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Spectra Medical Devices, LLC was founded by Anthony C. Arrigo (known as Tony Spectra). Tony was previously the CEO, President and Owner of American Medical Instruments, which was a leading manufacturer of custom procedural needles. Spectra Medical Devices is focused on making the highest quality needle products and providing the best and most responsive customer service.

In 2020, Spectra Medical Devices, LLC celebrated its 25th anniversary as one of the largest procedural needle manufacturers in the world, with substantial market share in over 40 countries. Spectra utilizes the latest state-of-the-art manufacturing, measuring and inspection systems, along with over 225 years of senior staff needle-manufacturing experience. Spectra has been awarded several U.S. patents for special needle processing and products, as well as being an FDA-approved source for Lidocaine ampules and vials, Sodium Chloride ampules and Bupivacaine ampules. In the future, we will be offering several more similar drugs as well.

Our primary focus is on patient safety and achieving substantial growth through quality and innovation. Spectra has five manufacturing plants worldwide, employing over 300 personnel. Our corporate headquarters is located in Wilmington, Massachusetts.

Anthony (Tony) Arrigo, President
Our mission is to provide physicians with the best performing, most reliable medical equipment possible. At every stage, from design to customer service, we go beyond the standard to achieve that objective.

The most critical step in the process is manufacturing. Our manufacturing equipment, facilities and processes are all state-of-the-art. They are capable of engineering consistently high-quality products that physicians count on for any procedure. At our facilities, we continue to increase automation to our manufacturing production capabilities.

Of course, all physicians are part of an organization with time and budget demands, inventory concerns and other business issues. Spectra is committed to addressing both medical and business concerns that each individual customer faces. Our outstanding customer service department is responsive to all our customers’ needs, from meeting deadlines to customizing our product line.

ISO 13485:2016 Registered
Needle manufacturing is an esoteric science. Spectra has been manufacturing needles that are smaller than a human hair for over 25 years. As you can imagine, during the genesis of our company, we had to overcome many adaptive and technical challenges. Overcoming these challenges has prepared our staff to manufacture the widest array of needles in the world.

Creating precision consistently demands sophisticated engineering, precise manufacturing and uncompromising quality control. After extensive global consideration and analysis, Spectra has located its primary production facilities in South Korea, where they offer state-of-the-art technology and an exceptional commitment to quality control.

Our production facilities adhere to tight tolerances, exceeding industry standards to continually produce the best medical equipment possible.
Constantly Advancing Design to Improve Care

Spectra’s extensive engineering and manufacturing capabilities allow us to partner with physicians around the world on a regular basis to design, test and produce innovative and custom needle designs to the highest quality specifications.

In this catalog, you’ll learn about some of our proprietary needle innovations, including Cath Glide®, Cath Slide®, Epi-Match®, Guide Glide®, Reduced Advancement Force Radiofrequency (RF) Needles and Spectra Guide® – the global standard for needle echogenicity under ultrasound.

Spectra's Commitment to Customer Satisfaction and Patient Safety

Spectra Medical Devices, LLC manufactures the highest quality medical instruments and products that are designed and intended to assist physicians in achieving better clinical results while ensuring patient safety and comfort. Our collaborative approach and robust supply chain management system assure that our products arrive where and when they are required, at competitive prices that help our customers meet both their business and patient care objectives.
As a world leader in echogenic needle design and quality, Spectra has clearly advanced the field of ultrasound-guided procedures with a proprietary dimple design that delivers sharper imaging all the way to the tip of the needle.

**What Makes Spectra Guide® Better?**

- More and smaller dimple reflectors for a clearer, defined image
- Reduced presence of acoustic shadowing and haloing
- Dimpled right up to the apex so physicians can precisely see the tip of the needle
- Uniform dimples around the needle provide clarity from any angle
- Spectra’s production process allows echogenicity on a wide variety of needle styles

**Guide Glide II® echogenic technology**

Our echogenic configuration optimizes needle visualization under ultrasound guidance. This proprietary technology improves the accuracy of needle placement and is atraumatic to the patient.
Spectra offers both sterile and non-sterile needles. We have in-house packaging and labeling operations.

