Inovus Medical®

Accessible | Affordable | Functional

Product Catalogue

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Mission

To become the world's partner for surgical training

Established in 2012, Inovus Medical is an award winning UK-based designer and manufacturer of healthcare simulators. With a focus on meeting the diverse needs of surgical simulation, we understand that a one-size-fits-all approach is insufficient.

Inovus Medical is driven by the principles of affordability, accessibility, and functionality in the development of our products. Our ultimate goal is to become the world's partner for surgical training by delivering an evolving ecosystem of simulation solutions that cater to the entire spectrum of training requirements. This includes low-fidelity task trainers, high-fidelity full procedure simulators, and everything in between.

By placing clinicians at the forefront, we ensure that our products address the specific demands of surgical simulation. This approach enables us to create simulators that effectively enhance surgical skills and provide a realistic training experience.

The company has received multiple awards for its innovative contributions to the field of healthcare simulation. This recognition further underscores our commitment to excellence and our dedication to advancing surgical training worldwide.

In summary, we are transforming surgical training by specialising in the design and manufacturing of healthcare simulators. Our products prioritize affordability, accessibility, and functionality, catering to the diverse needs of clinicians across the globe.

Totum - Surgical Training Remastered

Totum is an accredited digital surgery platform powering an evolving ecosystem of surgical simulators, dedicated to supporting surgical training, skills acquisition, and data aggregation.

- LapAR
- LapAR Pro

TOTUM

Connecting practice to procedure

- HystAR
- HystAR Pro

Totum powers Inovus' growing portfolio of high-fidelity, minimally invasive surgical simulators including LapAR and HystAR.

The Totum mobile application can be paired with open surgery task trainers to enable recording, review, and refinement of open surgical skills.

- Basic Surgical Skills

TOTUM

The single source for all your surgical training data, aggregating minimally invasive and open procedural data into a single platform, with a single log in, for review and management of training without boundaries.

Totum - Connect to perfect surgical technique

Guiding the way to surgical success

Inovus' simulators allow surgeons to practice procedures with real instruments and simulated tissues that create natural haptics. The augmented reality overlays of Totum are uniquely streamed direct to a screen, providing 'headset free', immersive training experiences. Totum connects surgeons of all grades with mentors, peers, and examiners to share best practice through its web-based learning portal.

Unlocking the power of practice

Totum's video capture and debrief portal provides a platform for review, refinement, and mastery of surgical procedures. Record training events, receive written, time-stamped feedback, and compare this to objective data to guide training needs. Utilise the task management portal to set training goals and review progress.

Harnessing the power of data to transform surgical training

The powerful computer vision algorithms of Totum track instrument motions during training. The instruments are simultaneously mapped and recorded digitally. The data collected from practice is then aggregated, managed, and shared in each trainee's portfolio within Totum. These objective performance metrics guide improvements in surgical technique and operative flow.

Dynamic assessment, universal recognition

Totum allows the digitalisation of skills curriculums by integrating them with the Inovus ecosystem of simulators. Use Totum to scale delivery and certification of national programmes such as LapPass. The assessment and certification portal can be used to issue certificates of competency for recognised curriculums, claim CPD/CME points for time spent training, and perform work-based assessments and OSATS.

Key features of Totum

- Natural Haptics
- Compatible with any surgical instrument or device
- Distance learning
- Single log in, multiple devices
- Web and mobile compatible
- Accredited by RCS England
- Gain CPD points while training
- Reduces operating time by 41%
- Improves surgical efficiency by 60%

TOTUM®

To learn more about connected surgical training powered by Totum, visit **www.inovus.org**

Laparoscopic simulators

As medical simulation and training specialists, Inovus Medical introduced the concept of take-home laparoscopic surgical training with the launch of the original Pyxus Laparoscopic Simulator in 2012. Since then, the popularity of these simulators has grown significantly, with thousands of units being sold worldwide.

By providing surgical trainees with the opportunity to practice laparoscopic procedures in a simulated environment, our simulators offer a valuable tool for skill development and proficiency. Trainees can familiarise themselves with laparoscopic instruments and techniques, refine their hand-eye coordination, and enhance their decision-making abilities in a safe and controlled setting.

Overall, the simulators from Inovus Medical cater to the needs of surgical trainees seeking convenient and effective methods to enhance their laparoscopic skills.


Inovus
Medical

Low fidelity laparoscopic simulators

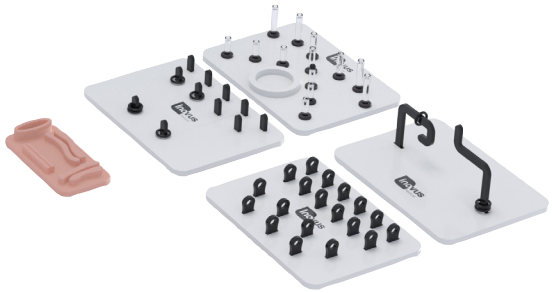
With thousands of Pyxus simulators now sold worldwide, their popularity continues to grow with surgical trainees all over the globe.

The Pyxus HD and Pyxus HD Move are ideally suited to surgical trainees looking to hone their laparoscopic skills at home or on the move. Their flatpack nature makes them highly portable, fitting in perfectly with the busy lifestyle of the training surgeon.

Pyxus HD

The Pyxus HD consists of a four piece high grade composite shell casing. The silicone skin is held in place with a bracket and allows for insertion of the Inovus Medical dummy trocars. The fixed internal camera provides a clear, HD image once attached to a laptop or PC. The integrated light source in the camera provides direct illumination of the operative field and is a unique feature of the Pyxus HD and Pyxus HD Move.

