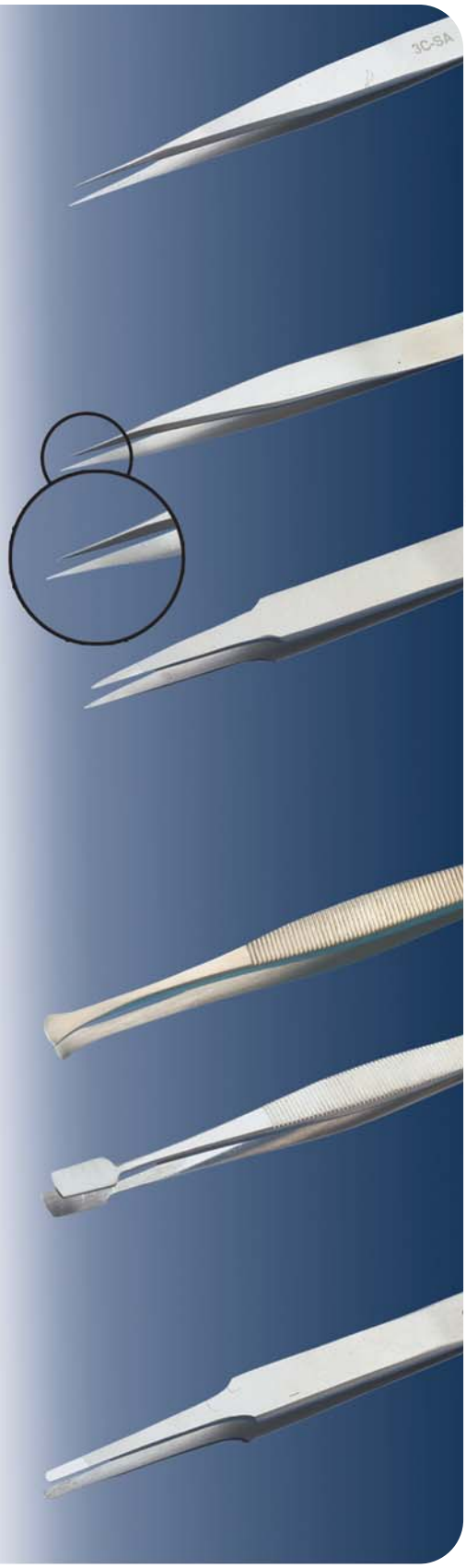
Straight: Ultra Fine Tips

Pattern 3 Extra long and narrow straight point tweezers. Provides extended reach and access to confined areas. Length: 4-3/4" 120mm

Order #	Description	
18053 ACU	**Accutek Pattern 3** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18053 USA	**Technik Pattern 3** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

*USA – Ultra Satin Anti-glare Finish

Precision Tweezers



Straight: Ultra Fine Tips

Pattern 3C Same as 3 but shorter. Length: 4-1/4" 110mm

Order #	Description	
18056 ACU	**Accutek Pattern 3C** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18056 USA	**Technik Pattern 3C** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18054	**Aven Pattern 3C** Carbon Steel, Nickel/Chrome Plated	★★★

Pattern 3F Tips touch over 3mm for holding tiny wires. Length: 4-3/4" 120mm

Order #	Description	
18079 ACU	**Accutek Pattern 3F** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★

Straight: Strong Sharp Tips

Pattern 2 Tapered point for bending and handling of small wires and parts. Length: 4-3/4" 120mm

Order #	Description	
18046 ACU	**Accutek Pattern 2** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18046 USA	**Technik Pattern 2** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Straight: Broad Tips

Pattern 35A For handling wafers and delicate parts. Length: 4-3/4" 120mm

Order #	Description	
18201	**Aven Pattern 35A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern 36 Angled broad tip tweezers with large paddle style tips. Wide tips provide firm grip. Length: 4-3/4" 120mm

Order #	Description	
18202	**Aven Pattern 36** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

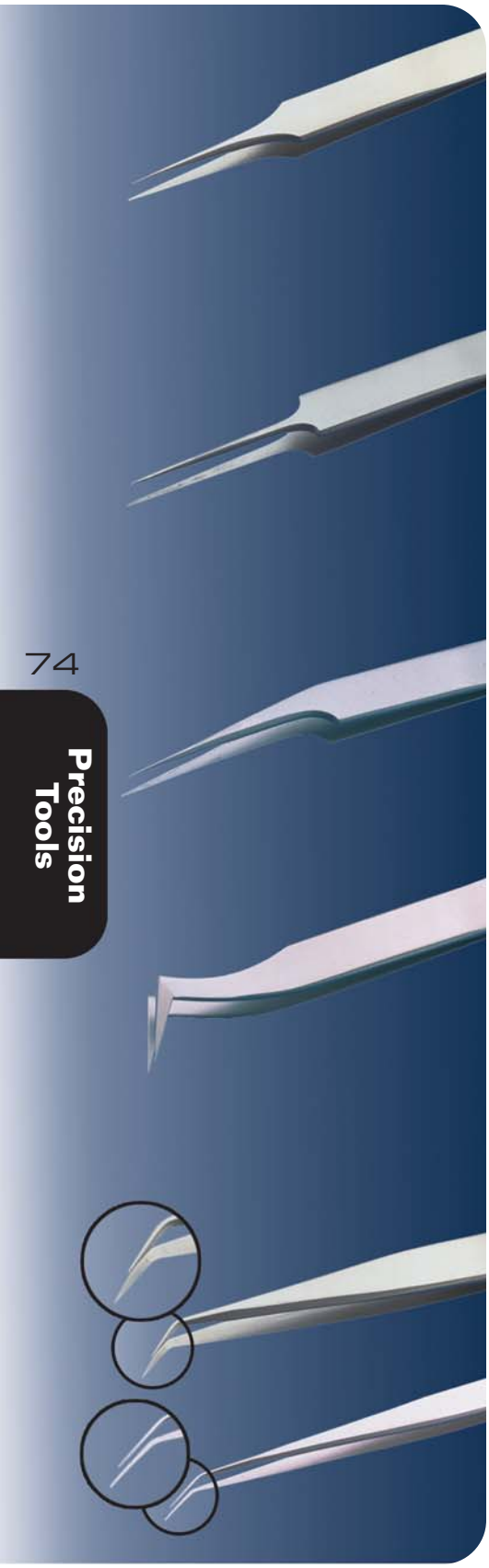
Tapered: Flat Tips

Pattern 2A Straight flat tips. Provides large flat gripping surface. Length: 4-3/4" 120mm

Order #	Description	
18049 ACU	**Accutek Pattern 2A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18049 USA	**Technik Pattern 2A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

*USA – Ultra Satin Anti-glare Finish

Precision Tweezers



Tapered: Ultra Fine Tips

Pattern 4 For extra fine work, blades taper sharply from body to very fine long rounded points. Length: 4-1/4" 110mm

Order #	Description	
18059 ACU	**Accutek Pattern 4** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18059 USA	**Technik Pattern 4** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18057	**Aven Pattern 4** Carbon Steel, Nickel/Chrome Plated	★★★

Pattern 5 For extra fine work, long blades break sharply from body and taper to super fine points. Length: 4-1/4" 110mm

Order #	Description	
18062 ACU	**Accutek Pattern 5** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18062 USA	**Technik Pattern 5** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Angled: Fine Tips

Pattern 5A Oblique fine points for greater visibility. Length: 4-1/2" 115mm

Order #	Description	
18065 ACU	**Accutek Pattern 5A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18065 USA	**Technik Pattern 5A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern 6 Same as 3 but shorter. Length: 4-3/4" 120mm

Order #	Description	
18069 ACU	**Accutek Pattern 6** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18069 USA	**Technik Pattern 6** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18067	**Aven Pattern 6** Carbon Steel, Nickel/Chrome Plated	★★★

Angled: Ultra Fine Tips

Pattern 3CB Same as 3C except tips are bent. Length: 4-1/4" 110mm

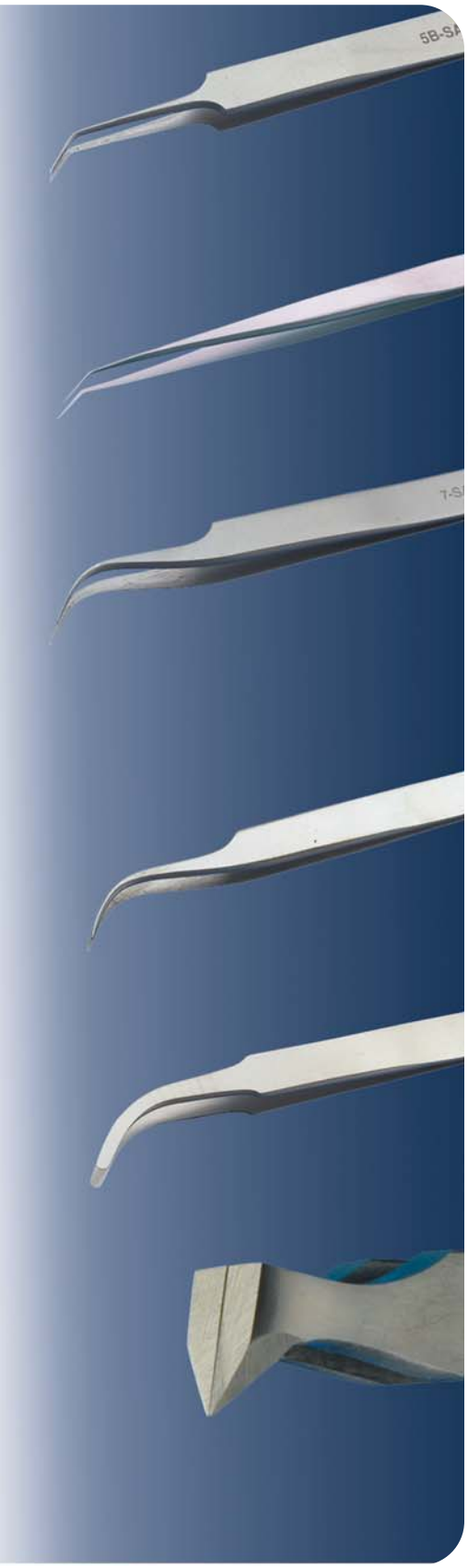
Order #	Description	
18078 ACU	**Accutek Pattern 3CB** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★