Features and Options Available:

- Tyvek® chevron peel pouches in chipboard or fluted shelf box
- Studies demonstrate SAL, Bioburden, Non-Pyrogenicity, Non-Toxicity, package integrity and EtO residuals, as well as bacteriostasis and fungistasis
- Standard or customized needles to fit customer specifications
- Customer contracted packaging solutions, specific testing and validation needs available
- Fast, easy customization of private labels
- EtO sterilization
Epidural Needles

More Options for Physicians

Spectra's epidural needles come with an extensive array of features for various applications and uses.

**Features and Options Available:**
- 510(k) clearance
- CE 0413 marking
- ISO 80369-6 (NRFit®) compliant hubs
- Epi-Match® technology
- Cath Slide® process ensures unscathed catheter advancement and retraction
- Uses the highest tensile strength 304 stainless steel
- With or without cm depth markings
- Bevel orientation indicator ensures proper alignment
- Metal or plastic hub and stylet
- Fixed wing, removable wing or no wing
- Transparent hub for full visualization of fluids
- Color-coded stylet cap
- Customizable Sharpness: Regular/Dull/Super Dull
- Single use, disposable

**Sizes:**
- 14GA - 25GA
- 2” - 6” lengths
  (custom sizes available upon request)

**Applications:**
- Epidural catheter placement
- Regional anesthesia pain management
- Pain management

**Styles:**
- Tuohy, Hustead, Crawford or Weiss

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
PAIN MANAGEMENT

Epi-Match®

It's vital that an epidural needle advances and passes through a catheter without disruptions. Any catch or resistance can lead to a potentially dangerous situation.

This is why Spectra offers our premium Epi-Match® option and performs Cath Slide® on all epidural needles. The cannula and stylet are ground together to match perfectly.

This eliminates the common protrusion scissoring at the tip or recessions at the heel – two of the causes of resistance and placement errors when introducing the catheter.

Cath Slide®

Spectra’s Cath Slide® technology is a proprietary blasting process that rounds all internal sharp edges in order to eliminate the chances of damaging the catheter during introduction into the patient’s epidural space.

These potentially dangerous failures can be caused by sharp edges on the heel of the standard production epidural needle.
Internal and external edges are completely rounded by our proprietary process in order to facilitate advancing of spinal cord stimulator lead without skiving, breaking or hang-ups.

**Features and Options Available:**
- ISO 80369-6 (NRFit®) compliant hubs
- Cath Slide® process ensures unscathed catheter advancement and retraction
- Uses the highest tensile 304 stainless steel
- Eliminates SCS lead cutting, skiving and hang-ups
- Plastic or metal hub
- Metal or plastic stylet
- With or without calibration markings
- Fixed wing, removable wing or no wing
- Color-coded stylet cap
- Curved or straight
- Customizable sharpness
- Bevel orientation indicator ensures proper alignment
- Single use, disposable

**Sizes:**
- 13GA - 16GA
- 4” - 6.5” lengths
  (custom sizes available upon request)

**Applications:**
- Intrathecal drug delivery
- Neurostimulation

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
Spinal introducer needles are designed to provide additional support for easy insertion and maximize precise placement of the small-gauge spinal needle during spinal anesthesia.

**Features and Options Available:**
- Uses highest tensile 304 stainless steel
- Aluminum, metal or plastic hub
- Knurled Hub
- Smooth transition for needle insertion and passage
- Single use, disposable

**Sizes:**
- 19GA - 22GA
- 1" - 3.5" lengths
  (custom sizes available upon request)

**Applications:**
- Cerebrospinal fluid collection (CSF)
- Spinal anesthesia
Spectra's spinal needles use the highest tensile strength 304 stainless steel and are available in custom sizes and configurations to match any procedure and preference.

**Features and Options Available:**
- 510(k) clearance
- ISO 80369-6 (NRFit®) compliant hubs
- With or without Spectra Guide®
- Uses the highest tensile strength 304 stainless steel
- Clear, plastic hub with color-coded stylet cap
- With or without introducer needles
- With or without cm depth markings
- Depth stop available
- Block Glide® lubrication
- Bevel orientation indicators available
- Single use, disposable

**Sizes:**
- 18GA - 27GA
- 1.5” - 12” lengths
  (custom sizes available upon request)

**Application:**
- Cerebrospinal fluid collection (CSF)
- Spinal anesthesia

**Styles:**
- Quincke, Chiba, Sprotte (Pencil Point) or Whitacre (Pencil Point)
Spectra's Echoshot™ Injection Needles

Spectra's Echoshot™ injection needles are disposable lubricated echogenic needles with fluid injection designed for joint injections, peripheral nerve blocks and injection of radio contrast medium.

