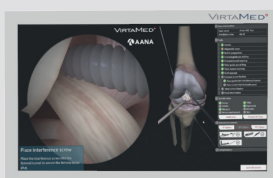




# VirtaMed ArthroS™

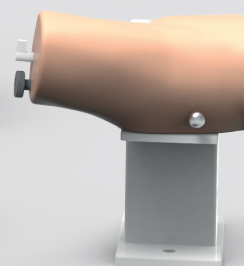
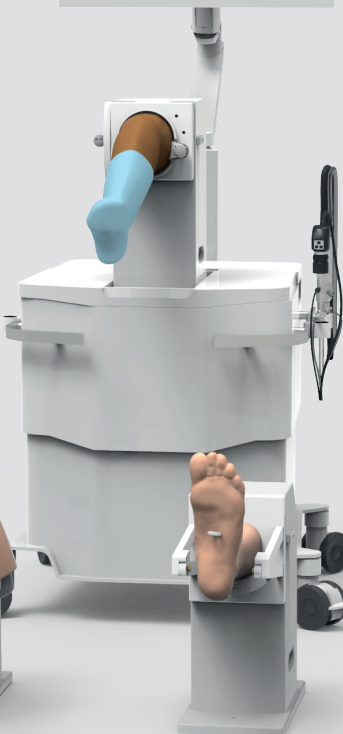
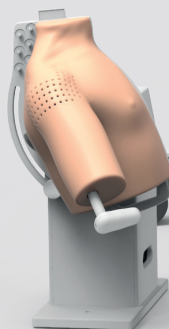
The most realistic arthroscopy simulator.

Realistic graphics



Original instruments

Anatomical models



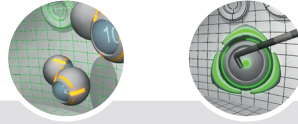
ArthroS enables the integration of modules from other specialties on the same platform.

Preferred simulation training partner of:



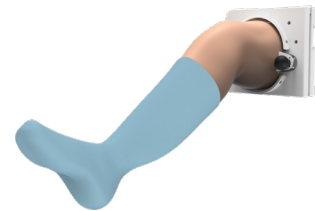
## VirtaMed ArthroS™ FAST

The Fundamentals of Arthroscopic Surgery Training (FAST) program was developed with the goal of improving and standardizing surgical education in the field of arthroscopy. Trainees will learn the basic skills that are a prerequisite for any arthroscopy. ArthroS™ FAST features more than 300 joint-independent cases, including exercises for camera navigation, ambidextrous skills, and triangulation.



## VirtaMed ArthroS™ Knee

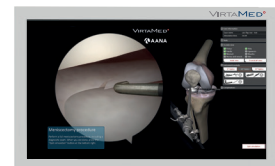
Trainees learn the basics of knee arthroscopy, perform complete diagnostic arthroscopies, and carry out smaller surgical interventions on more than 40 patient cases with different pathologies. An anatomical knee model with soft skin allows for physical manipulation of the knee joint, including varus and valgus, flexion, extension, hip flexion, hyperflexion, and figure 4.



## VirtaMed ArthroS™ Meniscectomy

Practice and perform a partial meniscectomy of suitable tears such as flap tears, bucket handle tears, and horizontal cleavage tears. 10 cases have been developed in collaboration with the Arthroscopy Association of North America (AANA).

**KNEE ADD-ON**



## VirtaMed ArthroS™ ACL Reconstruction

Practice and perform an anatomical ACL reconstruction with a bone-patellar tendon-bone BTB graft and interference screw graft fixation. Cases were designed in collaboration with the Arthroscopy Association of North America (AANA) and use a proficiency-based progression training model.

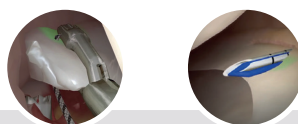
**KNEE ADD-ON**



## VirtaMed ArthroS™ Meniscal Repair

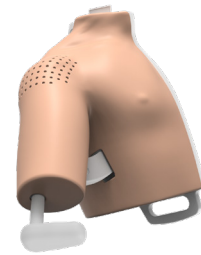
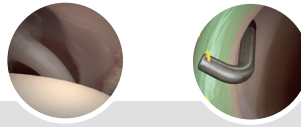
Practice and perform a range of techniques to repair different types of meniscus tears: all-inside technique, outside-in technique, transtibial technique for meniscal root repair, and meniscal ramp repair using a two-portal posteromedial approach. Cases were designed in collaboration with Prof. Dr. med. Romain Seil.