Pattern 65A Long fine curved tips. Length: 5-1/2" 140mm

Order #	Description	
18076 ACU	**Accutek Pattern 65A** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★

*USA – Ultra Satin Anti-glare Finish

Precision Tweezers



Angled: Ultra Fine Tips

Pattern 5B Super micro, high precision bent tips provide maximum visibility. Length: 4-1/4" 110mm

Order #	Description	
18066 ACU	**Accutek Pattern 5B** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18066 USA	**Technik Pattern 5B** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Pattern 66 Long double bent tips. Length: 5-1/2" 140mm

Order #	Description	
18077 ACU	**Accutek Pattern 66** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★

Curved: Fine Tips

Pattern 7 For assembly work, hand can rest on bench, curved super fine points. Length: 4-1/2" 115mm

Order #	Description	
18072 ACU	**Accutek Pattern 7** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18072 USA	**Technik Pattern 7** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★
18070	**Aven Pattern 7** Carbon Steel, Nickel/Chrome Plated	★★★

Pattern 7B Curved precision point tweezers. Similar to 7 but tips are serrated. Length: 4-1/2" 115mm

Order #	Description	
18074 USA	**Technik Pattern 7B** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Curved: Flat Tips

Pattern 2AB Curved round tip tweezers. Handles delicate or small parts. Tip angle facilitates wafer tray loading. Length: 4-3/4" 120mm

Order #	Description	
18050 USA	**Technik Pattern 2AB** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

Cutting Tweezers

Pattern 15AGW & 15AP For cutting hairsprings and electronic component wires. Blades induction hardened to C58 (C Scale). 15AP same as 15A with parallel cut. Length: 4-1/2" 115mm

Order #	Description	
18114 ACU	**Accutek Pattern 15AGW** Carbon Steel, Nickel/Chrome Plated	★★★★
18115 ACU	**Accutek Pattern 15AP** Carbon Steel, Nickel/Chrome Plated	★★★★

*USA – Ultra Satin Anti-glare Finish

Precision Tweezers

Comfort Grip Tweezers

Aven comfort grip tweezers are designed to provide you the ultimate in comfort and control, to help you increase productivity and combat fatigue. The foam grips are ESD Safe and the tweezers feature high precision points for exact control. Tweezers are manufactured from Anti-Magnetic, Anti-Acid Stainless Steel.

Pattern 00-SA Flat edges, heavy duty strong blades, tapering to regular strong points. Length: 4-3/4"

Order #	Description
18032-ER	**Aven Pattern OO-SA**

Pattern 2A-SA Straight, flat tips. Provides large flat gripping surface. Length: 4-3/4"

Order #	Description
18049-ER	**Aven Pattern 2A-SA**

Pattern 3C-SA Very Sharp, ultra fine tips. Length: 4-1/4"

Order #	Description
18056-ER	**Aven Pattern 3C-SA**

Pattern 5-SA For extra fine work, blades taper sharply from the body to super fine points. Length: 4-1/2"

Order #	Description
18062-ER	**Aven Pattern 5-SA**

Pattern 7-SA Curved, super fine tips. Length: 4-1/2"

Order #	Description
18072-ER	**Aven Pattern 7-SA**

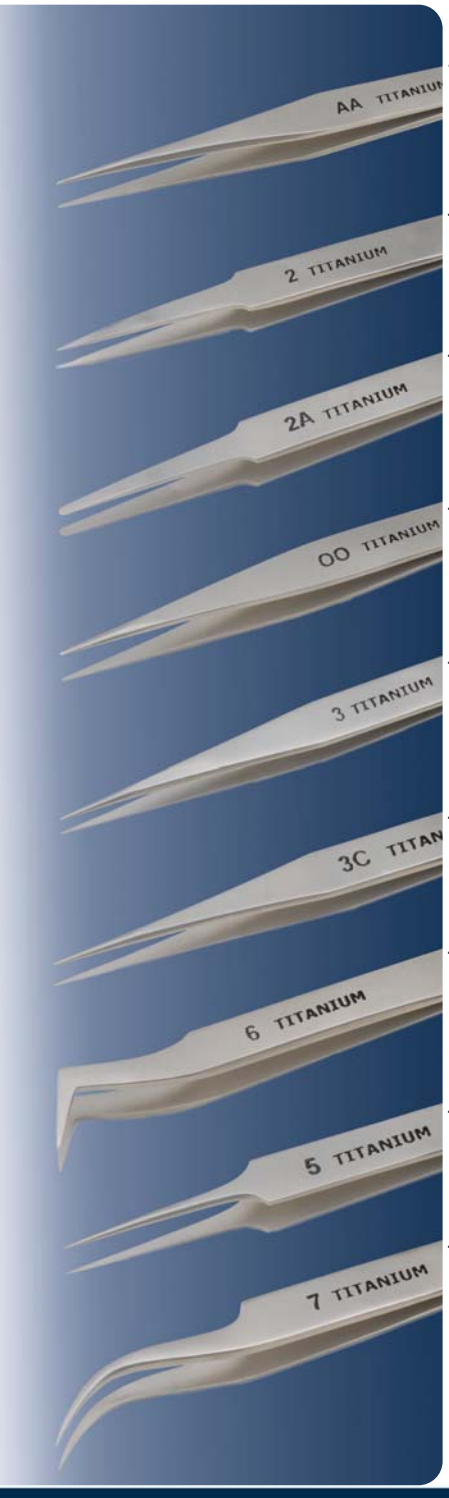
Precision Tweezers

Titanium Tweezers

These titanium tweezers have been found to be excellent for use in the silicon chip industry because titanium tweezers do not shed particles like the stainless steel tweezers. Anytime an abrasive substance is handled and microscopic particles are a detriment, it may be best to choose titanium. Since titanium is non-magnetic, these tweezers are extremely useful when handling magnetic materials or when working in a magnetic field. Titanium is a light weight, high strength material.

Features:

- Lightweight (high strength to weight ratio)
- Zero Magnetic Retaintivity
- Temperature Resistant to 800° F
- Chemical and Corrosion Resistant
- Non Solder Adhesive
- Bio compatible (maintain cell integrity, no inflammatory response)
- Typical application: handling of sensitive components in cleaning/chemical processes at high temperatures, histology, biology, forensics, electron microscopy etc.



Titanium AA

Order #	Description
18013TT	**Titanium AA** Length: 5" (130mm)

Titanium #2

Order #	Description
18046TT	**Titanium #2** Length:4-3/4" (120mm)

Titanium #2A

Order #	Description
18049TT	**Titanium #2A** Length:4-3/4" (120mm)

Titanium 00

Order #	Description
18032TT	**Titanium 00** Length:4-3/4" (120mm)

Titanium #3

Order #	Description
18053TT	**Titanium #3** Length:4-3/4" (120mm)

Titanium #3C

Order #	Description
18056TT	**Titanium #3C** Length:4-1/4" (110mm)

Titanium #6

Order #	Description
18069TT	**Titanium #6** Length:4-3/4" (120mm)

Titanium #5

Order #	Description
18062TT	**Titanium #5** Length:4-1/4" (110mm)

Titanium #7

Order #	Description
18072TT	**Titanium #7** Length:4-1/2" (115mm)

Precision Tweezers

E-Z Pik Tweezers

E-Z Pik tweezers features a highly durable special coating for high visibility and easy identification. Helps operators quickly identify the tweezers they need for their particular operation and engineers can easily specify tweezers to be used for a particular process by identifying the color only rather than type and style of tweezers. E-Z Pik tweezers will help improve productivity and process control. Available in six popular styles: AA (Yellow); OO (Red): #2A (Black); #3c (Light Blue); #5 (Green); #7 (Orange). Tweezers are manufactured from Anti-Acid, Anti-Magnetic Stainless Steel.

Style AA

Order #	Description
18013EZ	**Style AA (Yellow)** Length: 5" (130mm)

Style OO

Order #	Description
18032EZ	**Style OO (Red)** Length: 4-3/4" (120mm)

Style 2A

Order #	Description
18049EZ	**Style 2A (Black)** Length: 4-3/4" (120mm)

Style 3C

Order #	Description
18056EZ	**Style 3C (Light Blue)** Length: 4-1/4" (110mm)

Style 5

Order #	Description
18062EZ	**Style 5 (Green)** Length: 4-1/4" (110mm)

Style 7

Order #	Description
18072EZ	**Style 7 (Orange)** Length: 4-1/2" (115mm)

6 E-Z Pik Tweezers w/Protective Pouch

Order #	Description
18480EZ	**6 E-Z Pik Tweezers w/Protective Pouch**

Carbofib Tweezers

Anti-Magnetic, Anti-Acid Stainless Steel Grips, with "Carbofib Tips." Fully ESD Safe (10^2 ohm) but at the same time, soft and non scratching. These conductive synthetic fiber tips are ideally suited to handle delicate and fragile components when extreme care and ESD safety are an absolute necessity. Every tweezers is manually finished and tested for maximum precision. Chemical resistant and heat resistant upto 256˚C.

Straight: Strong Precise Tips

Accu-Tek 2CF Tapered precision point for bending and handling small wires.

Order #	Description
18767	**Accu-Tek 2CF** Length: 5"/130mm

Accu-Tek 2ACF Straight round tip. Provides larger flat gripping surface.

Order #	Description
18768	**Accu-Tek 2ACF** Length: 5"/130mm

Straight: Ultra Fine Tips

Accu-Tek 5CF Tapered, ultra-fine tweezers for subminiature work in densely packed areas.

Order #	Description
18762	**Accu-Tek 5CF** Length: 5"/130mm

Straight: Fine Tips

Accu-Tek 3CF Excellent for subminiature assembly work. Sharp fine tips.

Order #	Description
18760	**Accu-Tek 3CF** Length: 5"/130mm

Accu-Tek 302 Soft and strong carbofib tips. Resistant to 520˚F/270˚C. Tip width 2mm.

