

Iris Scissor

Description

An **Iris Scissor** is a **delicate surgical instrument** typically used in **ophthalmic** and **microsurgical** procedures. It is specifically designed for **fine dissection** or cutting of **delicate tissues**, particularly in the **eye**, hence the name "iris." The iris scissor's sharp, precise tips allow surgeons to work in **highly sensitive areas**, such as the **eye's iris, cornea, or other small anatomical structures**. They are used to cut or trim soft tissues with minimal damage to surrounding areas, providing superior control during surgery.

Iris scissors are generally **small, lightweight, and sturdy**, allowing for intricate surgical manoeuvres in confined spaces. They come in various forms depending on the intended procedure (straight, curved, or with specialized tips).

Specifications

- **Material:** Made from **high-quality stainless steel**, often **hardened** for durability and sharpness.
- **Length:** Typically ranges from **4 to 5 inches (10–12 cm)**, designed for precision and control.
- **Handle Type:** **Straight** or **curved**, depending on the intended surgical procedure. Some models come with **ergonomically designed handles** for a comfortable grip.
- **Tip Type:** **Straight, curved, or angled tips**, depending on surgical requirements.
- **Finish:** **Matte** or **polished** surface to reduce glare during surgery. Some have **non-reflective coatings** to ensure optimal visibility in bright surgical lights.

Sizes

- **Small (4 inches):** Ideal for fine, detailed dissection in small surgical fields.
- **Medium (4.5 inches):** More common, balancing precision and comfort for general use in ophthalmic surgeries.
- **Large (5 inches):** Less common but used for surgeries involving larger tissue or incisions.

Shapes

- **Straight Iris Scissor:** The classic style, with straight blades, commonly used for general tissue cutting.
- **Curved Iris Scissor:** Features curved blades for better access to hard-to-reach areas or for cutting tissues at an angle.
- **Angled Iris Scissor:** Designed with a slight angle, allowing for precision in difficult areas where a straight or curved scissor might be challenging to manoeuvre.

Types

- **Straight Iris Scissor:** Standard version with straight blades for general-purpose cutting.
- **Curved Iris Scissor:** The curved design is used when manoeuvring in tight or constrained areas is necessary.
- **Micro Iris Scissor:** An even more precise tool, often used in **microsurgery** or **paediatric surgery**.
- **Iris Scissor with Fine Tips:** These are designed for highly delicate tasks, such as cutting fine tissue layers in the eye or other small organs.

Material

- **Stainless Steel:** High-grade stainless steel is most commonly used for its **durability**, **corrosion resistance**, and **sharpness** retention.
- **Titanium Coating:** In some versions, **titanium coatings** are applied to enhance rust resistance and improve performance in corrosive environments (e.g., contact with bodily fluids).
- **Non-reflective Finish:** Some models feature a **matte finish** to reduce glare during surgery.

Category

- **Ophthalmic Surgical Instruments**
- **Microsurgical Instruments**
- **Surgical Tools**
- **Precision Cutting Instruments**

Product Form

- **Physical Instrument:** Usually sold as a single scissor pair, ready for sterilization and use.
- **Non-Sterile or Sterile:** Iris scissors are generally **non-sterile**, requiring proper sterilization before use. Some models come **pre-sterilized** in packaging for single-use purposes.

Usage

- **Ophthalmic Surgery:** Primarily used for delicate dissection in eye surgeries such as **cataract removal**, **glaucoma procedures**, or **corneal transplants**.
- **Microsurgery:** Often used in **microsurgical procedures** on **small blood vessels**, tissues, or in **paediatric surgeries**.
- **Fine Tissue Dissection:** Used in surgeries involving **soft tissues**, such as **skin**, **blood vessels**, or delicate internal organs.
- **Incision and Cutting:** Used for precise incisions where other, larger scissors might cause damage due to their size or lack of precision.

✔ Advantages

- **Precision:** Iris scissors allow for highly accurate and clean cuts, minimizing damage to surrounding tissues.
- **Versatility:** Suitable for a variety of surgical procedures beyond ophthalmic surgeries, including general microsurgery and reconstructive surgeries.
- **Durability:** Made of **high-quality stainless steel**, iris scissors retain sharpness and durability even under repetitive use.
- **Comfortable Handling:** The design is optimized for ergonomic use, ensuring a comfortable grip during lengthy surgeries.

✘ Disadvantages

- **Small Size:** While the small size allows for precision, it may make it challenging to handle for some surgeons or in larger surgeries.
- **Risk of Breakage:** Due to their fine tips, the blades are susceptible to **damage** if not handled carefully.
- **Requires Regular Sterilization:** Since the scissors are typically reusable, they require thorough sterilization after each use to prevent contamination.

⚠ Precautions

- **Proper Handling:** Handle with care to avoid bending or breaking the delicate tips.
- **Sterilization:** Ensure proper sterilization before use to prevent the risk of infection.
- **Avoid Excessive Force:** Do not apply excessive force when using the scissors; they are designed for delicate dissection and cutting.

📄 HS/HSN Code

- **HS Code:** 9018 (For surgical instruments, including scissors)
- **HSN Code:** 9018.90.90 (For surgical scissors and other precision instruments)

👐 Handling

- **Sterile Handling:** Always ensure the scissors are properly sterilized before use to maintain hygiene and prevent infection.
- **Safe Storage:** Store in a dry, safe place to avoid accidental damage or rust.
- **Regular Maintenance:** Periodically check for sharpness and any signs of wear on the tips or handle to maintain performance.

Sterilization Details

- **Autoclaving:** The most common sterilization method, using high-pressure steam to kill any bacteria or pathogens.
- **Chemical Sterilization:** Can be used for instruments that are sensitive to heat or pressure.
- **Sterilization Frequency:** After each use, the scissors should be cleaned thoroughly, and sterilized, especially if they are **reusable**.

Veterinary Application

- **Microsurgery on Small Animals:** Used in delicate surgeries on small animals or veterinary ophthalmology for procedures like **cataract surgeries** in dogs or cats.
- **Soft Tissue Dissection:** Employed for surgeries that require fine tissue dissection, such as **spaying/neutering** or minor skin surgeries in pets.

Human Application

- **Ophthalmic Surgery:** Mainly used for eye surgeries like **cataract surgery**, **corneal transplant**, or other eye-related procedures.
- **Microsurgery:** Applied in surgeries that involve the repair of **nerves**, **blood vessels**, or **skin** using a fine dissection technique.
- **General Soft Tissue Dissection:** Used in any surgical field requiring fine tissue manipulation or cutting, including **plastic surgery**.

FAQs

Q1: What is the primary use of the Iris Scissor?

A: The iris scissor is primarily used in **ophthalmic surgeries** to cut or dissect delicate tissues, particularly in the eye, but can also be used in **microsurgical** procedures.

Q2: How should I clean and sterilize iris scissors?

A: Iris scissors should be thoroughly cleaned after each use, typically sterilized using **autoclaving**. If you're using chemical sterilization, follow the manufacturer's instructions.

Q3: Can I use iris scissors for other types of surgeries?

A: Yes, iris scissors can be used in **microsurgeries** or any surgical procedures that require **precise cutting of delicate tissues**.

Q4: Are iris scissors reusable?

A: Yes, most iris scissors are reusable and made from durable materials like stainless steel, but they require regular cleaning and sterilization.

Q5: Can iris scissors be used for cutting bone or harder tissues?

A: No, iris scissors are designed for cutting **soft tissues** and should not be used on harder materials like bone, as they may become damaged.

