

Aural Speculum

Description

An **Aural Speculum** is a conical, hollow instrument used to gently widen and straighten the **external auditory canal** for clear visual examination of the **ear canal and tympanic membrane**. It is commonly used by **ENT specialists, general physicians, audiologists, and veterinarians**.

The speculum attaches to an **otoscope, microscope or headlight system**, enabling illumination and magnification during diagnostic and minor surgical procedures.

Reusable types are generally made of **surgical-grade stainless steel**, while disposable versions are made from **medical-grade plastic**.

Specification

- **Product Name:** Aural Speculum / Ear Speculum
- **Category:** Medical, Surgical & ENT Instrument
- **Product Form:** Hollow cone-shaped tube with wide base and narrow tip
- **Length:** Approximately 25–40 mm
- **Diameters (Distal Opening):** Typically 2 mm – 7 mm depending on patient age
- **Shapes:** Round, oval, or oblique tip depending on model
- **Finish:** Satin, polished steel, or anti-glare black coating
- **Compatibility:** Fits standard otoscope heads or ENT holders
- **Sterilisation (Reusable):** Autoclavable at standard steam cycles
- **Packaging:** Usually supplied as sets of 3–7 sizes or individually in sterile pouches (for disposable types)

Types

- **Reusable Aural Speculum:** Stainless steel, durable, autoclavable
- **Disposable Aural Speculum:** Medical-grade plastic, single-use
- **By Tip Shape:**
 - Round cone
 - Oval lumen
 - Oblique/angled surgical specula

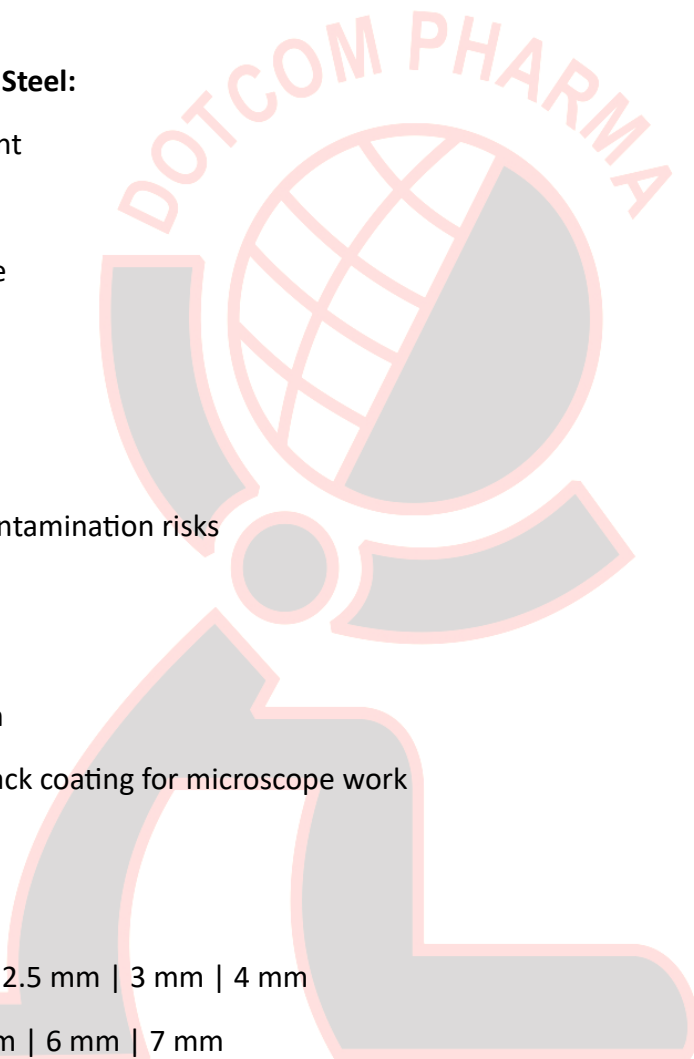
- **By Patient Category:**
 - Paediatric (2–4 mm)
 - Adult (4–7 mm)
- **By Use:**
 - Diagnostic specula
 - Surgical specula with wider working space

