

# Chisel & Hammer Set

## Description

A high-precision surgical instrument set comprising various chisels and a surgical hammer (or mallet). This set is essential in orthopaedic and veterinary surgeries for cutting, shaping, or removing bone or dense tissue. The tools are crafted for accuracy, control, and durability during procedures requiring force and precision.

## Specifications

- **Chisel Shapes & Sizes:** Flat, curved, angled, gouge types.
  - Common lengths: 100 mm, 150 mm
  - Common widths: 5 mm, 10 mm
- **Hammer Types:**
  - Surgical mallet with anti-vibration handle
  - Rubber or steel-faced options
  - Approx. weight: 200–500 g
- **Set Configuration:**
  - Chisels in varying shapes and sizes
  - 1 or more surgical hammers/mallets
  - Sterilizable surgical tray

## Types

- Standard orthopaedic chisels
- Micro chisels
- Cross-cut chisels
- Surgical mallets (rubber-faced or full stainless steel)

## Material

- Surgical-grade stainless steel (AISI 420 or equivalent) – corrosion-resistant and sterilizable
- Mallet faces may include hardened rubber, silicone, or polyurethane

## **Category**

Surgical Instrument Set – Class B Medical Device

## **Product Form**

Sterilizable tray or cassette containing a curated selection of chisels and one or more mallets, often arranged with protective padding to prevent instrument damage.

## **Usage**

- Bone cutting, sculpting, or removal during surgery
- Used in trauma cases to align or separate fractured bone
- Cranial, dental, or orthopaedic applications
- Veterinary use in large animal extractions or orthopaedic reconstructions

## **Advantages**

- Precision cutting and shaping
- Variety of chisel types for different procedures
- Durable, long-lasting instruments
- Easy sterilization and handling
- Reduced fatigue with ergonomic design

## **Disadvantages**

- Requires trained expertise to avoid tissue or bone damage
- Can become dull over time, requiring re-sharpening or replacement
- Heavier surgical trays due to solid metal tools

## **Precautions**

- Inspect instruments for cracks, dull edges, or corrosion before each use
- Use appropriate force—excessive impact may cause splintering
- Always match chisel size/type to the specific surgical need
- Avoid mixing with non-metal tools during sterilization to prevent damage

## Handling Instructions

- Clean immediately after use with enzymatic detergent
- Use ultrasonic cleaning for best results
- Dry completely before packing
- Store in a protective tray with foam lining to prevent tip deformation

## Sterilization Details

- **Recommended:** Steam sterilization in an autoclave (121–134°C, 15–30 mins)
- **Alternate:** Chemical sterilization (e.g., glutaraldehyde), if compatible
- Instruments should be packed in sterilization pouches or cassettes

## HSN & HS Code

- **HSN Code (India):** 9018.90.24  
*Surgical tools such as chisels, gouges, elevators, and bone instruments*
- **HS Code (Global):** 9018.90.24  
*Applicable globally for surgical and veterinary tools used in medical science*

### Human Application:

- Orthopaedic surgeries (e.g., joint replacements, fracture repair)
- Neurosurgical bone access (e.g., craniotomies)
- Maxillofacial and dental bone sculpting

### Veterinary Application:

- Animal orthopaedic procedures (fracture management, joint surgery)
- Large animal dental extraction
- Minor reconstructive surgeries involving bone

## **? Frequently Asked Questions (FAQs)**

### **1. What is the correct HSN/HS Code for the Chisel & Hammer Set?**

The accurate code is **9018.90.24** – covers surgical instruments like chisels and orthopaedic bone cutters.

### **2. Can these instruments be autoclaved?**

Yes, they are fully autoclave-safe and designed to withstand repeated high-pressure sterilization.

### **3. What sizes are commonly used in surgeries?**

Chisels range from 100 mm to 150 mm in length, and 5 mm to 10 mm in width. Mallet weights vary between 200 g to 500 g.

### **4. Are there specific precautions for safe use?**

Yes, always inspect tools before use, avoid excessive impact, and select chisel type appropriate for the procedure.

### **5. What's the difference between surgical and regular hardware chisels?**

Surgical chisels are made of high-grade stainless steel, precision-balanced, and built for tissue safety and sterilization—unlike carpentry chisels.