A lightweight, sleek device ideal for take home surgical training, fully flatpack for added portability



Included in the package:

- fixed 1080p HD camera as standard
  - perfect for solo training
  Compatible with MAC & PC
  - USB connectivity
- needle holder
- scissors
- Maryland grasping forceps
- ratcheted Johan forceps
- 4 x skills tasks

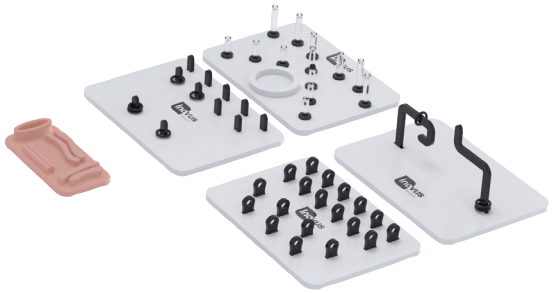
Product code: 00000916

*Laptop not included

Pyxus HD Move

The Pyxus HD Move has the most lifelike dummy laparoscope of any take home box trainer on the market with an integrated light source providing direct illumination of the operative field. The dummy laparoscope offers the ability to develop camera operator skills as well as allowing the solo trainee to manually zoom the camera when performing intricate tasks such as suturing, giving an even even more realistic representation of the challenges faced in minimally invasive surgery.

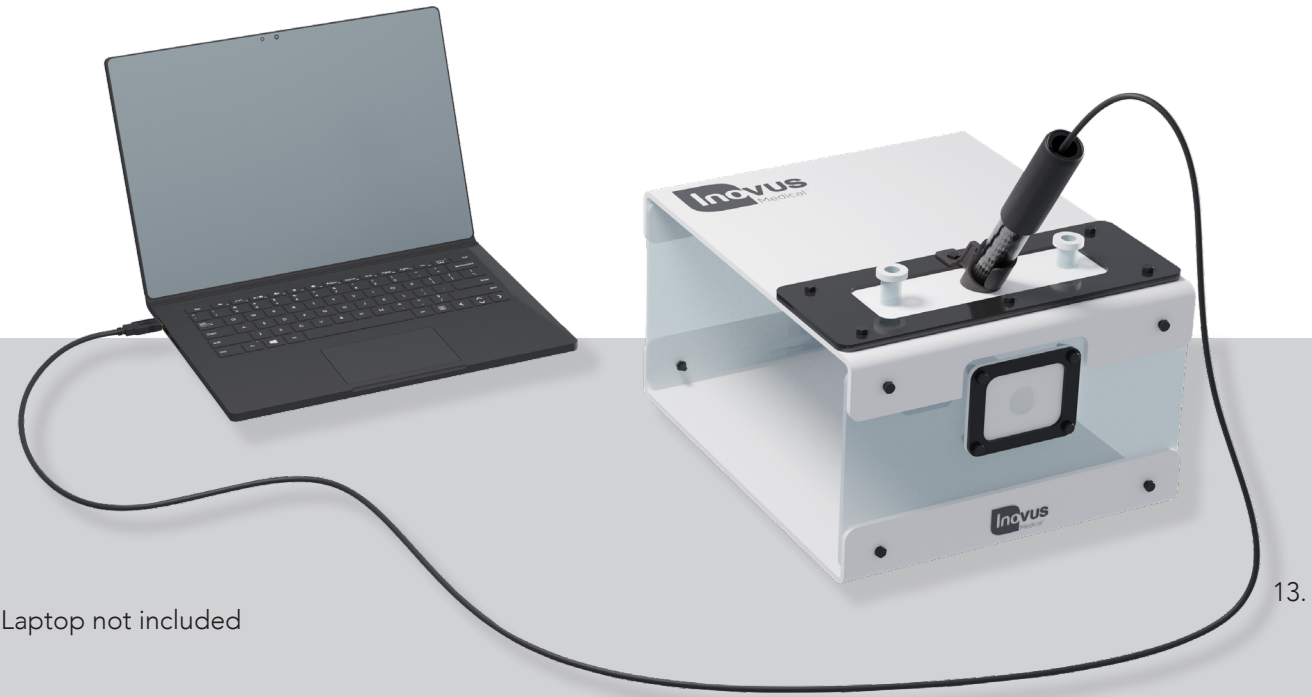
Ideal for developing camera operation and advanced laparoscopic skills



Included in the package:

- dummy laparoscope with 1080p HD camera can be fixed for solo training
  Compatible with MAC & PC
  - USB connectivity
- needle holder
- scissors
- Maryland grasping forceps
- ratcheted Johan forceps
- 4 x skills tasks

Product code: 00000919



*Laptop not included

Medium fidelity laparoscopic simulators

Inovus Medical is recognised as a global leader in the delivery of "Hub and Spoke" surgical training, ensuring a consistent training experience from the hospital to the trainees' home environments.

The specific simulators provided by Inovus Medical for group-based and simulated laparoscopic stack system surgical teaching may vary. However, Inovus is renowned for its commitment to innovation and advancing surgical training. Our Simulators are designed to replicate real-world surgical scenarios and provide trainees with a realistic and interactive learning environment.

By utilising these simulators within hospitals and educational settings, surgical trainees can benefit from hands-on practice, collaboration with peers, and guidance from experienced instructors. The simulators enable trainees to develop and refine their surgical skills, enhance teamwork and communication, and gain confidence in performing laparoscopic procedures.

Inovus Medical's approach to "Hub and Spoke" surgical training ensures that the training experience is consistent across different settings, allowing trainees to seamlessly transition between the hospital and their home-based training. This continuity in training contributes to improved learning outcomes and better-prepared surgeons.

Overall, Inovus Medical's simulators for group-based and simulated laparoscopic stack system surgical teaching offer a comprehensive solution for delivering effective and standardised surgical training within hospitals and educational settings.