**Features and Options Available:**
- Disposable, lubricated, echogenic needles with fluid injection line for joint injections, peripheral nerve blocks and injection of radiocontrast medium
- Smooth, steerable shafts with a small ergonomic hub that indicates injection direction
- Echogenic needles allow you to see and precisely guide, advance and locate in order to perform procedures more safely and efficiently
- Spectra Guide® dimpled echogenic field provides maximum recapture rate for the clearest image under ultrasound guidance
- Small ergonomic hub provides comfortable handling and clear fluoroscopic views
- Uses highest tensile strength 304 stainless steel
- 30° bevel with a back-cut secondary bevel
- A 30 cm integral tube and Luer connector for injection without disturbing needle placement
- Designed for easy, controlled steerable needle placement or injection to the target
- “Spectra” marking on the hub serves as the bevel orientation indicator ensuring proper alignment
- Lubricated or non-lubricated needles
- Single use, disposable

**Sizes:**
- 21GA - 23GA
- 6 - 15 cm
  (custom sizes available upon request)

**Applications:**
- Joint injection
- Peripheral nerve blocks
- Injection of radiocontrast medium
Peripheral Nerve Block (PNB) - Continuous

Spectra’s Sonic Block™ Echogenic Needles for Precise Control

Spectra’s PNB needles provide a maximum visualization, under ultrasound guidance, allowing physicians to clearly see where the tip of the needle is and allowing them to safely and confidently introduce the catheter.

Features and Options Available:
- 510(k) clearance
- ISO 80369-6 (NRFit®) compliant hubs
- Spectra Guide® technology for clarity, precision and safety under ultrasound-guided procedures
- Uses the highest tensile strength 304 stainless steel
- Inner diameter unaffected by echogenic process so catheter advances smoothly
- Bevel orientation indicator ensures proper alignment
- Cath Slide® applied on Tuohy style
- Fixed wing, removable wing or no wing
- Single use, disposable

Sizes:
- 16GA - 25GA
- 1” - 7” lengths
  (custom sizes available upon request)

Applications:
- Ultrasound-guided injections
- Catheter placement

Styles:
- Tuohy or Crawford

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
Peripheral Nerve Block (PNB) - Single Shot

For Quick and Easy Pain Management Injections

Our single-shot PNB needles have 360° dimples, which provide optimal ultrasound imagery.

Features and Options Available:

• 510(k) clearance
• Spectra Guide® technology for clarity, precision and safety under guided ultrasound procedures
• Echogenic or non-echogenic
• B bevel
• Uses the highest tensile strength 304 stainless steel
• Single use, disposable

Sizes:

• 21GA - 23GA
• 2.5” - 6” lengths
  (custom sizes available upon request)

Application:

• Injecting local anesthetic

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
Spectra Medical Devices, LLC is a leading manufacturer of radiofrequency needles, as a result of producing high-quality products and applying state-of-the-art technologies in compliance with cGMP/QSR regulations. Spectra’s RF needles can be used with various probes and generators. Spectra offers one of the widest ranges of RF needles in the industry with over 100 configurations available.

**Features and Options Available:**
- 510(k) clearance
- CE 0413 marking
- Uses the highest tensile strength 304 stainless steel
- Customizable gauges, needle lengths and active tip lengths
- With or without hub
- Straight, curved, blunt or sharp tip
- Echogenic or non-echogenic
- Lubricated or non-lubricated
- Quincke bevel or lancet bevel
- Single use, disposable

**Sizes:**
- 16GA, 18GA, 20GA, 21GA, 22GA
- Lengths: 5 cm, 10 cm, 15 cm, 20 cm
- Active Tip Lengths: 4 mm, 5 mm, 10 mm, 15 mm, 20 mm (custom sizes available upon request)

**Application:**
- Radiofrequency lesioning

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
PAIN MANAGEMENT

Loss of Resistance (LOR) Syringes

Spectra's Glass LOR Syringes

Spectra's Glass LOR Syringes are match formed, ensuring seamless plunger action when locating the epidural space.