Order #	Description
18702	**Accu-Tek 302** Length: 5"/130mm

Accu-Tek 304 Same as 302 but has finer tips. Tip width 0.6mm.

Order #	Description
18704	**Accu-Tek 304** Length: 5"/130mm

Ceramic Tweezers

Zirconica Ceramic Tweezers meet the requirements for a high grade tweezer for use in:

- **Clean rooms**
- **Chemical Laboratories**
- **Semiconductor manufacturing**
- **Analytical Chemistry**
- **Bio Technology**
- **Circuit Board, Disk Drive and Magnetic Head Manufacturing**

Features:

- **Extremely smooth surface and very low coefficient of friction.**
- **Low thermal conductivity and high thermal shock resistance.**
- **Excellent electric loss at very high frequency range (VHF, UHF, and SHF).**
- **Will not cause electromagnetic induction or eddy current loss in high frequency.**
- **100% non magnetic, non rusting and non static.**
- **Highly resistant to all strong acids except hydrofluoric.**
- **Free from all metallic contamination.**
- **Solder will not adhere to surface.**
- **Six times harder than stainless steel.**
- **Two times harder than carbon steel.**
- **Will hold tip geometry better than metal.**
- **Can be subject to microwaves for sterilization.**
- **Thermal insulators well suited for soldering.**
- **Resistant to 1500°C**

AVEN Full Ceramic Tweezers

For working with acids (except HF). For SMD solder pot, high temperature exposure. Clean room approved. Can be sterilized, solder repellent.

Order #	Description
18801	**Aven Full Ceramic Tweezers** Straight 1mm serrated tips Length: 5"/130mm
18802	**Aven Full Ceramic Tweezers** Straight 1mm smooth tips Length: 5"/130mm
18803	**Aven Full Ceramic Tweezers** Straight very fine smooth tips Length: 5"/130mm
18804	**Aven Full Ceramic Tweezers** Curved shape, fine tips Length: 5"/130mm

Accu-Tek Ceramic Tweezers

Lightweight, Zirconia replaceable ceramic tips attached to aluminum body.
*Replacement tips available.

Order #	Description
18810	**Accu-Tek Pattern 71** Flat fine tips Length: 5-1/4" Tip Length: 1-1/4"
18811	**Accu-Tek Pattern 72** Fine tips Length: 5-1/4" Tip Length: 1-1/4"
18812	**Accu-Tek Pattern 73** Extra fine tips Length: 5-1/4" Tip Length: 1-1/4"
18813	**Accu-Tek Pattern 74** Fine broad tips Length: 5-3/8" Tip Length: 1-5/8"

AVEN Ceramic Tweezers
w/EDS Safe Plastic Body

Lightweight and economical ceramic tipped tweezer. Length: 4-3/4 : Fine Points

Order #	Description
18820	**Aven EDS Safe Ceramic Tipped Tweezers**

Plastic Tweezers

Features & Specifications:

- **Tips do not spread under pressure**
- **No contamination**
- **Static Dissipative (106 - 109 OHM/SQ)**
- **Overall length 4-1/2" 115mm**
- **Non magnetic**

Recommended Uses:

Ideal for handling semi-conductors, silicone chips and delicate wafers. Static dissipative tweezers are ideal for use with sensitive components where ESD damage is a concern.

Aven Plastic Tweezers

Aven 2A Straight, flat, rounded tips

Order #	Description
18511	**Aven 2A** Type: P2A

Pattern 2AB Curved, rounded tips

Order #	Description
18514	**Aven 2AB** Type: P2AB

Pattern 3C Very fine, straight tips

Order #	Description
18517	**Aven 3C** Type: P3C

Pattern 6A Very fine, angulated tips

Order #	Description
18520	**Aven 6A** Type: P6A

Pattern 7 Very fine, curved tips

Order #	Description
18523	**Aven 7** Type: P7

Pattern 35 Straight, flat tips

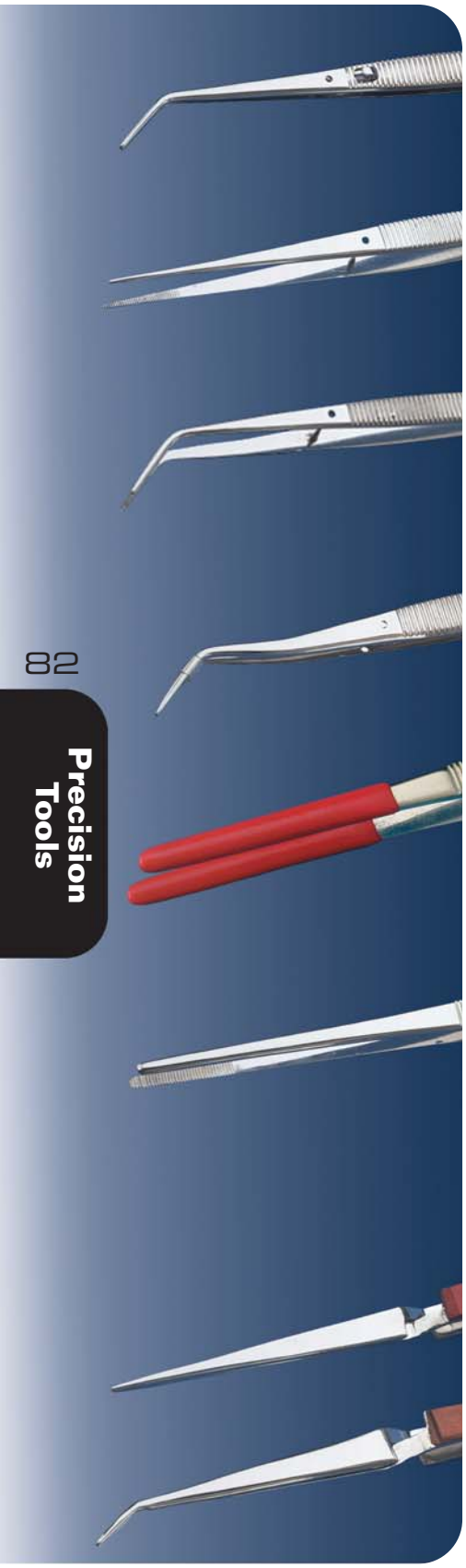
Order #	Description
18526	**Aven 35** Type: P35

Pattern 35A Straight, broad, flat tips

Order #	Description
18529	**Aven 35A** Type: P35A

General Purpose Tweezers

Recommended Uses: For bending, separating and removing small items.



Aven College Forceps with Lock Curved, serrated tips

Order #	Description
18400	**Aven College Forceps with Lock** Length: 6"/150mm" Tip Length: 1-5/8"

Aven College Forceps with Alignment Pin Straight, serrated tips

Order #	Description
18401	**Aven College Forceps with Alignment Pin** Length: 6"/150mm
18437	**Aven College Forceps with Alignment Pin** Length: 4"/100mm

Aven College Forceps with Alignment Pin Curved, serrated tips

Order #	Description
18402	**Aven College Forceps with Alignment Pin** Length: 6"/150mm
18438	**Aven College Forceps with Alignment Pin** Length: 4"/100mm

Aven College Forceps with Alignment Pin Offset, curved, serrated tips

Order #	Description
18403	**Aven College Forceps with Alignment Pin** Length: 6"/150mm

Aven Forceps with Plastic Coated Tips

Order #	Description
18430	**Aven Forceps with Plastic Coated Tips** Length: 8"/205mm
18431	**Aven Forceps with Plastic Coated Tips** Length: 12"/300mm

Aven Forceps with Straight Serrated Tips

Order #	Description
18432	**Aven Forceps with Straight Serrated Tips** Length: 12"/300mm
18433	**Aven Forceps with Straight Serrated Tips** Length: 10"/255mm
18434	**Aven Forceps with Straight Serrated Tips** Length: 8"/205mm
18435	**Aven Forceps with Straight Serrated Tips** Length: 6"/150mm
18436	**Aven Forceps with Straight Serrated Tips** Length: 5"/130mm

Aven Fiber Grip Tweezers Straight, smooth tips

Order #	Description
18415	**Aven Fiber Grip Tweezers** Length: 6-1/2"/165mm

Aven Fiber Grip Tweezers Curved, smooth tips

Order #	Description
18417	**Aven Fiber Grip Tweezers** Length: 6-1/2"/165mm

General Purpose Tweezers

Aven Self Locking Tweezers Straight, narrow tips

Order #	Description
18419	**Aven Self Locking Tweezers** Length: 6-1/2"/165mm
18423	**Aven Self Locking Tweezers** Length: 4-1/2"/115mm

Aven Self Locking Tweezers Straight, serrated wide tips

Order #	Description
18421	**Aven Self Locking Tweezers** Length: 6-1/2"/165mm

Aven Utility Tweezers Curved tips and finger serrations

Order #	Description
18425	**Aven Utility Tweezers** Length: 7"/180mm

Aven Utility Tweezers Straight, serrated tips, and finger serrations

Order #	Description
18426	**Aven UtilityTweezers** Length: 7"/180mm

Aven Stand Up Cross Locking Tweezers Known as Paper Forceps in the dental trade. Also useful for soldering and holding small parts.

