HIGH-FIDELITY KNEE PHANTOM

Product Guidelines

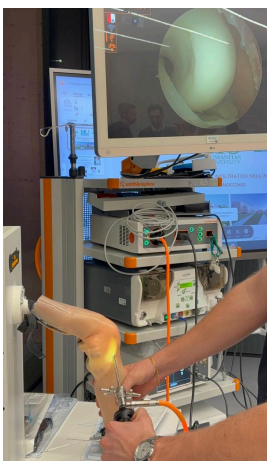
→ Designed for high-fidelity orthopedic training, this realistic knee phantom combines accurate bone anatomy with flexible ligaments and a realistic soft-tissue envelope.

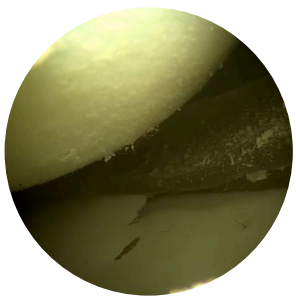
DESCRIPTION

The model features a hybrid construction: a rigid 3D-printed skeletal structure integrated with biologically accurate menisci and silicone soft tissues. It is specifically engineered for training in arthroscopic procedures, intra-articular injections, and orthopedic manipulation.

KEY FEATURES & PATHOLOGIES

- Meniscal Fidelity: The meniscus component mimics the mechanical properties of biological cartilage, supporting realistic cutting and suturing maneuvers.
- Accessible Soft Tissue: Features a removable soft tissue cover equipped with a zipper closure, allowing for easy internal access and visualization of the articular structures without damaging the envelope.
- Stable Mounting: The unit is securely attached to a dedicated stand, ensuring steady demonstration and realistic limb stability during instrument handling.
- Hybrid Anatomy: Combines rigid 3D-printed bones with flexible silicone ligaments to simulate authentic joint mechanics and obstruction.





ANATOMICAL COMPOSITION

- Removable Silicone Skin with Zipper
- Muscular Tissue Envelope
- Rigid 3D-Printed Femur & Tibia
- Meniscus & Flexible Ligaments

WARNINGS AND SAFETY

Intended Use: This product is intended exclusively for educational and medical simulation purposes