Features and Options Available:
- 510(k) clearance
- ISO 80369-6 (NRFit®) compliant luer fittings
- Smooth, low friction, consistent plunger movement
- Norprene® Shroud application prevents transit damages

Sizes:
- Metal Luer Slip: 3 cc, 5 cc, 10 cc
- Metal Luer Lock: 3 cc, 5 cc, 10 cc
- Glass Luer Slip: 3 cc, 5 cc, 10 cc

Application:
- Used in conjunction with an epidural needle to assist in locating the epidural space
Bupivacaine Hydrochloride in Dextrose Injection, USP, 0.75%/8.25%, 2 mL Single-Dose Ampules

Spectra now offers Bupivacaine Hydrochloride in Dextrose Injection, USP, 0.75%/8.25% indicated for the production of subarachnoid block (spinal anesthesia).

- Bupivacaine HCL in Dextrose Injection, USP, 0.75%/8.25%
- Glass Ampules
- Preservative Free

How To Order:
2 mL Single-Dose Glass Ampules*
Box of 50 / Carton of 2,000
NDC: 73293-0002-1, 73293-0002-2

*USP Type 1 Glass Ampules, hermetically sealed, compatible with EtO sterilization.
Glass is impermeable to EtO per ANSI/AAMI ST41:1999 Standard

IMPORTANT SAFETY INFORMATION
INDICATIONS AND USAGE
Bupivacaine Hydrochloride in Dextrose Injection, USP is indicated for the production of subarachnoid block (spinal anesthesia).

IMPORTANT SAFETY INFORMATION
CONTRAINDICATIONS:
Bupivacaine Hydrochloride in Dextrose Injection, USP is contraindicated in patients with known hypersensitivity to it or to any local anesthetic agent of the amide-type. The following conditions preclude the use of spinal anesthesia:
1. Severe hemorrhage, severe hypotension or shock and arrhythmias, such as complete heart block, which severely restrict cardiac output.
2. Local infection at the site of proposed lumbar puncture.

WARNINGS
Local anesthetics should only be employed by clinicians who are well versed in diagnosis and management of dose-related toxicity and other acute emergencies which might arise from the block to be employed, and then only after insuring the immediate availability of oxygen, other resuscitative drugs, cardiopulmonary resuscitative equipment, and the personnel resources needed for proper management of toxic reactions and related emergencies.
Delay in proper management of dose-related toxicity, underventilation from any cause and/or altered sensitivity may lead to the development of acidosis, cardiac arrest, and, possibly, death.

Please refer to full Prescribing Information found at www.spectramedical.com
PHARMACEUTICALS

Lidocaine Hydrochloride Injection, USP, 1%, 5 mL Single-Dose Ampules

Spectra offers Lidocaine Hydrochloride Injection, USP, 1%, indicated for production of local or regional anesthesia by infiltration techniques such as percutaneous injection and intravenous regional anesthesia, by peripheral nerve block techniques such as brachial plexus and intercostal and by central neural techniques such as lumbar and caudal epidural blocks.

- Lidocaine Hydrochloride Injection, USP, 1%
- Glass Ampules
- Preservative Free
- Manufactured for Spectra Medical Devices, LLC, Wilmington, MA 01887 by Huons Co., Ltd., Seoul, South Korea

How To Order:
5 mL Single-Dose Glass Ampules*
Box of 25 / Carton of 900
NDC: 65282-1605-1

*USP Type I Glass Ampules, hermetically sealed, compatible with EtO sterilization. Glass is impermeable to EtO per ANSI/AAMI ST41:1999 Standard

IMPORTANT SAFETY INFORMATION

INDICATIONS AND USAGE
Lidocaine Hydrochloride injection, USP is indicated for production of local or regional anesthesia by infiltration techniques such as percutaneous injection and intravenous regional anesthesia by peripheral nerve block techniques such as brachial plexus and intercostal and by central neural techniques such as lumbar and caudal epidural blocks, when the accepted procedures for these techniques as described in standard textbooks are observed.

IMPORTANT SAFETY INFORMATION
Lidocaine HCl is contraindicated in patients with a known history of hypersensitivity to local anesthetics of the amide type.