Order #	Description
18428	**Aven Stand Up Cross Locking Tweezers** Length: 6"/150mm

Aven General Purpose Tweezers Curved, serrated tips

Order #	Description
18481	**Aven General Purpose Tweezers** Length: 4-1/2"/110mm

Aven General Purpose Tweezers Tapered, serrated tips

Order #	Description
18482	**Aven General Purpose Tweezers** Length: 4-1/4"/110mm

Aven General Purpose Tweezers Medium sharp tweezers, serrated tips

Order #	Description
18483	**Aven General Purpose Tweezers** Length: 3"/80mm

General Purpose Tweezers

Aven General Purpose Tweezers Slant end

Order #	Description
18484	**Aven General Purpose Tweezers** Length: 3-1/2"/90mm

Aven General Purpose Tweezers Square end, smooth tips

Order #	Description
18485	**Aven General Purpose Tweezers** Length: 3-1/2" 90mm

Aven General Purpose Tweezers Blunt, smooth tips

Order #	Description
18486	**Aven General Purpose Tweezers** Length: 3"/80mm

Aven General Purpose Tweezers Spade tips, smooth

Order #	Description
18487	**Aven General Purpose Tweezers** Length: 4-1/2"/110mm

Aven General Purpose Tweezers Offset spade tips, smooth

Order #	Description
18488	**Aven General Purpose Tweezers** Length: 4-1/8"/108mm

Aven General Purpose Tweezers Square end, smooth tips

Order #	Description
18489	**Aven General Purpose Tweezers** Length: 4-1/8"/108mm

Aven General Purpose Tweezers Blunt, serrated tips

Order #	Description
18490	**Aven General Purpose Tweezers** Length: 5-11/16"/145mm

Aven General Purpose Tweezers Offset blunt, serrated tips

Order #	Description
18491	**Aven General Purpose Tweezers** Length: 4-1/2"/115mm

Aven General Purpose Tweezers Bent, blunt serrated tips

Order #	Description
18492	**Aven General Purpose Tweezers** Length: 10" 255mm

Aven Toothed Tissue Forceps

Order #	Description
18494	**Aven General Purpose Tweezers** Length: 5-1/2"/140mm

Tweezer Sets

5-Piece Precision Tweezers Set

Supplied in an elegant padded wooden case. Contains the most popular tweezers: OO-SA, OOD-SA, 3C-SA, 5-SA and 7-SA

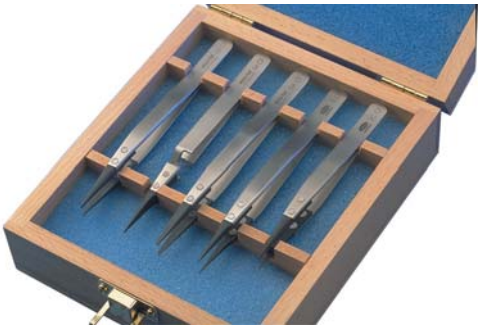
Order #	Description	
18476 ACU	**Accutek** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18476 USA	**Technik** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

6-Piece Precision Tweezers Set

6 of our most popular tweezers supplied in a plastic pouch. Contains AA-SA, OO-SA, OOD-SA, 3C-SA, 5-SA and 7-SA

Order #	Description	
18475 ACU	**Accutek** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★★
18475 USA	**Technik** Stainless Steel, Anti-Magnetic, Anti-Acid	★★★

5-Piece Carbofib Tweezers Set



Five of our most popular carbofib tweezers in an elegant padded wooden case. Contains: 2-CF,OO-CF, 2A-CF, 3C-CF and 5CF

Order #	Description
18478	**ESD-Safe Tweezers Set**

Aven 6-Pc. Tweezers Set

Contains one each of the following in a plastic pouch: 7" Curved Solder Utility Tweezers, 6" Blunt Tip Tweezers Serrated Points, 4-1/2" Solder Utility Tweezers Sharp Points, 7" Wide Point Tweezers with Lock, 7" Wide Point Cross Locking Tweezers, 7" Solder Utility Tweezers Straight

Order #	Description
18472	**Aven 6-Pc. Tweezers Set**

Aven 5-Pc. Tweezers Set

Contains one each of the following in a plastic pouch:4-1/4" Curved Tweezers Serrated Tips, 4-1/4" Spade Tip Tweezers Smooth, 4-1/4" Wide Point Tweezers Serrated Tips, 4-1/4" Indented Shank Tweezers Smooth Tips, 4-1/2" Solder Utility Tweezers Sharp Points

Order #	Description
18473	**Aven 5-Pc. Tweezers Set**

Screwdrivers

Features:
- Ergonomically designed handle made from a molded thermoplastic rubber which prevents hands from slipping and allows for maximum torque application.
- Chrome-Vanadium steel blade with tip hardened to 56-60 HRC.

Slotted Screwdrivers

Slotted

Order #	Blade Length	Tip Size
13801	3" / 75mm	1/8" / 3mm
13802	6" / 150mm	1/8" / 3mm
13803	3" / 75mm	3/16" / 5mm
13804	6" / 150mm	3/16" / 5mm
13805	8" / 200mm	3/16" / 5mm
13806	4" / 100mm	1/4" / 6mm
13807	6" / 150mm	1/4" / 6mm
13808	6" / 150mm	5/16" / 8mm

Phillips Screwdrivers

Phillips

Order #	Blade Length	Tip Size
13811	3"/ 75mm	#0
13812	6" / 150mm	#0
13813	3" / 75mm	#1
13814	6" / 150mm	#1
13815	6" / 150mm	#2
13816	10"/250mm	#2

Stubby Style Screwdrivers

Stubby Style

Order #	Blade Length	Tip Size
13809 (Slotted)	1-1/4"/31mm	1/4"/6mm
13817 (Phillips)	1-1/4"/31mm	#2

Torx-Tip Screwdrivers

Tamper-Proof Torx

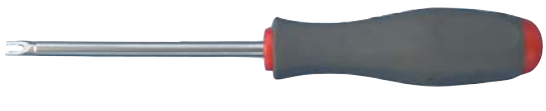
Order #	Blade Length	Tip Size
13821	2"/50mm	T5
13822	2"/50mm	T6
13823	2"/50mm	T7
13824	3-1/4"/80mm	T8
13825	3-1/4"/80mm	T9
13826	3-1/4"/80mm	T10
13827	3-1/4"/80mm	T15

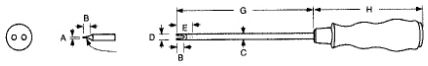
Nut Drivers

Nut Drivers

Order #	Blade Length	Tip Size
13841	4"/100mm	3/16"
13842	4"/100mm	7/32"
13843	4"/100mm	1/4"
13844	4"/100mm	9/32"
13845	4"/100mm	5/16"
13846	4"/100mm	11/32"
13847	4"/100mm	7/16"
13848	4"/100mm	1/2"

Security Screwdrivers



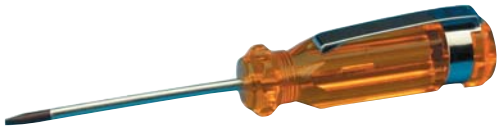


Security

Order #	Type	A	B	C	D	E	F	G	H
13831	M1.7	0.5	0.8	4	2.0	10	Ø10	80	50
13832	M2.0	1.0	1.0	4.5	2.0	10	Ø10	80	50
13833	M2.3	0.9	1.1	5	2.5	10	Ø10	80	50
13834	M2.6	1.2	1.2	5.5	2.8	10	Ø10	80	50

Screwdrivers

Pocket Screwdriver



Pocket Clip Style – Slotted

Order #	Description
13850	**Pocket Screwdriver - Slotted** Blade Length: 1/32" x 2"

Pocket Screwdriver

Pocket Clip Style – Phillips

Order #	Description
13851	**Pocket Screwdriver - Phillips** Blade Length: #0 x 2"

Precision Screwdrivers

Precision Screwdrivers

Specifically designed for electronics.

Features:
- Black Tip.
- Nylon engineered plastic.
- AISI 8660 Chrome-molybdenum vanadium steel with satin finish.
- Duplex component handle designed for rapid rotation greater comfort and control.
- Fast turning swivel caps.
- Imprinted sizes on the handle for easy selection.

Slotted Unit: m/m

Order #	Shaft Diameter	Working Length
13900	1.0	50mm
13901	1.6	50mm
13902	2.0	50mm
13903	2.4	50mm
13904	3.0	50mm
13905	2.4	75mm
13906	3.0	100mm
13907	4.0	150mm

Torx and Temper-Proof Unit: m/m

Order #	Tip Size	Working Length
13920	T5 (only in star)	50mm
13921	T6 (only in star)	50mm
13922	T7	50mm
13923	T8	50mm
13924	T9	50mm
13925	T10	50mm
13926	T15	50mm
13927	T20	50mm

Phillips Unit: m/m

Order #	Tip Size	Working Length
13910	No. 000	50mm
13911	No. 00	50mm
13912	No. 0	50mm
13913	No. 1	50mm
13914	No. 0	75mm
13915	No. 1	100mm
13916	No. 1	150mm

Nutdriver Unit: m/m

Order #	Socket Size	Working Length
13930	M3.0	50mm
13931	M3.5	50mm
13932	M4.0	50mm
13933	M4.5	50mm
13934	M5.0	50mm
13935	M5.5	50mm
13936	M6.0	50mm

Precision Screwdriver Sets

7-Piece Precision Screwdriver Set

Contents:
Slotted: 1.6 x 50mm, 2.0 x 50mm, 2.4 x 50mm, 3.0 x 50mm
Phillips: No.00 x 50, No.0 x 50, No.1 x 50 **Carrying case**

Order #	Description
13940	**7-pc. Precision Screwdriver Set**

14 in 1 Reversible Precision Screwdriver Set

Contents:
Slotted: 1.5mm, 2.0mm, 3.0mm, 4.0mm **Phillips:** No.0, No.00, No.000, No.1
Star: T5, T6, T7, T8, T9, T10 **Handle**

Order #	Description
13941	**14in1 Reversible Precision Screwdriver Set**

12 in 1 Precision Screwdriver Set

Precision Screwdriver with 6 Reversible Blades

Contents:
Slotted: 1.5mm, 2.0mm, 2.5mm, 3.2mm **Phillips:** No.000, No.00, No. 0, No.1
Star: T7, T9, T8, T10 **Handle**

Order #	Description
13710	**12 in 1 Precision Screwdriver**

20 Piece Precision Screwdriver Set

This useful set contains 19 assorted Slotted/Philip/Star/Hex/Ball point/Blades. Special quick release design makes blade changes quick and easy.