Pyxus Pro Move

The Pyxus Pro Move is the most affordable way to train the three core fundamental skills of laparoscopic surgery from a single platform. It allows simulation of camera handling and navigation, instrument handling and has the ability to train trocar insertion under view from the laparoscope; a crucial step in laparoscopic surgery and a functionality unique to the Inovus Medical institutional simulators.

The Pyxus Pro Move utilises the Inovus Medical trocar insertion pad to offer realistic feel and resistance experienced in trocar insertion whilst offering the ability to view the trocar entry internally using the laparoscope. The trocar insertion pad can be replaced ensuring high volume trocar insertion training (see accessories for replacement pad).

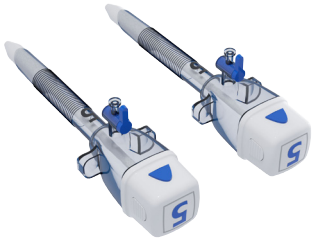
The Pyxus Pro Move not only allows dual training of camera operator and surgeon but also allows for solo training, ideal for examination/testing environments. The laparoscope is easily held in a fixed position with the bracket provided and allows adjustments of camera position by a solo operator.

Inovus Medical is a world leader in delivery of 'Hub and Spoke' surgical training, providing a consistent training experience from hospital to home. The Pyxus Pro Move delivers an institutional based training experience consistent with that encountered on the Pyxus HD and Pyxus HD Move take home simulators.

Included in the package:

- real-feel trocar insertion with peritoneal 'pop'
- zero lag 1080p dummy laparoscope
- 2 x Maryland forceps
- 2 x 5mm trocars included as standard
- 15" monitor and monitor stand included as standard
- flatpacked for easy set up and storage

Product code: 00000891



• 2 x 5mm trocars

• 2 x Maryland forceps

The integrated screen, plug and play capability, and comparatively low cost make the Pyxus Pro Move the perfect solution for delivering group-based surgical teaching within hospitals and other educational settings.

Bozzini Laparoscopic

The Bozzini Laparoscopic Simulator by Inovus Medical is the world's first 'simulated laparoscopic stack system', offering true-to-life laparoscope and camera handling simulation at a fraction of the cost of using a retired or repurposed stack system. This high fidelity simulator utilises the proprietary Bozzini light source and camera technology to deliver a full stack system experience through an affordable, compact, table top device.

The Bozzini light source is USB powered and, as with the camera system, connects directly to the monitor supplied, removing the need for multiple power outputs and bulky camera/light source units. The simulator comes with a flatpack laparoscopic box trainer meaning the entire system can be packed away into an easy to store carry case. The box trainer has multiple camera and instrument entry ports. It comes with the proprietary trocar insertion pad, as seen on the Pyxus Pro Move, allowing close to life port insertion under camera view as well as advanced laparoscopic skills training.

Included in the package:

- 1 x 10mm laparoscope
- 1 x bozzini light source
- 1 x fibreoptic light lead
- 1 x camera unit
- 1 x 15" monitor
- 1 x monitor stand
- 1 x 10mm trocar
- 2 x 5mm trocars
- 4 x laparoscopic instruments: needle holder, scissors, Maryland forceps, ratcheted Johan forceps
- 1 x box trainer with trocar insertion pad
- 1 x scope bracket for fixing laparoscope

Product code: 00000960

Two Year Extended Warranty

Product code: 00000891

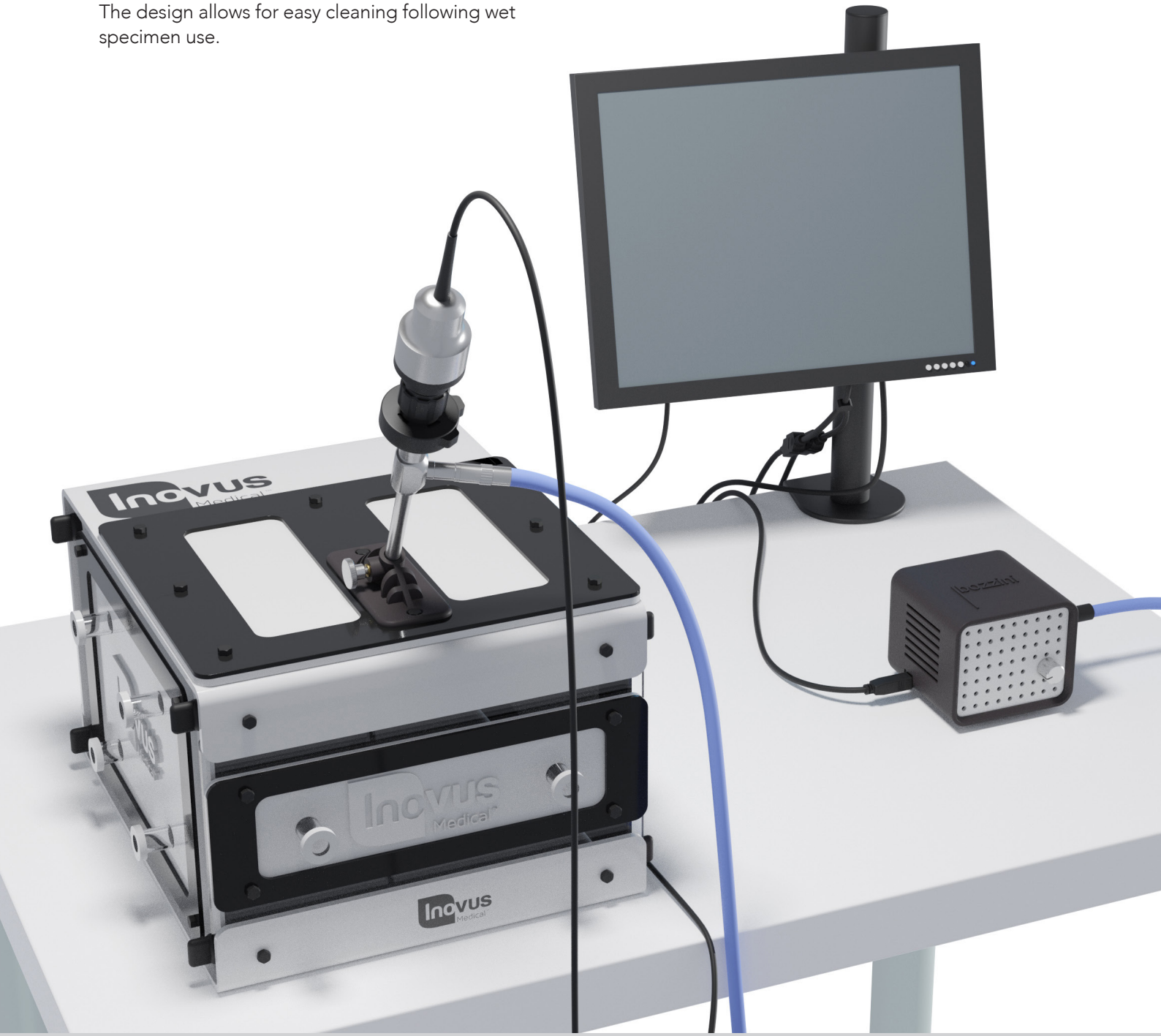
- Titratable light source.