WARNINGS AND PRECAUTIONS
LIDOCAINE HYDROCHLORIDE INJECTION, USP FOR INFILTRATION AND NERVE BLOCK SHOULD BE EMPLOYED ONLY BY CLINICIANS WHO ARE WELL VERSED IN DIAGNOSIS AND MANAGEMENT OF DOSE-RELATED TOXICITY AND OTHER ACUTE EMERGENCIES THAT MIGHT ARISE FROM THE BLOCK TO BE EMPLOYED AND THEN ONLY AFTER ENSURING THE IMMEDIATE AVAILABILITY OF OXYGEN, OTHER RESUSCITATIVE DRUGS, CARDIOPULMONARY EQUIPMENT AND THE PERSONNEL NEEDED FOR PROPER MANAGEMENT OF TOXIC REACTIONS AND RELATED EMERGENCIES. PROPER MANAGEMENT OF DOSE-RELATED TOXICITY, UNDERVENTILATION FROM ANY CAUSE AND/OR ALTERED SENSITIVITY MAY LEAD TO THE DEVELOPMENT OF ACIDOSIS, CARDIAC ARREST AND, POSSIBLY, DEATH.

- To avoid intravascular injection, aspiration should be performed before the local anesthetic solution is injected. The needle must be repositioned until no return of blood can be elicited by aspiration.
- In the case of severe reaction, discontinue the use of the drug.
- The safety and effectiveness of lidocaine HCl depend on proper dosage, correct technique, adequate precautions, and readiness for emergencies.
- Resuscitative equipment, oxygen, and other resuscitative drugs should be available for immediate use.
- Debilitated, elderly patients, acutely ill patients, and children should be given reduced doses commensurate with their age and physical condition. Lidocaine HCl should also be used with caution in patients with severe shock or heart block.
- Use with caution in patients with hepatic disease.
- Use with caution in patients with impaired cardiovascular function since they may be less able to compensate for functional changes associated with the prolongation of A-V conduction produced by these drugs.
- The intramuscular injection of lidocaine HCl may result in an increase in creatine phosphokinase levels.

Please refer to full Prescribing Information found at www.spectramedical.com
How To Order:
5 mL Single-Dose Glass Vials
Box of 10 / Carton of 600
NDC: 73293-0001-1, 73293-0001-2
IMPORTANT SAFETY INFORMATION

PRECAUTIONS

• Consult the manufacturer’s instructions for choice of vehicle, appropriate dilution or volume for dissolving the drugs to be injected, including the route and rate of injection.
• Inspect reconstituted (diluted or dissolved) drugs for clarity (if soluble) and freedom from unexpected precipitation or discoloration prior to administration.
• Pregnancy Category C - Animal reproduction studies have not been conducted with 0.9% Sodium Chloride Injection, USP. It is also not known whether sodium chloride injection containing additives can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Sodium chloride injection containing additives should be given to a pregnant woman only if clearly needed.
• Pediatric Use - The safety and effectiveness in the pediatric population are based on the similarity of the clinical conditions of the pediatric and adult populations. In neonates or very small infants the volume of fluid may affect fluid and electrolyte balance.

DRUG INTERACTIONS

• Some drugs for injection may be incompatible in a given vehicle, or when combined in the same vehicle or in a vehicle containing benzyl alcohol.
• Use aseptic technique for single or multiple entry and withdrawal from all containers.
• When diluting or dissolving drugs, mix thoroughly and use promptly.
• Do not store reconstituted solutions of drugs for injection unless otherwise directed by the manufacturer of the solute.
• Do not use unless the solution is clear and seal intact. Do not reuse single-dose containers, discard unused portion.

ADVERSE REACTIONS

• Reactions which may occur because of this solution, added drugs or the technique of reconstitution or administration include febrile response, local tenderness, abscess, tissue necrosis or infection at the site of injection, venous thrombosis or phlebitis extending from the site of injection and extravasation.
• If an adverse reaction does occur, discontinue the infusion, evaluate the patient, institute appropriate countermeasures, and if possible, retrieve and save the remainder of the unused vehicle for examination.

OVERDOSE

• Use only as a diluent or solvent. This parenteral preparation is unlikely to pose a threat of carbohydrate, sodium chloride or fluid overload except possibly in neonates or very small infants. In the event these should occur, re-evaluate the patient and institute appropriate corrective measures.