Contents:
Slotted: 2.0mm, 2.5mm, 3.0mm, 4.0mm **Phillips:** No.00, No.0 PZ#00 & #0
Star: T6, T7, T8, T9, T10 **Hex:** 1.5, 2.0, 2.5 mm
Nutdriver: 1.5, 2.0, 2.5 mm **Handle:** 75mm (3")

Order #	Description
13714	**20pc. Precision Screwdriver Set**

Precision Screwdriver Sets

8-Piece Precision Screwdriver Set

Contents:
Slotted: 2.0 x 75mm, 2.5 x 75mm, 3.0 x 75mm, 4.0 x 75mm
Phillips: No. 00x75mm, No. 0x75mm, No. 1x75mm, No. 1.5x75mm

Order #	Description
13715	**8-Piece Precision Screwdriver Set**

6-Piece Precision Nut Driver Set

Precision Screwdriver with 6 Reversible Blades

Contents:
Metric: 3.2 x 75, 4 x 75/mm, 5 x 75, 5.5 x 75/mm
Inch: 1.8" x 75/mm, 3/16" x 75/mm

Order #	Description
13716	**6-Piece Precision Nut Driver Set**

6-Piece Combo Set

Contents:
Slotted: 40mm in sizes 1.8 and 2.5
Phillips: 40mm in sizes No. 00 and No. 0
4" Diagonal Cutter
5" Sharp Pointed Tweezers

Order #	Description
13717	**6-Piece Combo Set**

7-Piece Combo Set

Contents:
Slotted: 40mm in sizes 1.8 and 2.5
Phillips: 40mm in sizes 00 and 0
4" Diagonal Cutter
4" Long Nose Pliers
5" Sharp Pointed Tweezers

Order #	Description
13718	**7-Piece Combo Set**

11-Piece Combo Set

Contents:
Slotted: 40mm in sizes 1.2, 1.5, 1.8, 2.0, and 2.5
Phillips: 40mm in sizes 000, 00 and 0
4" Diagonal Cutter, 4" Long Nose Pliers, 5" Sharp Pointed Tweezers

Order #	Description
13719	**11-Piece Combo Set**

Precision Screwdrivers

15-Piece Combo Set

Contents:
Slotted: 40mm in sizes 1.0, 1.2, 1.5, 2.0 and 2.5
Phillips: 40mm in sizes 000 and 00
Hex: 40mm in sizes 0.9, 1.3 and 1.5
4" Diagonal Cutter, 4" Long Nose Pliers, 5" Sharp Pointed Tweezers, 4-1/2" Scissors, Precision Knife Handle with 6 blades

Order #	Description
13720	**15-Piece Combo Set**

26-Piece Bit and Socket Set

Contents: 19 Bits, 4mm Hex x 28mm
Slotted: 2.0, 2.5, 3.0, and 4.0 **Phillips:** 00 and 0
PZ: 00 and 0 **Torx:** 6, 7, 8, 9, and 10
Hex: 1.5, 2.0 and 2.5 **Ball Point:** 1.5, 2.0 and 2.5
Adapters: 4mm Hex, 1/4" SQ, 25mm
Sockets: 1/4" Drive: 3.2, 4.0, 5.0, 5.5 and 7.0
Neo Microtip Screwdriver Handle

Order #	Description
13723	**26-Piece Bit and Socket Set**

11-Piece MicroTip Screwdriver Set w/ Interchangeable Blades

Contents:
Slotted: 40mm in sizes 0.8, 1.0, 1.2, 1.5, 1.8, 2.0 and 2.5
Phillips: 40mm in sizes 00, 0 and 1
Screwdriver Handle

Order #	Description
13721	**11-Piece Microtip Screwdriver Set**

6-Piece Precision Reversible Screwdriver Set

Contents:
Slotted Reversible: 120mm in sizes 0.25 x 1.5 and 0.5 x 3.0, 0.4 x 2..0 and 0.6 x 3.5, 0.4 x 2.5 and 0.8 x 4.0
Phillips Reversible: 120mm in sizes No. 000 and No. 00, No. 0 and No. 1
Neo Microtip Screwdriver Handle, Roll Up Pouch

Order #	Description
13722	**6pc. Precision Reversible Screwdriver Set**

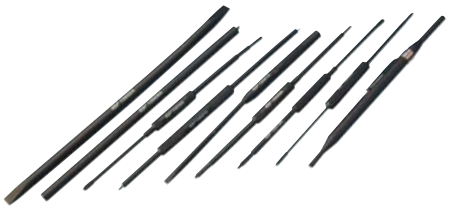
Alignment Tools

25-Piece Master Alignment Tool Kit

This comprehensive selection of the most commonly used alignment tools and adjusters is invaluable to anyone's tool kit. The 25-piece set includes all the trimmer/potentiometer and RF coil adjusting tools available.

Order #	Description
13500	**25-Piece Master Alignment Tool Kit**

9-Piece Anti-Static Alignment Tool Kit



This Pocket Kit contains nine alignment tools constructed from a special nylon type material that cannot retain a static charge. Wide range of tip styles and sizing assures the user will have a tool for adjusting most conventional components.

- Pocket Size
- ESD Safe

Order #	Description
13016	**9-Piece Anti-Static Alignment Tool Kit**

Ceramic Alignment Screwdrivers/Adjusters

Special ceramic blades for zero electromagnetic induction. Outlasts metal and plastic tools.

Slotted Blade ,Ceramic Adjusters

Order #	Description
13224	**Slotted Blade, Ceramic Adjusters** Tip Size:0.9mm Blade Length:15mm
13221	**Slotted Blade, Ceramic Adjusters** Tip Size:1.3mm Blade Length:15mm
13225	**Slotted Blade, Ceramic Adjusters** Tip Size:1.8mm Blade Length:15mm
13222	**Slotted Blade, Ceramic Adjusters** Tip Size:2.6mm Blade Length:15mm

Phillips, Ceramic Adjusters

Order #	Description
13218	**Phillips, Ceramic Adjusters** Tip Size:PHOO Blade Length:15mm
13219	**Phillips, Ceramic Adjusters** Tip Size:PHO Blade Length:15mm
13220	**Phillips, Ceramic Adjusters** Tip Size:PH1.7 Blade Length:15mm

4 in 1, Ceramic Adjusters

A handy tool consisting of two double end ceramic bits.
Phillips: 0 and 1.8mm **Slotted:** 1.7mm and 0.9mm
Supplied with two protective plastic caps.

Order #	Description
13230	**4 in 1, Ceramic Adjusters**

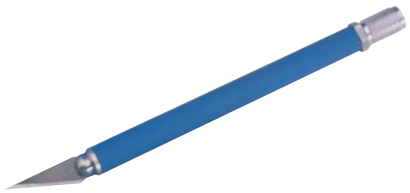
6-Piece Ceramic Adjuster Set

A handy set consisting of the most popular ceramic adjusters. Blade length is 15mm and the following sizes are included:
Phillips: PH0 and PH1.7 **Slotted:** 0.9mm, 1.3mm, 1.8, and 2.6mm

Order #	Description
13231	**6-pc Ceramic Adjuster Set**

Technik Knives

Technik K-18 Grip-On Non-Roll Soft Handle Knife



5" Comfortable soft grip handle with 4 jaw machined aluminum chuck for secure blade positioning. Includes a super sharp #11 blade, convenient rear blade release and a clear plastic safety cap. Used for cutting or trimming plastic, wood, paper, cloth and film. See page 94 for replacement blades.

Order #	Description
44011	**K-18 Precision Knife**

Technik K-40 Pocket-Clip Light Duty Utility Knife

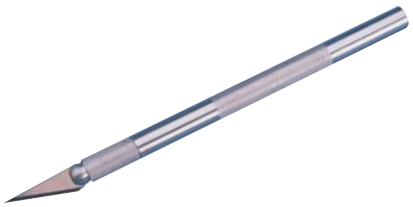
This unique multi-purpose precision knife is outstanding for cutting and trimming of paper, plastic, cloth, film and rubber and includes the following features:

- Unique twist lock pocket-clip safety cap.
- Machined aluminum 4 jaw chuck for tight secure blade housing.
- Comfortable ridged tapered plastic handle.
- Super sharp #11 blade.

See page 94 for replacement blades.

Order #	Description
44018	**K-40 Knife with Pocket Clip Cap**

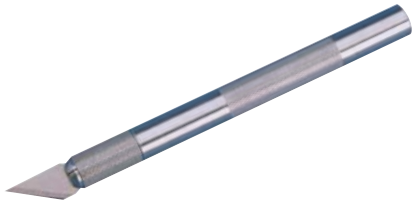
Technik Precision K-1 Light Duty Knife



4-3/4" aluminum handles with 4-slot point chuck for easy blade release. Includes a super sharp #11 blade and a high impact safety cap. Used for precision cutting, forming and stripping of paper, plastic, wood, cloth and film. See page 94 for replacement blades.

Order #	Description
44012	**K-1 Precision Knife**

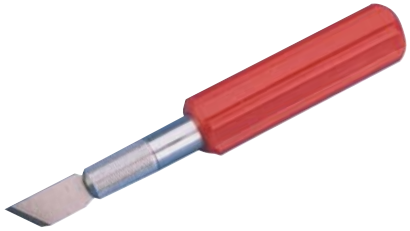
Technik K-2 Medium Duty Knife



4-3/4" aluminum handle with 4-slot point chuck for easy blade release. Includes a super sharp #22 blade and a high impact safety cap. Used for precision cutting, trimming and stripping paper, plastic, wood, cloth and film. See page 94 for replacement blades.

Order #	Description
44013	**K-2 Medium Duty Knife**

Technik K-5 Heavy Duty Knife



7/16" aluminum adapter, 4 jaw machined aluminum chuck for secure blade positioning and a snug fitting plastic safety cap. Included is a sharp edge angled blade. Used for precision cutting, trimming, stripping paper, plastic and wood. See page 94 for replacement blades.

Order #	Description
44014	**K-5 Heavy Duty Knife**

Knives & Blades

Technik Knives

Technik K-8 Flat Handle Light Duty Knife

You can adjust the length of the blade by releasing the nut. Both ends of the blade can be used for cutting boxes, wood, leather and foam.

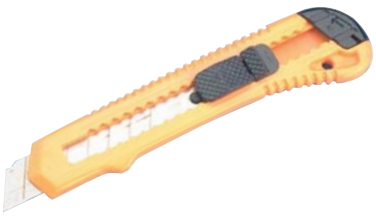
Order #	Description
44015	K-8 Light Duty Knife
44257	K-8 Replacement Blade (5/pk)

Technik K-10 Plastic Snap Blade Knife

Comes with 13-point blade. For home, office, industrial use cutting paper, plastic, wood and other items.