- Instruments included in the package.

The box trainer supplied with the system is perfect for use with Inovus Medical's range of synthetic soft tissue models and can also be used with wet specimens.

The design allows for easy cleaning following wet specimen use.

The box trainer can also be substituted for a cadaver or animal model making the Bozzini Laparoscopic Simulator the perfect system for running high fidelity wet lab courses.



High fidelity laparoscopic simulators

The LapAR, developed by Inovus Medical, marks a significant breakthrough in healthcare simulation comparable to the transformative impact of the Model T car. This high fidelity laparoscopic simulator combines patent-pending Augmented Reality (AR) technology with the Inovus Medical box trainer model, resulting in the world's first affordable and accessible simulator of its kind.

One of the key distinguishing features of the LapAR is its utilisation of real-feel soft tissue models and actual laparoscopic instruments, revolutionising haptic realism. This innovation allows surgeons to experience unparalleled functionality, replicating the tactile feedback and sensations encountered during real laparoscopic procedures.

The LapAR simulator caters to a wide range of surgical procedures within the domains of general surgery and gynaecology. Surgeons can practice various techniques and refine their skills in a simulated environment that closely mimics real surgical scenarios.

The simulator incorporates instrument tracking technology, enabling the capture of instrument handling and performance metrics. This data, including performance statistics and key metrics, can be accessed and analysed through an online portfolio. This feature provides surgeons with valuable feedback on their performance and allows for continuous skill development and improvement.

By combining cutting-edge AR technology, realistic soft tissue models, and instrument tracking capabilities, the LapAR simulator offers an unprecedented level of realism and functionality in laparoscopic training. Its affordability and accessibility make it an attractive option for surgeons looking to enhance their laparoscopic skills without the constraints of traditional training methods.