Material

- **Surgical-Grade Stainless Steel:**
 - Corrosion-resistant
 - Strong and rigid
 - Fully autoclavable
- **Medical-Grade Plastic:**
 - Lightweight
 - Single-use only
 - Reduces cross-contamination risks
- **Surface Options:**
 - Polished steel
 - Matte/satin finish
 - Anti-reflective black coating for microscope work

Sizes & Shapes

- **Paediatric Sizes:** 2 mm | 2.5 mm | 3 mm | 4 mm
- **Adult Sizes:** 4 mm | 5 mm | 6 mm | 7 mm
- **Length:** 2.5–4 cm depending on model
- **Shapes:**
 - Straight cone
 - Oval lumen
 - Oblique profile for surgical precision
 - Wide-base surgical variants for instrument access



Usage

Human Application

- Routine ear examination
- Viewing the tympanic membrane
- Ear wax (cerumen) removal
- Foreign body extraction
- Aural toilet (suction/cleaning)
- Assistance in procedures like myringotomy and grommet insertion
- Used with microscopes during otologic surgeries

Veterinary Application

- Ear examination in dogs, cats, rabbits and small animals
- Assessing ear infections (otitis externa)
- Removal of ticks, grass seeds, or debris
- Used with veterinary otoscopes for diagnosis and treatment

Handling

- Handle with clean and dry gloved hands
- Choose the correct size based on patient age and canal diameter
- Insert gently following the natural curve of the ear canal
- Do not force the instrument; withdraw if resistance is felt
- Protect metal specula from falls to avoid distortion
- Store in clean, dry ENT trays or pouches

Sterilisation Details

Reusable Stainless-Steel Specula

1. **Pre-cleaning:** Rinse in lukewarm water immediately after use
2. **Cleaning:** Use neutral-pH enzymatic detergent
3. **Sterilisation:** Steam autoclave at 121–134°C
4. **Drying:** Ensure complete drying before storage
5. **Storage:** Keep in sterile wrap or sealed trays

Disposable Plastic Specula

- Pre-cleaned or pre-sterilised depending on manufacturer
- **Single-use only**
- Must be discarded immediately after examination
- Not suitable for autoclaving or reprocessing

Advantages

- Provides clear visualisation of ear canal and eardrum
- Available in multiple sizes for all age groups
- Reusable stainless steel is durable and cost-effective
- Disposable options reduce infection risks
- Different tip profiles allow both diagnostic and surgical use

Disadvantages

- Incorrect size can cause discomfort or minor trauma
- Metal specula may feel cold to patients
- Requires proper cleaning and sterilisation
- Disposable types generate medical waste
- Narrow working space in some diagnostic designs

Precautions

- Inspect for cracks, distortion or sharp edges before use
- Choose the smallest comfortable size, especially for children
- Insert slowly to avoid trauma
- Follow proper sterilisation and infection-control protocols
- Avoid use in severe infection or swelling unless supervised by ENT specialist
- Do not re-use disposable specula

HS & HSN Codes

- **HS Code:** 9018.90 – Medical, surgical, dental or veterinary instruments (specula included)
- **HSN Code (India):** 9018 90 99 – Other surgical instruments (includes ear specula)

? Frequently Asked Questions

Q1. What is an Aural Speculum (AS)?

It is a cone-shaped instrument used to widen the ear canal for examination of the eardrum and ear structures.

Q2. What is the difference between Reusable Aural Speculum (RAS) and Disposable Aural Speculum (DAS)?

Reusable models are stainless steel and autoclavable; disposable models are plastic and intended for single use.

Q3. What sizes are used for children and adults?

Children generally require 2–4 mm sizes, while adults use 4–7 mm sizes depending on canal width.

Q4. Can Aural Speculum (AS) be used for animals?

Yes, veterinarians use them to examine ear canals of dogs, cats, rabbits, and other animals.

Q5. How is a Reusable Aural Speculum (RAS) sterilised?

It is cleaned with enzymatic detergent, then autoclaved at 121–134°C and stored in sterile packaging.