Order #	Description
44016	K-10 Heavy Duty Snap Blade Knife
44256	K-10 Replacement Blade (100/pk)

Technik K-13 Heavy Duty Plastic Snap Blade Knife



Comes with 7 point snap blade used for cutting and trimming.

Order #	Description
44017	K-13 Heavy Duty Snap Blade Knife
44254	K-13 Replacement Blade (100/pk)

Technik Scalpel Handles and Blades

These high precision knives are designed for intricate detailed work. Made from non-sterile .015" thick stainless steel, these blades are ideal for precision cutting in micro circuitry, photography, art, etc.

We offer a variety of handles and blades to suit many applications. Blades are made from surgical quality stainless steel and are supplied 2pc per tube.

Use the #30 plastic or #31 stainless steel metal handles for blades #10, 11, 12 and 15, use the #32 plastic handle or the #33 stainless steel metal handle for blade #23.

Order #	Description
44030	#30 Plastic Handle
44031	#31 S.S Metal Handle
44032	#32 Plastic Handle
44033	#33 S.S. Metal Handle

Order #	Description	
44041	#10 Scalpel Blade	2pc/tube
44042	#11 Scalpel Blade	2pc/tube
44043	#12 Scalpel Blade	2pc/tube
44044	#15 Scalpel Blade	2pc/tube
44045	#23 Scalpel Blade	2pc/tube

Knives & Blades

Technik Knife Set

Contains K1, K2, K5 knife handles with 13 assorted blades in a plastic tray that includes a Teflon covered magnetic strip to help in holding the blades securely.

Order #	Description
44101	**Knife Set**

Technik Deluxe Knife Set

Contains the same items as our Knife Set #44101 however, is supplied in a wooden box.

Order #	Description
44102	**Technik Deluxe Knife Set**

Technik Replacement Blades

Features:
- Blades precision-crafted of the highest quality carbon and stainless steel with hard, sharp points and honed cutting edges.
- Designed to handle a variety of tasks where accuracy and cutting ease are essential.

	Description	Order #
	No. 2 Blade Sharp angle for precision cutting of medium to heavyweight materials	**44201 / 5 Pack Tube** **44202 / 100 Pack**
	No. 10 Blade For general cutting, light carving and slicing	**44203 / 5 Pack Tube** **44204 / 100 Pack**
	No. 11 Blade Sharp angle for delicate, precision cutting, trimming and stripping	**44205 / 5 Pack Tube** **44206 / 100 Pack**
	No. 11 Stainless Steel Blade Resists corrosion; will not rust	**44205S / 5 Pack Tube** **44206S / 100 Pack**
	No. 16 Blade For stencilling, etching and scoring; also used on printed circuit boards	**44211 / 5 Pack Tube** **44212 / 100 Pack**
	No. 17 Blade For precision wood chiseling with 1/4" cutting surface	**44213 / 5 Pack Tube** **44214 / 100 Pack**
	No. 18 Blade For deep cross and smooth chiseling of wood with 1/2" cutting surface	**44215 / 5 Pack Tube** **44216 / 100 Pack**
	No. 19 Blade For light chiseling, rough shaping, deburring and trimming	**44217 / 5 Pack Tube** **44218 / 100 Pack**
	No. 22 Blade For long, heavy pressure cuts and general initial shaping in wood working, whittling, carving, trimming and slicing	**44221 / 5 Pack Tube** **44222 / 100 Pack**
	No. 23 Blade For corner cuts, stripping and trimming in confined areas	**44223 / 5 Pack Tube** **44224 / 100 Pack**
	No. 24 Blade For close corner cuts on templates and mates for deburring, stripping and gasket cutting	**44225 / 5 Pack Tube** **44226 / 100 Pack**
	No. 25 Blade For general purpose heavy-pressure cutting, whittling, carving and trimming	**44227 / 5 Pack Tube** **44228 / 100 Pack**
	No. 26 Blade For general purpose whittling and trimming with 2-15/16" cutting edge	**44229 / 5 Pack Tube**
	No. 27 Blade For general purpose cutting of lightweight & medium woods; 3" length for deeper cut	**44230 / 5 Pack Tube**
	No. 28 Blade For whittling, leather and linoleum work	**44231 / 5 Pack Tube**

Scissors

5" Electrician Scissor

Heavy-duty general-purpose scissor with two notches for 19 AWG and 23 AWG wire. Scraper and file on back edge of blade. Blade Length: 2"

Order #	Description
11012	**5" Electrician Scissor**

4-1/2" Slim Blade Scissor

Most popular precision scissor for cutting fine wire and for general use. Blade Length: 1-1/4"

Order #	Description
11014	**4-1/2" Slim Blade Scissor - Straight**
11072	**4-1/2" Slim Blade Scissor - Curved**

All Purpose Standard Scissor

The most common scissor for a variety of applications. Available in 3 most popular sizes.

Order #	Description
11022	**7" All Purpose Standard Scissor** Blade Length: 3-1/4"
11023	**8" All Purpose Standard Scissor** Blade Length: 3-3/4"

4-1/2" Precision Scissor

Excellent for routine and specialty applications. Blade Length: 1-3/8"

Order #	Description
11016	**4-1/2" Precision Scissor**

5" Ceramic Scissor

The durable zirconia blade insert even works with magnetic materials. Plastic handles are carbon fiber reinforced.

Order #	Description
11802	**5" Ceramic Scissor**

5-1/2" Ceramic Scissor

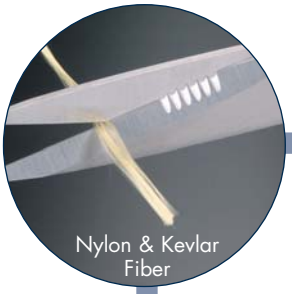
Ultra-sharp solid blades never dull. Aluminum die cast handles.

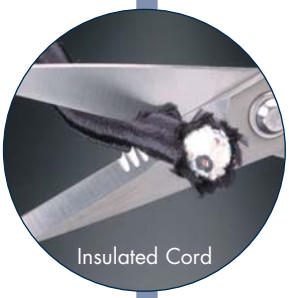
Order #	Description
11801	**5-1/2" Ceramic Scissor**

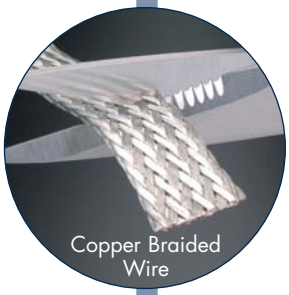
**Ceramic blades never need sharpening. No metal to rust or corrode. Trims Kevlar quickly and neatly.*

Scissors

2 IN 1 Combination Scissors







This scissor has a unique 2 in 1 cutting blade and can trim and cut materials that would not be possible with a normal scissor.

- Easily trim materials such as nylon fiber, cabtire cord, Kevlar etc.
- Gives you a fine flush cut
- Notched blades prevent the material to be trimmed from slipping
- U types notches on the blade allows you to hold items such as copper wire, cabtire or insulated cords etc. firmly in place
- Soft grip for added comfort
- Stainless Steel with blade hardness of HRC 54
- Length 170mm (6-1/2")

Specifications:

Notched Blade Cutting Capacity:
Aluminum/Copper sheet: 0.5mm
Plastic plate/PET: 1.0mm

U-type Blade Cutting Capacity
Copper wire: 1.5mm

Order #	Description
11080	**2 IN 1 Combination Scissors**

Crimping Tools/Wire Strippers

- A full line of crimping tools and wire strippers to meet all your data com requirements
- Special die available on request

Crimping Tools/ Wire Strippers

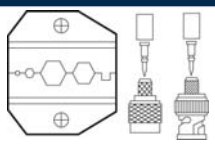
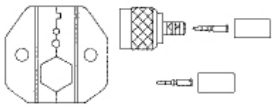
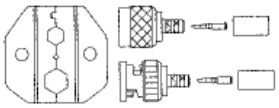
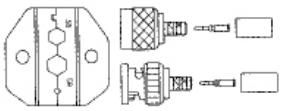
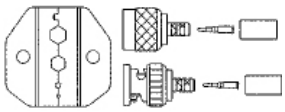
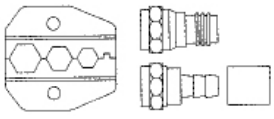
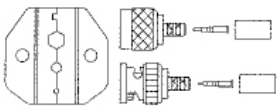
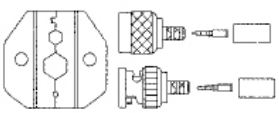
Aven Professional Crimping System

*Please note the frames and dies are sold separately.

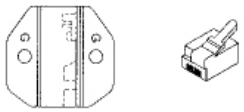
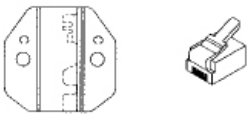
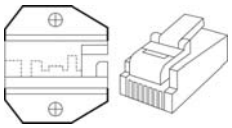
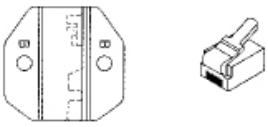
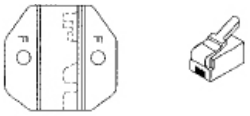
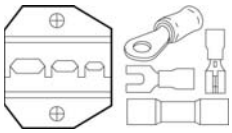
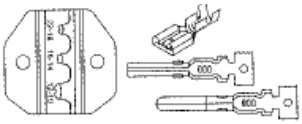
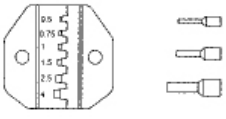
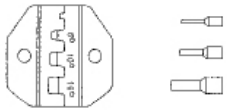
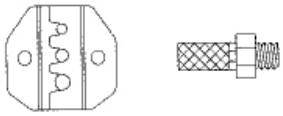
- All Steel Construction.
- Fully Ratcheting Cycle.
- Interchangeable dies constructed from heat treated hardened tool steel for long life.
- Quick Release Safety Latch.
- Sure-Grip Handles.
- More die selections available, contact Aven for details.
- Can provide custom designed die, contact Aven for details.