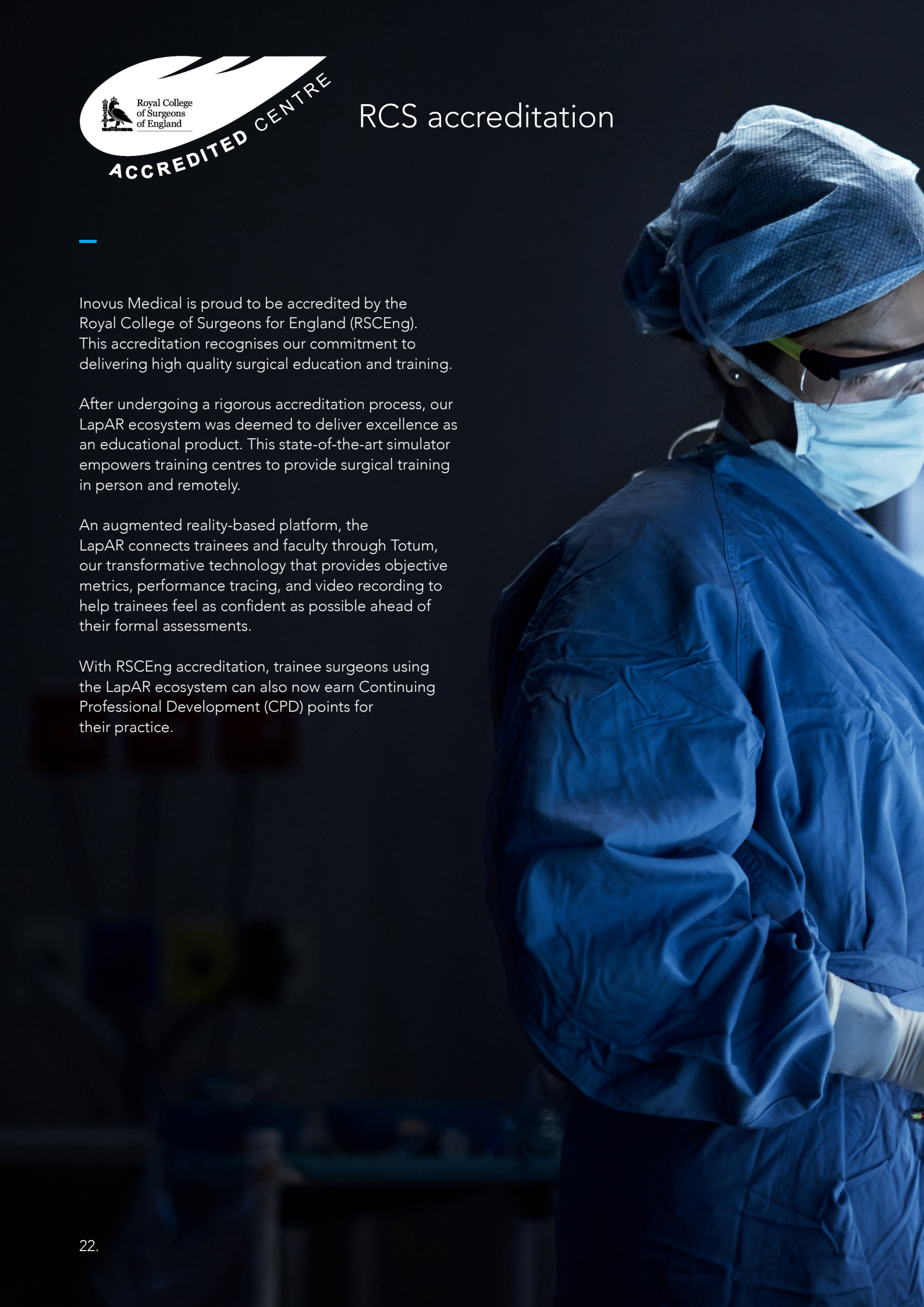
RCS accreditation

Inovus Medical is proud to be accredited by the Royal College of Surgeons for England (RSCEng). This accreditation recognises our commitment to delivering high quality surgical education and training.

After undergoing a rigorous accreditation process, our LapAR ecosystem was deemed to deliver excellence as an educational product. This state-of-the-art simulator empowers training centres to provide surgical training in person and remotely.

An augmented reality-based platform, the LapAR connects trainees and faculty through Totum, our transformative technology that provides objective metrics, performance tracing, and video recording to help trainees feel as confident as possible ahead of their formal assessments.

With RSCEng accreditation, trainee surgeons using the LapAR ecosystem can also now earn Continuing Professional Development (CPD) points for their practice.



LapAR - Democratising high fidelity surgical simulation

The LapAR serves the demand for distance learning in laparoscopic simulation. The simulator allows the user to perform simulated full surgical procedures as well as basic skills tasks by connecting the simulator to their PC or laptop*.

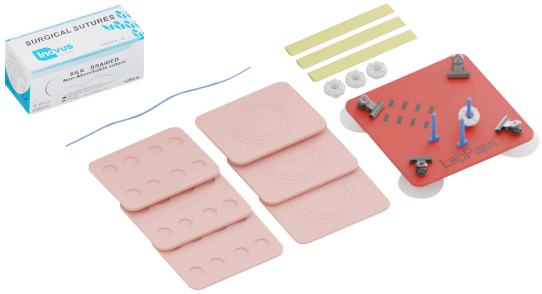
Powered by the Totum digital surgery platform, users' performance data is captured and displayed in the web portal and can be downloaded and added to surgical training portfolios and logbooks.

Included in the package:

- LapAR box trainer with integrated 1080p USB camera
- model mounting jig and abdominal wall skin
- 4 x laparoscopic instruments: Maryland forceps, Johan forceps, scissors, needle holder
- 1 x LapPass kit
- 1 x pack of sutures
- 5 x medical models
- single user licence for Totum

Product code: 00000502

*Laptop not included



To facilitate practice in ipsilateral port placement and suturing, additional side panels are available for purchase.

Product code: 00001605

Totum - Connect to perfect surgical technique

LapAR simulators are powered by Totum, the holistic platform that creates a connected surgical training ecosystem.

Totum allows instrument motions to be mapped and recorded digitally, to generate rich objective data on surgical performance. The objective data is aggregated, managed, and shared with trainers via the Totum web portal.

LapAR,
LapAR Pro
Powered by

TOTUM®

Guiding the way to surgical success
Connect with mentors, peers, and examiners to share best practice

Harnessing the power of data to transform surgical training
Objective performance metrics guide improvements in surgical technique and operative flow

Unlocking the power of practice
Video capture and debrief provides an ecosystem for review, refinement, and mastery of surgical procedures

Dynamic assessment, universal recognition
Issue certificates of competency, gain CPD/CME points for time spent training, perform work based assessments and OSATS

TOTUM® To learn more about the complete Totum ecosystem of connected surgical training, visit **www.inovus.org**

LapAR Pro - Democratising high fidelity surgical simulation

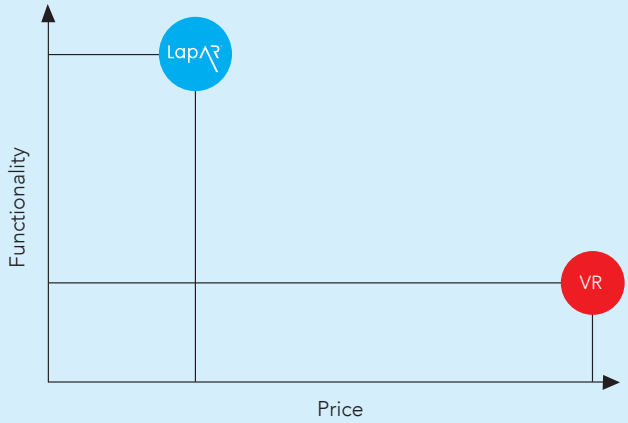
LapAR Pro is a hybrid high fidelity laparoscopic simulator. The system combines patented Augmented Reality (AR) technology with the Inovus box trainer model. LapAR Pro is powered by the Totum digital surgery platform, providing a connected ecosystem for surgical training.

The LapAR Pro represents a paradigm shift in haptic realism utilising real-feel soft tissue models and real laparoscopic instruments to provide unparalleled 'natural haptics'.

The simulator allows surgeons to practise a range of procedures across the specialities of general surgery and gynaecology. Instrument tracking technology enables capture of instrument handling and performance metrics with performance data displayed in the Totum platform.