Please refer to full Prescribing Information found at www.spectramedical.com
ONCOLOGY

Huber Needles and Cannulas

Our Non-Coring Needles and Cannulas Set the Benchmark for Quality

For port access therapies and implantable drug delivery systems, Spectra's Huber needles and cannulas set the standard for ease and comfort. Spectra is a trusted global source with over 300 million Huber needles sold worldwide.

Features and Options Available:

• 510(k) clearance
• Uses the highest tensile strength 304 stainless steel
• Plastic hub, metal hub or cannula only
• Plastic hub can be color-coded
• Straight or angled
• Standard or custom configurations
• Single use, disposable
• Straight, 45° or 90° angled and custom configurations

Sizes:

• 19GA – 25GA
• 0.75” – 3.5” lengths

Applications:

• Port access
• Implantable drug delivery systems

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
ONCOLOGY

Fine Needle Aspiration (FNA) Biopsy Needles

For Precise Sampling of Tissue for Analysis

Spectra offers a selection of needle sizes and configurations to provide the desired biopsy sample of tissue, cells or fluid, quickly and easily, with or without echogenic guidance.

Features and Options Available:
- 510(k) clearance
- ISO 80369-7 compliant hubs
- Uses the highest tensile strength 304 stainless steel
- Dimpled echogenic, echogenic blasted or non-echogenic tip
- Plastic or metal hub
- With or without calibration markings
- Bevel orientation indicator ensures proper alignment
- Color-coded stylet hub for instant gauge identification
- Depth stop available
- Single use, disposable

Sizes:
- 18GA – 27GA
- 7 cm – 20 cm lengths

Application:
- Soft tissue biopsy procedures

Styles:
- Chiba, Franseen, Greene, Westcott or Turner

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
ONCOLOGY

Tunnelers and Trocars

A Wide Selection for a Range of Applications

Spectra manufactures a complete line of standard and custom tunnelers and trocars, to meet the needs of physicians for a wide range of applications.

Features and Options Available:
• Class I Medical Devices / Components
• Manufactured to Spectra's high standards
• Single use, disposable

Sizes:
• Custom sizes available upon request

Applications:
• Wound drainage
• Laparoscopic surgery
• Long-term catheter placement
• SCS installation
• Port installation

Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.
For oncologists and urologists treating prostate cancer, the precise placement and smooth delivery of the radioactive seeds requires maximum echogenic visibility for accuracy and control.

**Features and Options Available:**
- Uses the highest tensile strength 304 stainless steel
- Bevel orientation indicator ensures proper alignment
- Plastic or metal hub
- Single use, disposable

**Sizes:**
- 18GA
- 8” length
  (custom sizes available upon request)

**Application:**
- Introducing prostate seed implants
Guidewire Introducer Needles (GWI)

Specialized Design for Accurate PICC Line Placement

Spectra's combination of precision feature options and unmatched echogenic quality set a higher standard for guidewire introducers.

**Features and Options Available:**
- 510(k) clearance
- CE 0413 marking
- Uses the highest tensile strength 304 stainless steel
- Guide Glide II® technology optimizes needle visualization under ultrasound guidance
- Bevel orientation indicator ensures proper alignment
- Lubricated or non-lubricated
- Dimpled echogenic, blasted echogenic or non-echogenic
- Wide array of plastic hub styles and colors
- A or B bevel
- Blunt needles available
- Single use, disposable

**Sizes:**
- 18GA - 21GA
- 1.25” - 3.5” lengths
  (custom sizes available upon request)

**Applications:**
- Angiography
- Angioplasty
- PICC

**Styles:**
- Seldinger, Potts-Cournand or Modified Potts

**Spectra will work with customers to generate drawings, specifications and R&D for custom small batches.**
Scalpels

Safe-Cut® Safety Scalpels and Safe-Cut® Mini Safety Scalpels that Meet FDA Injury and Prevention Guidance

Spectra’s Safe-Cut® and Safe-Cut® Mini Safety Scalpels have the consistent sharpness, control and strength surgeons demand and are easy to use and uniquely packaged for safety.

