VirtaMed RoboS™

Robotic surgery simulator: independent learning, seamless transition to surgery

Modules from other specialties – LaparoS™, GynoS™, ArthroS™ and UroS™ – are compatible with the RoboS™ platform.

virtamed.com

RoboS™ fundamental skills

Step into the future of surgical training with VirtaMed's robotic surgery simulator. Designed for soft tissue robotic surgery residency programs, our simulator is your passport to proficiency, offering expert-specified metrics that pinpoint unsafe behavior and guide you towards safe surgical performance. Experience a true-to-life interface, mirroring the most widely used robotic consoles. With VirtaMed, skills transfer is assured, regardless of your access to a robotic console. Plus, hospitals and training centers gain the power to customize their own training curriculum. With VirtaMed, you're not just learning – you're mastering the art of robotic surgery!

Elevate your surgical skills with RoboS™

A realistic, market standard training tool with customizable programs designed to ensure accelerated proficiency on extraordinary robotic-assisted surgery platforms.

Key features

- Adjustable and ergonomic console
- Gravity free controller + handles with clutching feature
- Advanced 3D visualization system
- Standard pedal layout
- Realistic training environment
- Customizable curriculum
- KOL approved metrics

"Every surgical robot includes a VR simulator. While it might be tempting to see it as a cool gadget for residents or just an advanced instruction manual, its true potential lies far beyond. In my experience as a preceptor, I've witnessed numerous cases where a well-designed exercise would have been crucial in significantly improving surgeons' performance. VirtaMed's focus is on providing hardware and exercises specifically crafted to aid in the acquisition and retention of critical surgical skills, ensuring practical, hands-on learning that translates directly to improved patient outcomes. Invest in a system that goes beyond being a navigation of technical specs. Choose a platform designed to truly elevate surgical expertise, from any level."

Federico Gheza, MD, PhD
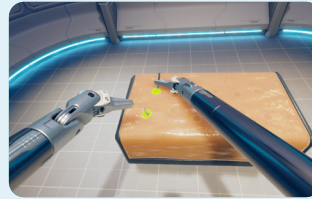Candidate AI in Medicine and Surgical Education Expert

Robotic surgery curriculum
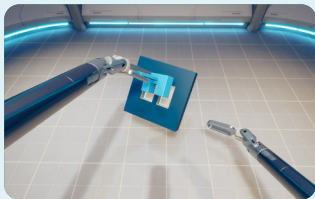
Exercises

Clutching

- Short range clutch
- Long range clutch
- Long range clutch and horizon control

Suturing

- Needle pose
- Needle handling (easy)
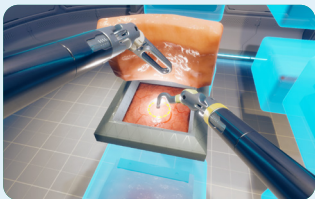- Needle handling (difficult)
- Surgeon's knot

Instrument articulation

- Instrument pose
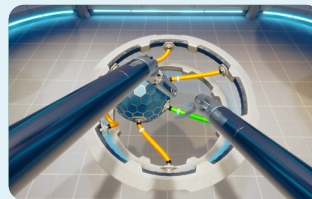- Shape matching
- Work behind obstacles

Working without haptic feedback

- Recognition of hardness | Grasping

Energy

- Monopolar and bipolar basics (easy)
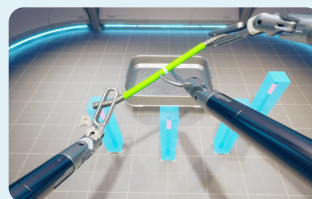- Monopolar and bipolar basics (difficult)

Non-dominant hand

- Traction and isolated cuts
- Pushing and isolated cuts

Endoscope handling

- 30° optic

4th arm

- 2nd to 4th arm transpose

"A key highlight of our product is its capability to seamlessly translate real-life situations into training scenarios and vice versa. One significant challenge with the leading robotic systems is that, unless an institution possesses an additional console for a dedicated training area outside the operating room, these systems cannot be utilized during working hours or when surgeries are being performed. This limitation restricts the availability and accessibility of training opportunities. This is where RoboS will be instrumental."

Federico Serrot, MD
Medical Director, Bariatric & Metabolic Surgery, Cleveland Clinic, Fl

Expert panel

"During my decade of teaching and research in robotic surgery at the AdventHealth Nicholson Center, I have had the opportunity to use every simulation platform that was created to mimic surgical robots. It is a significant challenge to create a system that contains the best virtual reality software, effectively designed exercises, meaningful metrics, a hardware interface that replicates the real robot, and do it all at a price point that hospitals and education centers can afford. The VirtaMed RoboS has taken a significant step forward in all of these categories, making it a powerful tool in the education pathway for surgeons seeking to master robotic techniques."

Roger Smith, PhD
Award Winning Robotic Surgery and Simulation Research Scientist

"For a long time, I found simulation tools in robotic surgery were either hardly accessible or not realistic enough compared to the real console. Then I discovered RoboS. It felt remarkably similar to leading robotics consoles on the market. Unbelievable for a system that works outside of the operating room!

I feel like RoboS is a game changer. For the first time universities and hospitals will have access to a simulation system that will allow them to optimise the precious time of their robotic surgery operating rooms. Even before the surgeon or the hospital, the first beneficiary will be the patient himself."

Jean-Pierre Henry
Chairman & Co-Founder, STAN Institute

VirtaMed Connect

Connect is VirtaMed's cloud-based solution that lets you access your simulator data anytime from anywhere. Use Connect to remotely create courses, track student progress, and manage your simulator usage – all from the convenience of your desk or tablet. With Connect, trainees are motivated through online leader boards and can compare their own results over time.