Key features of LapAR

- Natural haptics through synthetic soft tissue models
- Realistic digital anatomy fully integrated with soft tissue models
- Full procedure simulation (multiple specialties)
- Trigger and manage intraoperative complications
- Objective feedback on key metrics of surgical performance
- Performance tracking on validated curricula
- Record and review training progress with online portfolio



Shown to save healthcare systems

>$115 million

per year through operative efficiencies when integrated into training programmes.

Full procedure simulation across gynaecology and general (including paediatric) surgery.

LapAR Pro

The institutional version of LapAR offers educational and training institutions the opportunity to deliver high fidelity, fully tracked laparoscopic simulation at an unprecedented scale. The sleek, compact trolley system meets all laparoscopic training requirements from delivering basic, intermediate, and advanced laparoscopic skills courses in simulation centres, through to pre-operative warm up in the clinical setting. LapAR Pro provides unlimited access to the Totum digital surgery platform, meaning there is no limit to the number of surgeons that can be trained with LapAR Pro.

Included in the package:

- LapAR Pro box trainer with integrated 1080p USB camera
- model mounting jig and abdominal wall skin
- 5 x laparoscopic instruments: Maryland forceps, Johan forceps, scissors, and needle holder (x2)
- 1 x LapPass kit
- 1 x pack of sutures
- mobile trolley system with adjustable operating height
- 1 x Integrated computer with Totum software pre-installed
- 22" touch screen monitor
- monitor mounting system – can be converted to table top mounting
- unlimited user licences
- admin access to Totum

Product code: 00001526

Laparoscopic Accessories

Inovus Medical boasts an ever expanding range of laparoscopic training bases that can be used to develop a range of skills in minimally invasive surgery.

Our multi-use skills tasks are perfect for developing basic and intermediate skills and for pre-operative warm up.

Threading base

Product code:
00000911

- Develops intermediate minimally invasive surgical skills
- Narrow eyelets are spaced in order to produce a challenging task
- Bilateral manual dexterity, depth perception & proprioceptive skills

Ring stack base

Product code:
00000904

- Develops intermediate minimally invasive surgical skills
- Grasp, lift, and relocate rings
- Bilateral manual dexterity, depth perception & proprioceptive skills

Maze base

Product code:
00000899

- Develops intermediate minimally invasive surgical skills
- Negotiate rings around a series of direction changes and breaks
- Bimanual dexterity, proprioceptive skills & surgical finesse

Bead stack base

Product code:
00000881

- Develops intermediate minimally invasive surgical skills
- Pick up beads and transfer between towers of varied heights
- Fine motor skills and surgical finesse

Shape manipulation base

Product code:
00000907

- Develops intermediate minimally invasive surgical skills
- Stabilise the base whilst manipulating the shape through the target
- Bilateral manual dexterity, surgical finesse

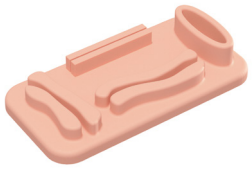
Suturing base

Product code:
00001442

- Develops advanced minimally invasive surgical skills
- Basic and advanced suturing tasks
- Supplied with suturing skin

Suturing refill

Product code:
00001444



- 1 x replacement suturing skin for suturing base

Surgical Sutures 3.0 Silk Braided

Product code:
00001286

- 12 x Surgical sutures (3/0 silk braided) not for human use

Replacement trocars

Product code:
00001205

- 2 x replacement trocars for Pyxus HD, Pyxus HD Move, and Bozzini Laparoscopic Simulators

Soft padded carry case

Product code:
00001236

- Accommodates Pyxus HD, Pyxus HD Move, and LapAR
- Separate zip pocket for instruments
- Room for accessories

Hard shell carry case

Product code:
Pyxus Pro Move
00001335
Product code:
Bozzini Laparoscopic
00001333

- Accommodates Pyxus Pro Move, Bozzini Hysteroscopy, and Bozzini Laparoscopic Simulators Hard outer shell with custom foam inserts to accommodate entire system and associated instruments

Hard shell carry case

Product code:
00001079

- Accommodates LAPAR, hard outer shell with custom foam inserts to accommodate entire flat packed system, associated instruments and parts

Hard Shell Flight Case

Product code:

00001233

The wheeled hard outer shell flight case is designed to offer maximum protection, ease of use, and mobility for the LapAR Pro system and its instruments. With its durable construction, secure latching mechanisms, and user-friendly features like the custom foam inserts and drop-down ramp, this flight case ensures safe and efficient transportation of the system and associated instruments.

- Wheeled hard outer shell flight case with custom fitted foam inserts
- 5-ply, phenolic bond marine plywood, 8mm thickness
- Fixed reinforced galvanised steel edging to all sides
- 4 x butterfly recessed galvanised steel latches
- 4 x recessed galvanised steel handles
- Fixed internal drop down ramp
- Equipped with 4 x 100 mm blue industrial style wheels (2 x with brakes)

Maryland grasper

Product code:
00000963

- 5mm laparoscopic Maryland grasping forceps
- Comes as standard with all laparoscopic simulators

Ratcheted grasper

Product code:
00001216

- 5mm laparoscopic ratcheted grasping forceps
- Ideal for more advanced laparoscopic skills training

Laparoscopic scissors

Product code:
00001217

- 5mm laparoscopic scissors
- Ideal for more advanced laparoscopic skills training

Needle holder

Product code:
00001218

- 5mm laparoscopic needle holder
- Ideal for more advanced laparoscopic skills training

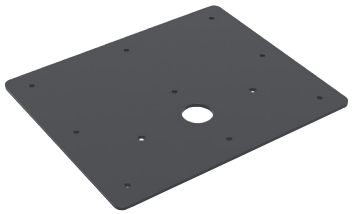
Replacement skin LapAR

Product code:
00001567

- Replacement background skin for LapAR
- Compatible with LapAR and LapAR Pro systems