**Safe-Cut® Safety Scalpel**

**Features and Options Available:**
- 510(k) clearance
- CE 0413 marking
- Class I Medical Devices
- Top activation button enables left and right-handed use
- Audible button click and tactile sensation confirms lock is in place
- Tactile ruler on side

**Applications:**
- Surgical cutting instrument
- Catheter cutter

**Safe-Cut® Safety Scalpel Sizes:** #10/#11/#15

**Safe-Cut® Mini Safety Scalpel Size:** #11

---

**Non-Safety Scalpel**

**Feature and Option Available:**
- Both scalpels and standalone blades available

**Application:**
- Surgical cutting instrument

**Scalpels/Blades Sizes:**
#10/#11/#12/#15/#20/#21/#22/#23 #24/#25/#10A/#12B/#15C
Single Use Disposable Instruments

Specialized Surgical and Dental Instruments for Procedural Kits

Our instrument catalog has over 150 illustrated pages of specialized surgical and dental instruments completing the full spectrum of custom trays. Contact us for our full catalog of disposable instruments.

Features and Options Available:
- Industry standard floor grade instruments
- Premium grade instruments
- 100% inspected parts in the USA
- A full spectrum of items for custom trays
Spectra’s Red Snapper® ampule openers are easy to use and ensure that glass ampules are quickly and safely opened, significantly reducing the chances of sharp injuries.

Features and Options Available:
- Biohazard color-coded
- Provides easy disposal of ampule neck
- Reduces the risk of injuries

Applications:
- 1 - 4 mL ampule
- 5 - 10 mL ampule
- 11 - 20 mL ampule

Easy as 1, 2, Snap
Sponges and Strap Clips

We offer straight and curved handled sponges, with 50 and 70 PPI surfaces. We also offer one- and two-hole strap clips.

**Features and Options Available:**
- Coarse sponge sticks (50 pores/sq. in.)
- Fine sponge sticks (70 pores/sq. in.)
- Straight or angled designs
- Oral swab available
Spectra Medical Devices, LLC  |  978.657.0889  |  www.spectramedical.com

Tubes and Fabrication

Stainless Steel Stock for Fabrication

Spectra offers a comprehensive selection of 304, 304L, 316 and 316L stainless steel tubing and wire, available in lengths, gauges and wall types to enable custom fabrication of medical devices.

Features and Options Available:

• Radiusing is available upon request

Sizes:

• 0.2' - 10' lengths
  (custom sizes available upon request)
### Wiring and Tubing Chart

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GLOSSARY OF TERMS

AQL (ACCEPTABLE QUALITY LEVELS): A statistical method of sampling by which a predetermined percentage of parts can be accepted as a process average.

ANGLE OF ROTATION: The included angle of the Diamond Point.

ANNEAL: To subject metal to high heat with a subsequent cooling to make it more malleable.

ANODIZE: To subject aluminum to an electrolytic action in order to coat it with a protective film.

ANTICORE BLAST: A blasting operation to dull the heel of the bevel in order to reduce coring.

ASSEMBLY: A cannula plus a hub (also may include packaging and/or protective material or internal components such as filters, diaphragms, etc.)

BEVEL: The angled surface formed on the cannula when a needle point is ground. A typical diamond point has three bevels. The main bevel is partially ground away to form two side bevels.

BEVEL LENGTH: The longest distance of the bevel, usually measured from the tip of the needle to the most proximal area of grinding behind the heel. Side Bevel Length is measured between 1) the juncture of side bevel and the outside surface of tubing and 2) the tip of the needle.

BURRS: Deflection of the point, perceptible to feel.

CANNULA: Small pointed hollow stainless steel tube for insertion into the body. (When hub is added it becomes a “NEEDLE”).

CHAMFER: The blending of the O.D. into the I.D., which is formed by angle or radius.

CLEAN: Free from dirt or pollution (Not sterile).

CORING: The cutting of a plug of tissue or port septum when the needle passes through.

CRUXE: The point of the inside wall where the primary and secondary angle meet after rotation.

CUTOFF: Tubing cut to length with no round bevel.

DIAMOND POINT: The length of the secondary angle after rotation, which is measured from the tip to the longest outside grind.

DISTAL END: The end of the needle farthest from the hub.

FEATHER: A thin portion of metal on the cannula that could potentially break off during use.

FLARE: To spread or curve outward. Pertaining to a cannula, it is the spreading of the tubing to a larger diameter.

FLASH: Excessive material on plastic, usually occurring at the mold parting lines.