Order #	Description
10160	**Frame Only**

Dies for Coax Connectors

Die for Coax Connectors	Description	Order #
	For RG-58, RG-174 and RG-8218 for both 50 and 75-ohm cables. (Hex 0.213, 0.190, 0.178, 0.068, 0.042)	**10162D**
	For N-Series and RG-8/11 Connectors (Hex 0.429, 0.100, 0.080)	**10166D**
	For Cambridge CP-88, CP-89, BNC/TNC coax connectors with RG-58, RG-59/62 AU cables. (Hex 0.305, 0.068, 0.228)	**10169D**
	For RG-58, RG-59/62, BNC/TNC Coax connectors (Hex 0.255, 0.213, 0.068)	**10172D**
	For Plenum and Teflon cables RG-58 and 59. (Hex 0.213, 0.190, 0.068, 0.042)	**10163D**
	For RG-59, RG-6, F-Type CATV Connectors (Hex 0.350, 0.320, 0.255)	**10167D**
	For RG-174, Mini 59, BNC/TNC Connectors (Hex 0.178, 0.128, 0.068)	**10170D**
	For RG-6, RG-174, Belden-Type RG 8281 Cables (Hex 0.324, 0.178, 0.068)	**10174D**

Crimping Tools/ Wire Strippers

Die for Modular Connectors	Description	Order #
	For RJ-11 DEC MMJ six-position modular plugs with an offset release tab	**10164D**
	For Amp RJ-45 eight-position modular plugs. Primary strain relief crimp bar is located further back on the die/modular plugs	**10168D**
	For RJ-45, eight-position keyed or non-keyed modular plugs (excluding AMP)	**10171D**
	For RJ-11 two, four and six-position modular plugs	**10175D**
	For RJ-22 two and four-position handset modular plugs	**10176D**
Die for Barrel Type Connectors		
	22-10 AWG insulated terminals. Color-coded nests	**10161D**
	For 22-12 AWG non-insulated, open barrel connectors, Commercial type	**10165D**
Die for Wire Ferrules		
	For wire ferrules 12-22 AWG (0.5mm sq to 4mm sq)	**10178D**
	For wire ferrules 6-10 AWG (6mm sq to 16mm sq)	**10179D**
Die for Fiber Optic Connecters		
	AMP Optimate Fiber-Optic SMA or SFR type connectors (Round 0.195)	**10173D**

Crimping Tools/ Wire Strippers

Universal Crimp Tool for Coax Connectors

For crimping RG type connectors. Will crimp the following RG connectors: 55, 58, 59, 5, 6, 21, 141, 142, 143, 210, 212, 222, 223, 303, 304 and 400. Will crimp the following Belden type connectors: 8279, 8281, 9231 and 9141.

Order #	Description
10184	**Universal Crimp Tool**

All In One Telephone Tool

This versatile tool combines all the necessary tools to cut, strip and crimp modular telephone wires and plugs. Will cut and strip flat line cord cable up to 8 conductors wide. Crimps 8P8C/RJ45, 6P6C/RJ12, 6P2C/RJ11, 6P2C, 4P4C/Handset and 4P2C.

Order #	Description
10181	**All In One Telephone Tool**

All In One Telephone Tool

Cuts and strips telephone cable. Features: RJ11, 2, 4 and 6 position and RJ45 8 position, a fully ratcheting cycle and a built in safety release.

Order #	Description
10183	**Universal Crimp Tool**

Modular Crimper

An extremely practical tool that is used for RJ11 and RJ45 applications. Both die are built into the tool. Also has a built in cutter and stripper to make it easier to prepare wire before crimping. Ratcheted Action

Order #	Description
10185	**RJ11/RJ45 Modular Crimp Tool**

4-Way Indent Crimp Tool

Designed to crimp closed barrel, screw machine pin and socket style contacts. Performs a simultaneous 4 indent crimp for superior contact retention.

Order #	Description
10186	**4-Way Indent Crimp Tool**

Crimping Tools/ Wire Strippers

Wire Stripper

Has adjustable screw stop for different wire sizes, and cushion grips. Cuts and strips both solid and stranded wire, cleanly and neatly. Hardened or ground blades. Strips AWG 30-10 wire.

Order #	Description
10106	**Wire Stripper**

Cable Cutter

Cuts coaxial cable up to RG-9U, multi-conductor cable up to 0.500" (12.7mm) and solid or stranded wire up to #8 AWG (10mm sq).

Order #	Description
10102	**Cable Cutter**

Cable Cutter-Heavy Duty

- Can cut up to 100 pair group cable.
- Cuts coaxial cable up to RG174/RG9.
- Built-in return springs allow ease of use.
- Custom grips and safety locks.
- Made from stamped hardened carbon steel.

Order #	Description
10106A	**Cable Cutter-Heavy Duty**

Ratchet Cable Cutter

- Cuts 750MCM (380mm sq) and smaller hard-drawn copper and aluminum cable.
- Specially hardened steel blades for longer life.
- Quick release mechanism simplifies blade back-out.
- Handles lock together for easy storage.

Order #	Description
10106B	**Ratchet Cable Cutter**

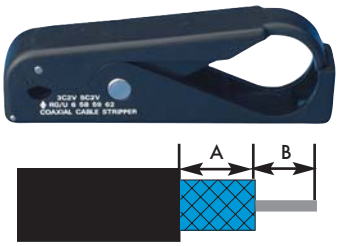
UTP Cable Stripper

A simple tool for UTP cables. Strips in 3 circles to extract the jacket of UTP cables. Can also function as a 110 punch down tool.

Order #	Description
10110	**UTP Cable Stripper**

Crimping Tools/ Wire Strippers

Rotary Coaxial Cable Stripper



For RG/58, 59 and 62. Strips without adjustments.

Order #	Description
10111	**Rotary Coaxial Cable Stripper** A: 8mm B: 4mm
10112	**Rotary Coaxial Cable Stripper** A: 6mm B: --
10111D	**Replacement Blades** for 10.111
10112D	**Replacement Blades** for 10.112

Round Cable Stripper

Slits cable both longitudinally and circumferentially. It can be used on single or multiple conductor cable to 1.75" (44.5mm) O.D. The blade can be adjusted to jacket thickness up to 0.125" (3.2mm).

Order #	Description
10113	**Round Cable Stripper**

Multi-Function Wire Stripper

- Use on shielded twisted pair and unshielded twisted pair, CATV Cable, CB Antenna, SO, SJ, and SJT and other flexible cables.
- Strips coax and UTP/STP cables.
- Versatile stripper and cutter allows you to carry fewer tools.
- Built-in cutter for clean cuts.
- Built-in wire stripper strips 16 to 26 AWG for added versatility.

Order #	Description
10114	**Multi-Function Wire Stripper**

Stripper/Cutter/Crimper

10133

10134

10134A

10134B

Item #10133

- Strips wire in wire sizes AWG 20 to 10 (0.8 to 2.6mm).
- Cuts soft copper wire.
- Cuts five bolt sizes (M2.6, M3, M3.5, M4 and M5).
- Crimps bare and insulated terminals.
- Crimps coax connectors (6mm).
- Has a serrated jaw and a narrow nose for pulling and looping wire and tightening small nuts.
- Cushioned handles.
- Length 8-1/4".

Item #10134, 10134A & 10134B

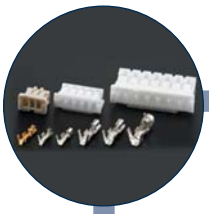
- Strips wire and 10134 crimps insulated terminals in wire sizes 22-10 & 22-14 AWG
- Cuts soft copper wire.
- Has a serrated jaw for pulling and looping wire and tightening small nuts.
- Cushioned handles with springs for easy repetitive wire stripping.
- Length 6-1/2".

Order #	Description
10133	**Stripper/Cutter/Crimper**
10134	**Stripper/Cutter** AWG 26–16 (0.4–1.3mm)
10134A	**Stripper/Cutter** AWG 30–20 (0.2–.08mm)
10134B	**Stripper/Cutter** AWG 20–10 (0.8–2.6mm)

Crimping Tools/ Wire Strippers

Crimping Tool for Micro Connectors

Precision Engineered



- Capable of crimping 1.25 to 2.5mm (AWG 32-20) pitch connector pins.
- D-Sub connector contact can be also crimped.
- Original Set-pin prevents the joint from being loose and offers you easy maintenance.
- With locking latch and coiled spring.
- Pliers made of S55C with Teflon coating.
- 135g compact body for fatigue-free work.
- Length 6.8"

	Die Width	Die Height	Wire Size Range	
Die 1	1.0mm	0.50mm	Ø 0.20-0.32mm	AWG 32-28
Die 2	1.4mm	0.55mm	Ø0.32-0.51mm	AWG 28-24
Die 3	1.6mm	0.8mm	Ø 0.51-0.64mm	AWG 24-22
Die 4	1.9mm	0.9mm	Ø 0.51-0.81mm	AWG 24-20

Order #	Description
10140	**Crimping Tool for Micro Connectors**
10141	**Crimping Tool for Large Connectors** Sizes: 1.6, 1.9, 2.0 and 2.3 mm

Crimping Tools/ Wire Strippers

Wire Stripper

One light squeeze strips wire clean up to a full 7/8". Automatic feature holds jaws open to remove wire without crushing ends. Practically eliminates all nicking, cutting or fraying. Strips Teflon, Silicone and PVC wire. Made of aluminum with plastic molded handles. Will strip 22, 16, 14, 12, 10 and 8 AWG sizes.

Order #	Description
10105	**Wire Stripper**

BNC/TNC Connector Removal Tool

For easy access to high-density locations of connectors. Available in two popular lengths.

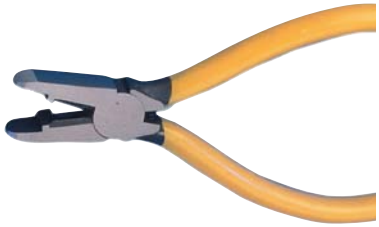
Order #	Description
10136A	**12" BNC/TNC Removal Tool**
10136B	**8" BNC/TNC Removal Tool**

Punch Down Tool with 110/66 Blades

Insert and cut cable terminations effortlessly with this punch down tool. Impact absorbing, cushioned grip reduces operator stress for high volume installers. Adjustable high/low actuation setting accommodates termination requirements or operator preference. Storage compartment with unique locking device provides convenient storage for spare blades and helps prevent blade loss.