Replacement trocar insertion skin

Product code:
00000995



- Replacement trocar insertion pad for Pyxus Pro Move and Bozzini Laparoscopic Simulators
- Up to 120 individual port insertions per skin

Replacement nuts and bolts

Product code:
00001536

Endoscopic Camera

Product code:
00001047

LED Light lead

Product code:
00001264

Replacement WiFi dongle

Product code:
00001537

Replacement Model cable

Product code:
00001243

Replacement Power cable

Product code:
00000779

Replacement Camera cable

Product code:
00001084

Replacement light source cable

Product code:
00001268

Replacement screen cable

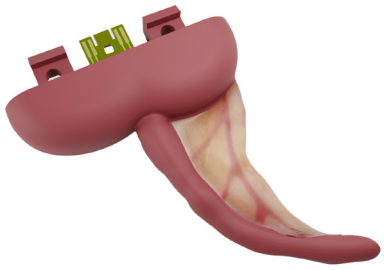
Product code:
00000857

Laparoscopic Accessories

General Surgery

Appendix model

Product code:
00001211



Single use model with standard anatomy
Work through the critical steps in laparoscopic appendectomy.
All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this.
LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be practised on the model include:

- mobilising the appendix
- Blunt dissection of mesoappendix
- ligate appendix
- dissect appendix
- visceral control
- perform a fully immersive procedure and track your performance with the LapAR simulator

Gallbladder model

Product code:
00001553

Work through the critical steps in laparoscopic cholecystectomy.
Standard anatomy including gallbladder, cystic duct, cystic artery, and common hepatic duct.
Hyper-realistic tissue handling and real time haptic feedback.
All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this. LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be practised on the model include:

- dissection of Calot's (cystohepatic) Triangle
- clipping of cystic artery
- clipping of cystic duct
- ligation of cystic artery
- ligation of cystic duct
- dissect cystic artery
- dissect cystic duct
- visceral control
- perform a fully immersive procedure and track your performance with the LapAR simulator

Bowel anastomosis model

Product code:
00001447

Two sections of simulated bowel.
Develops advanced minimally invasive surgical skills.
Perform basic suturing and bowel anastomosis.
Perform a fully immersive procedure and track your performance with the LapAR simulator.
All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this.
LapAR variant only compatible with the Inovus Medical LapAR simulator.
Single use.

Laparoscopic Accessories

Gynaecology

Vaginal vault model

Product code:
00000376

Highly realistic vaginal vault model.
True-to-life tissue handling and real time haptic feedback.
Multi use model, perfect for high volume vault closure training.
Perform a fully immersive procedure and track your performance with the LapAR simulator.
Required for use in hysterectomy 'campaign mode' in LapAR.

Coming soon

The introduction of the LapAR 2nd Generation with improved usability, increased complexity, and greater dexterity is already a significant advancement. With the upcoming release of new models specifically designed for General Surgery and Gynaecology procedures, the training experience for medical professionals will be further enhanced.

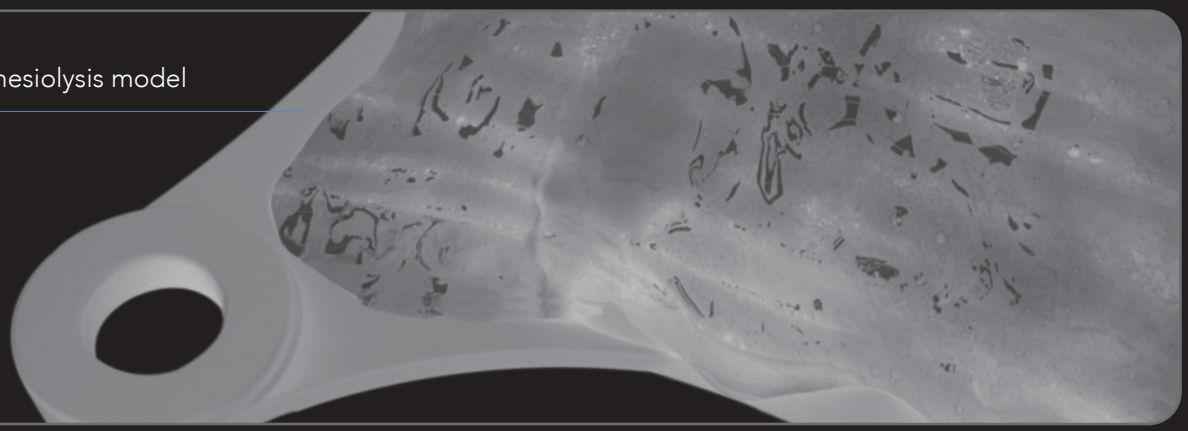
These new models will provide:

Enhanced Realism:	More realistic simulations of surgical procedures, helping trainees to better prepare for real-life scenarios.
Specialised Training Modules:	Tailored training modules that address the specific needs and challenges of General Surgery and Gynaecology, ensuring more focused and relevant practice.
Improved Technology:	Continued advancements in technology to offer even greater dexterity and control during simulations, which can help in honing fine motor skills and precision.
Comprehensive Feedback:	Enhanced feedback systems to provide detailed insights into performance, allowing for targeted improvements and tracking progress over time.
Collaborative Features:	Potential for collaborative training scenarios, where multiple trainees can work together, simulating a real surgical team environment.