FREE LENGTH (or NEEDLE LENGTH): The distance between the point of the cannula and the point where the hub starts; i.e. only the distance the cannula is exposed not covered by the hub. Sometimes referred to as USABLE LENGTH.


GAUGE: O.D. of the needle or cannula, expressed as a Stubs Gauge Number (See tubing specification chart).

GRIT BLAST: An extra heavy blast on the heel for 1) anti-coring, or 2) to roughen the O.D. of the cannula.

HEEL OF BEVEL: The proximal rounded inner-edge of the point lumen.

HOOK: A burr where a deflection of the point is in excess of .002 inches.

HUB: The part attached to the cannula to make a needle, to enable it to be attached to a syringe or other device.

HUBER POINT: A point which is bent to allow the opening to be on the side.

I.D.: Internal diameter of tubing.

INTRA-ARTERIAL: Within an artery.

INTRADERMAL: Within the skin.

INTRAMUSCULAR: Within the substance of a muscle.

INTRavenous: Within a vein.
GLOSSARY OF TERMS

INSERT MOLDING: Method of inserting a cannula during a plastic molding process.

LUER LOCK: A part which locks a needle to a syringe by means of a threaded hub.

LUER TAPER: This taper is standardized by the American Standard Association's Standard 270.1-1955.

LUMEN: The hole through the cannula tube.

MICRON: A unit of length -- a thousandth part of one millimeter.

NEEDLE (or NEEDLE ASSEMBLY): A cannula with a hub attached.

O.D.: Outside diameter of tubing.

OBUTURATOR: A solid rod having a handle, used to occlude the lumen of a needle.

OCCUDE: To block or close off.

OPTICAL COMPARATOR: An electronic device used to inspect and measure the angular configuration of bevel characteristics on the cannula after grinding.

OVERALL LENGTH: The full length of the needle — from the point of the cannula to the farthest end of the hub; i.e. includes the part of the cannula covered by the hub.

PARTICULATE MATTER: Any foreign substance contaminating a parenteral solution. These particles can be characterized according to their morphological and optical properties and evaluated under high magnification.

PARENTERAL INJECTION: Injection of substances into the body through any route other than via the alimentary canal; such as subcutaneous, intravenous, intramuscular or intrathecal injection.

PERMEABILITY: The property of stainless steel tubing which determines its relative influence in a magnetic field. This characteristic is often specified by customers depending on the end use of the product.

PENETRATION TESTS: Testing procedure used to measure the sharpness or penetration characteristics of a cannula when passed through a standard membrane. Spectra uses a Lloyd penetration tester for this purpose.

PROXIMAL END: The end of the cannula closest to the hub.

PYROGEN: A fever-inducing substance. Cleanliness in all phases of manufacturing and handling is essential to avoid a pyrogenic product.

STERILE: Free from living microorganisms.

STUBS NEEDLE GAUGE: A system denoting O.D. size of a cannula. This is stated in numbers ranging from 7 through 35 -- the larger the number is the smaller the needle is. (See tubing specification chart.)

STYLET: A solid rod with a handle. The tip is ground to fit the bevel of the needle through which it is run. This stylet, when introduced with the needle, helps prevent coring.

SUBCUTANEOUS: Under the skin.

SWAGING: 1) A method for crimping a hub onto a cannula by the use of pressure. 2) A process for shaping by compressing the O.D. of the cannula.

TROCAR: A three sided, sharp, pointed stylet fitted with a cannula to be inserted into a body cavity.

VENIPUNCTURE: The puncture of a vein with a needle.

WALL TYPES: The tubing wall is described by one of the following:

• RW: Regular wall
• TW: Thin wall
• ETW: Extra thin wall
• UTW: Ultra thin wall
• MTW: Micro thin wall

Notice: Every effort has been made to depict and describe the product accurately; however, we reserve the right to alter and make modifications to certain products from time to time and without notice. Measurements may vary slightly.
HUB COLOR CHART

HUB U.S. COLOR CHART

30G  29G  28G  27G
26G  25G  24G  23G
22G  21G  20G  19G
18G  17G  16G  15G
14G  13G  12G
11G  10G

HUB EUROPEAN COLOR CHART

30G  29G  28G  27G
26G  25G  24G  23G
22G  21G  20G  19G
18G  17G  16G  15G
14G  13G  12G
11G  10G