**KNEE ADD-ON**



## VirtaMed ArthroS™ Shoulder

With more than 30 cases available, trainees will learn to explore the glenohumeral and subacromial spaces, detecting various pathologies such as SLAP and Bankart lesions. Minor surgical interventions such as subacromial decompressions can be trained. An anatomical shoulder model allows for a realistic palpation of landmarks, and movements such as abduction, adduction, flexion, traction, and rotation.



## VirtaMed ArthroS™ Rotator Cuff Repair

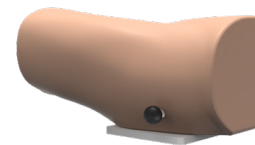
Practice and perform a rotator cuff repair, including portal establishment, correct anchor placements, suture management, and fixation procedure steps. Cases were designed in collaboration with the Arthroscopy Association of North America (AANA) and use a proficiency-based progression training model.

**SHOULDER ADD-ON**



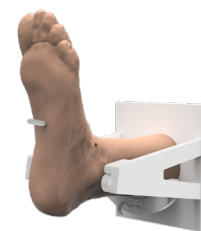
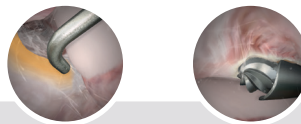
## VirtaMed ArthroS™ Hip

The ArthroS™ Hip offers realistic soft tissue layers that allow trainees to palpate bony landmarks for portal placement. Additionally, access training is enhanced by real-time simulated zero radiation fluoroscopy. Residents will train the usage of a 70-degree scope in central and peripheral compartments and improve their skills through more than 20 different cases from basic skills to therapeutic interventions.



## VirtaMed ArthroS™ Ankle

Navigating the ankle joint is difficult: the joint is narrow, the risk of damaging cartilage or nerves is higher than for most other arthroscopic surgeries, the curved bone horizon is disorienting, and surgeons often lose track of the exact location of the arthroscopic camera in the absence of visual landmarks. The ArthroS™ Ankle allows trainees to tackle and overcome these challenges.



## Curriculum Integration

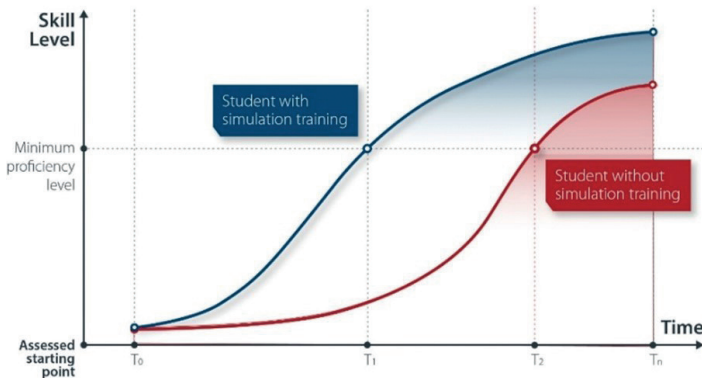
VirtaMed's Training & Education team are experts in the pedagogy of using simulation for medical education and will support you in the entire learning journey, from the integration of simulation into your existing training curriculum to implementing standardized levels of proficiency prior to entering the operating room.

” Our goal is to improve patient care by advancing education in arthroscopy. We want to ensure all arthroscopic surgeons have access to high-quality skills training and continuous education. Working with VirtaMed's first-rate simulators, experienced developers and dedicated education specialists helps AANA reach that goal.

— Joseph C. Tauro, MD AANA Learning Center Committee Chair



### LEARNING CURVE WITH SIMULATION TRAINING



” If used appropriately and embedded into a structured training curriculum, simulation training is perfectly adapted to demonstrate clinical proficiency.

*Seil, R., Hoeltgen, C., Thomazeau, H., Anetzberger, H., Becker, R. Surgical simulation training should become a mandatory part of orthopaedic education. J EXP ORTOP 9, 22 (2022).*



” Simulation shortened the learning curve because the residents could learn all the basic skills here in the lab. I didn't have to teach them in the theater, and it's safer for patients if surgeons are able to come and practice on the simulator before trying a new technique.

— Professor Rob Middleton, Head of the Orthopaedic Research Institute, Bournemouth University.

## 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.