Order #	Description
10135	**Punch Down Tool with 110/66 Blades**
10135A	**Spare Blade 110**
10135B	**Spare Blade 66**

Connector-Crimping Pliers



Designed to seat UG, UR and UY connectors. A special stop behind cutout prevents damage to connectors.

Order #	Description
10137	**Connector-Crimping Pliers**

Double Socket Can Wrench

Use to place fuses in cable terminals and connect wires to fuses and binding posts. 3/8" and 7/16" hex double end. Plastic handle.

Order #	Description
10138	**Double Socket Can Wrench**

Soldering/Desoldering Accessories

Desoldering Iron

Combines the ease and portability of a hand-held, manual desolder pump, with the performance of an electric desolder station. Vacuum chamber is easily removed for cleaning.

Order #	Description
17522	**Desoldering Iron**
17522-220	**Desoldering Iron 220V**

6-Piece Solder Aid Kit

Six of the most popular soldering aids. Use the hook to remove components, the reamer to clean holes choked with solder, the knife for cutting away unnecessary circuits on PCB's, the scraper to remove the shielding from wires, rust and contamination to improve adhesion of solder, the brush to clean and the fork to bend and hold leads.

Order #	Description
17524	**6-Piece Solder Aid Kit**

5-Piece Solder Aid Kit

This kit consists of a tweezer, a heat sink and 3 popular solder aids.

Order #	Description
17523	**5-Piece Solder Aid Kit**

Soldering Stands

17531

17533

- Holds up to 1-1/8" diameter iron.
- Heavy duty metal base.
- Built in sponge tray.
- Sponge receptacle.
- 2 position iron holder stand.
- Two per pack.

Order #	Description
17531	**Soldering Iron Stand**
17533	**Soldering Stands-Two per pack.**

Desoldering Pumps

Rugged, manual loading tool for volume desoldering. High vacuum heavy-duty plastic, fully enclosed shaft for safety. Plunger locks for compact storage.

Order #	Description
17535	**Desoldering Pump**–13" High Impact Plastic

Sturdy tool for routine desoldering. Slim profile with a smooth action.

Order #	Description
17536	**Desoldering Pump**–8.5" EDS Safe Plastic

Rugged, metal construction with an anti-static tip.

Order #	Description
17537	**Desoldering Pump**–8.5" Metal Body

Soldering/Desoldering Accessories

No Clean Microwick

Features:
- No Contamination.
- No Burns.
- Handy dispenser allows precision positioning of the wick.
- Eliminates contamination and burns.
- Pure copper braid (3/32" wide) coated with a "no clean", non-corrosive, halide-free rosin based flux. Length 8".
- Cleaning not needed, leaves no visible residue.

Order #	Description
17549	**No Clean Microwick**

Desoldering Wick

- High quality desoldering braid with unique no clean flux.
- Pure oxygen free copper wire.

Order #	Description
17540	**Desoldering Wick** Width: .06"/1.5mm Length:5"/1.5mm Weight: 0.4oz/11g
17541	**Desoldering Wick** Width: .08"/2mm Length:5"/1.5mm Weight: 0.5oz/13g
17542	**Desoldering Wick** Width: .10"/2.5mm Length:5"/1.5mm Weight: 0.6oz/16g

Solder Reel Stand

Features:
- Keep benches neat and draw out solder wire smoothly.
- Holds up to 1kg (approximately 2lbs.)roll of solder wire.
- Dimensions: 86mm (W) x 14mm (H) x 78mm (D) (3.4"x0.55"x3.1")
- Shaft diameter: 1.5mm (0.6")

Order #	Description
17560	**Solder Reel Stand**

Solder

Formulated for high quality hand soldering of circuit boards and electronic assemblies.

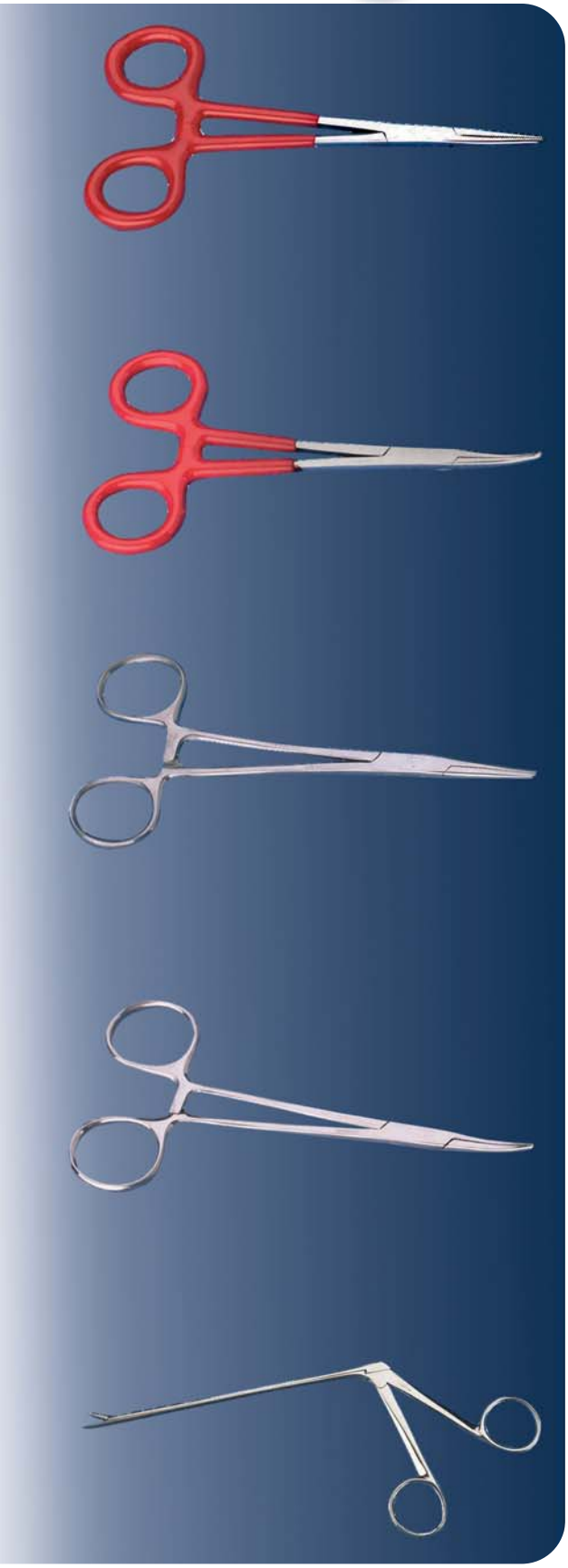
Order #	Description
17551	**Solder** Tin-Lead Alloy: 60 – 40 Diameter: 0.03"/0.8mm Weight: 1lb/500g
17552	**Solder** Tin-Lead Alloy: 60 – 40 Diameter: 0.04"/1mm Weight: 1lb/500g
17553	**Solder** Tin-Lead Alloy: 60 – 40 Diameter: 0.05"/1.2mm Weight: 1lb/500g
17554	**Solder** Tin-Lead Alloy: 60 – 40 Diameter: 0.03"/0.8mm Weight: 0.55lb/250g
17555	**Solder** Tin-Lead Alloy: 60 – 40 Diameter: 0.04"/1mm Weight: 0.55lb/250g

Third Hand With Tweezers

Allows both hands free for soldering. Heavy base prevents movement and multi position swivel clamps permit holding of piece at any angle.

Order #	Description
17012	**Third Hand With Tweezers**

Soldering/Desoldering Accessories



Hemostats Straight with Plastic Coated Handles

The most versatile tool, can be used as clamps, heat sinks, third hands, etc., while soldering. Has a three position locking device. Serrated jaws. Stainless steel construction.

Order #	Description
12011	**Hemostat Straight with Plastic Coated Handles** Length: 5"
12013	**Hemostat Straight with Plastic Coated Handles** Length: 6"

Hemostats Curved with Plastic Coated Handles

Order #	Description
12012	**Hemostat Curved with Plastic Coated Handles** Length: 5"
12014	**Hemostat Curved with Plastic Coated Handles** Length: 6"

Hemostats Straight

Order #	Description
12001	**Hemostat Straight** Length: 3-1/2"
12015	**Hemostat Straight** Length: 5"
12017	**Hemostat Straight** Length: 6"
12019	**Hemostat Straight** Length: 8"

Hemostats Curved

Order #	Description
12002	**Hemostat Curved** Length: 3-1/2"
12016	**Hemostat Curved** Length: 5"
12018	**Hemostat Curved** Length: 6"
12020	**Hemostat Curved** Length: 8"

Alligator Clamps

A unique tool for retrieving and holding small parts. Allows you to reach into long narrow spaces. Stainless steel.

Order #	Description
12201	**Alligator Clamp** Length: 3-1/2"
12202	**Alligator Clamp** Length: 5-1/2"

Soldering/Desoldering Accessories

4-Pc. Single Probe Set

These probes are made from stainless steel. They are scalpel-shaped for fine probing. Useful for cold solder probing, hand inspection, micro positioning lead adjusting, etc.

Order #	Description
20210	4-Pc. Single Probe Set

Stainless Steel Probes

Useful for cold solder probing, hand inspection, micro positioning and lead adjusting.

Order #	Description
20031	Stainless Steel Probe

Order #	Description
20032	Stainless Steel Probe

Order #	Description
20033	Stainless Steel Probe

Order #	Description
20034	Stainless Steel Probe

Order #	Description
20040	Stainless Steel Probe

Order #	Description
20036	Stainless Steel Probe

Order #	Description
20039	Stainless Steel Probe

Order #	Description
20038	Stainless Steel Probe

Order #	Description
20035	Stainless Steel Probe

Order #	Description
20037	Stainless Steel Probe

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AVEN

New Products

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