Needle Holder Angular

📝 Description

A **Needle Holder Angular 8"** is a specialized surgical instrument designed for holding and manipulating needles during suturing procedures. Its angular design facilitates better access in confined or hard-to-reach areas during surgical operations. Commonly used in both human and veterinary surgeries, it ensures precision and control when passing sutures through tissues.

📊 Specifications

- Length: 8 inches (approx. 20 cm)
- Design: Angular (typically 45° or 90° bend at the jaws)
- Jaw Type: Serrated or textured for secure grip
- Locking Mechanism: Ratchet lock to maintain grip without continuous pressure
- Finish: Mirror-polished or matte finish to reduce glare and enhance sterilization
- Weight: Lightweight stainless steel for easy handling

📐 Sizes & Shapes

- Size: Standard length 8 inches
- Shapes: Angular, usually right-angle or slightly curved jaw to enhance manoeuvrability
- Jaw Tips: Tapered or blunt, serrated to hold needles firmly

🧰 Types

- Crile-Wood Angular Needle Holder
- Mathieu Angular Needle Holder
- Mayo-Hegar Angular Needle Holder
- Variations based on locking style and jaw serration

🏭 Material

- High-grade Surgical Stainless Steel (AISI 316L or equivalent)
- Corrosion-resistant and durable
- Sometimes includes tungsten carbide inserts in jaws for enhanced grip

📂 Category

Surgical Instruments → Needle Holders → Angular Needle Holders

📦 Product Form

- Standalone instrument
- Available as part of surgical kits or sets
- Supplied sterilized or non-sterile based on user requirements

⚙️ Usage

- Holding surgical needles securely during suturing
- Facilitating needle placement in deep or angular surgical fields
- Used in tissue approximation for wound closure
- Applicable in both open and minimally invasive surgeries

✔️ Advantages

- Precise control over needle movement due to angular design
- Enhanced access in difficult anatomical locations
- Locking ratchet mechanism reduces hand fatigue
- Durable and corrosion-resistant materials ensure long life
- Versatile usage in multiple surgical fields

❌ Disadvantages

- Slightly more complex handling compared to straight needle holders (requires skill)
- Angular design might limit use in very tight spaces depending on angle
- Requires thorough sterilization due to crevices in joint areas

⚠️ Precautions

- Ensure proper sterilization before and after use to prevent infections
- Handle carefully to avoid damage to delicate jaw serrations
- Regularly inspect locking mechanism and jaw alignment for safe operation

🔢 HS and HSN Codes

- HS Code: 9018.39
- HSN Code: 9018

🤲 Handling Instructions

- Use with clean, gloved hands
- Avoid rough handling or misuse as pliers
- Store in designated surgical trays or containers to prevent damage
- Maintain locking mechanism free of debris and lubricate if recommended

🧼 Sterilization Details

- Autoclaving (Steam sterilization) at 121°C for 15-20 minutes is standard
- Can also be sterilized chemically or via plasma sterilization as per protocol
- Avoid exposure to harsh chemicals that might degrade metal finish
- Dry thoroughly after sterilization to prevent rusting

🐾 Veterinary Application

- Used in surgeries on animals such as spaying, neutering, wound closure
- Angular design aids access in veterinary surgeries (e.g., equine, small animals)
- Suitable for farm animals, pets, and exotic veterinary care
- Provides precision and control in veterinary suturing techniques
- Common in veterinary surgical kits for general and specialized procedures

🏥 Human Application

- Used in general surgery, gynaecology, orthopaedics, ENT, and more
- Enables precise needle handling in deep or angled surgical fields
- Essential in minimally invasive and open surgical procedures
- Used for tissue approximation and wound closure
- Preferred for surgeries requiring fine control and access to restricted areas

❓ Frequently Asked Questions (FAQs)

1. **What is the main advantage of an angular needle holder over a straight one?**
   The angular design provides better access and manoeuvrability in tight or deep surgical areas.
2. **Can the needle holder be used for both human and veterinary surgeries?**
   Yes, the design and materials are suitable for both veterinary and human surgical applications.
3. **How should I sterilize an angular needle holder?**
   Autoclaving at 121°C for 15-20 minutes is standard; ensure thorough drying to prevent corrosion.
4. **What materials are commonly used for these needle holders?**
   High-grade surgical stainless steel (AISI 316L) with optional tungsten carbide inserts for durability.
5. **Are there different sizes of angular needle holders?**
   Yes, but 8 inches is a common size. Other lengths and angular variations are available based on surgical needs.