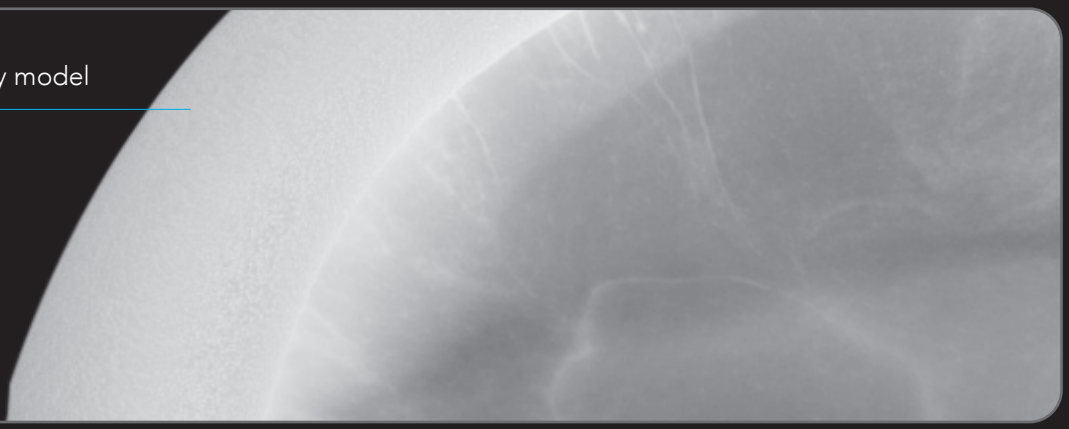
Laparoscopic Accessories

General Surgery

LAP adhesiolysis model

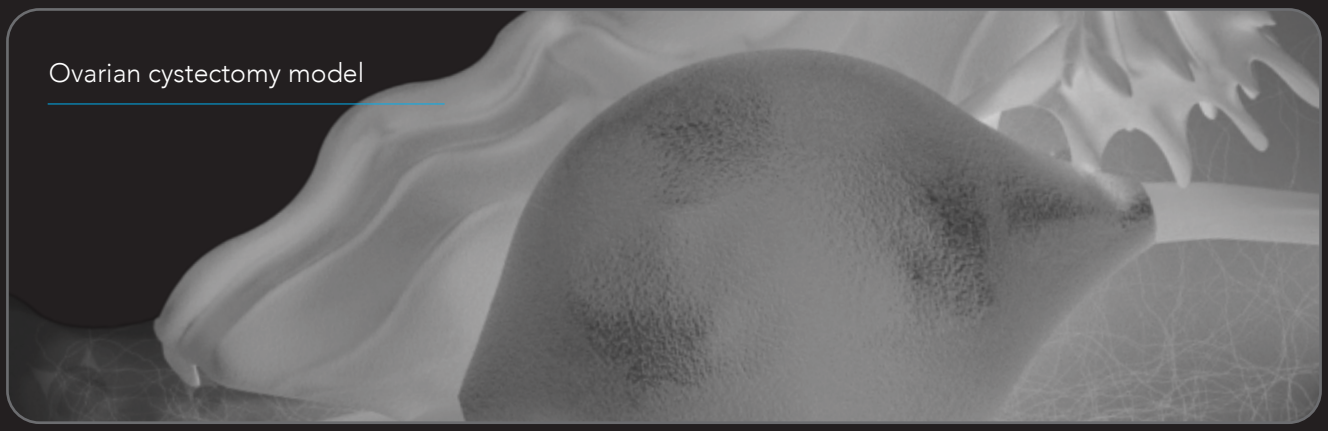


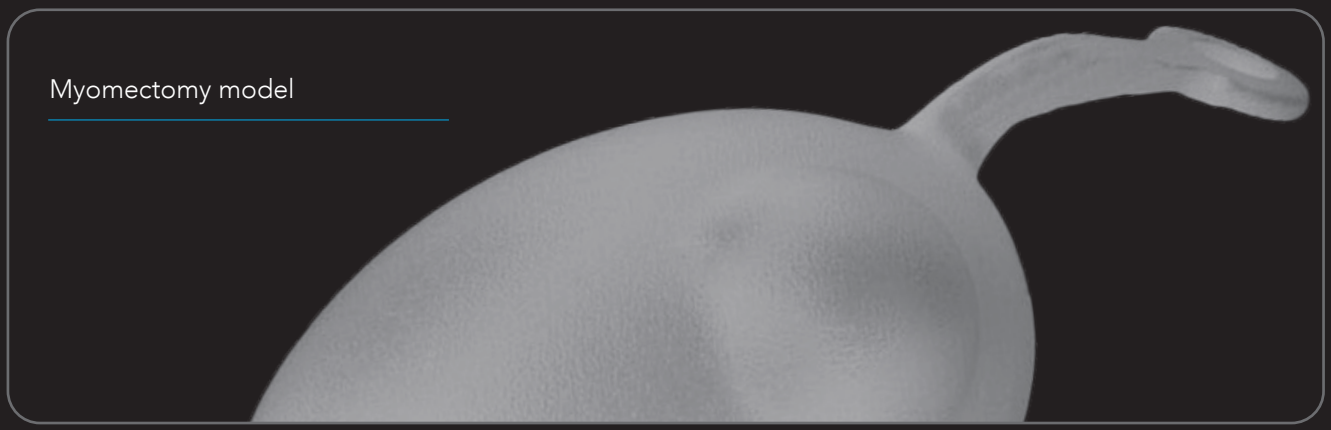
Bowel enterotomy model



Laparoscopic Accessories

Gynaecology





These enhancements will undoubtedly contribute to more effective and comprehensive training for surgeons and gynecologists, ultimately leading to improved patient outcomes. If there are specific features or capabilities that you'd like to highlight, feel free to share more details!

LapPass
- in association with

Thanks to our collaboration with the Association of Laparoscopic Surgeons of Great Britain and Ireland (ALSGBI), four essential laparoscopic tasks can now be practised on a range of simulators through the LapPass certification programme. This partnership democratises the LapPass programme by making it accessible to a wider audience.

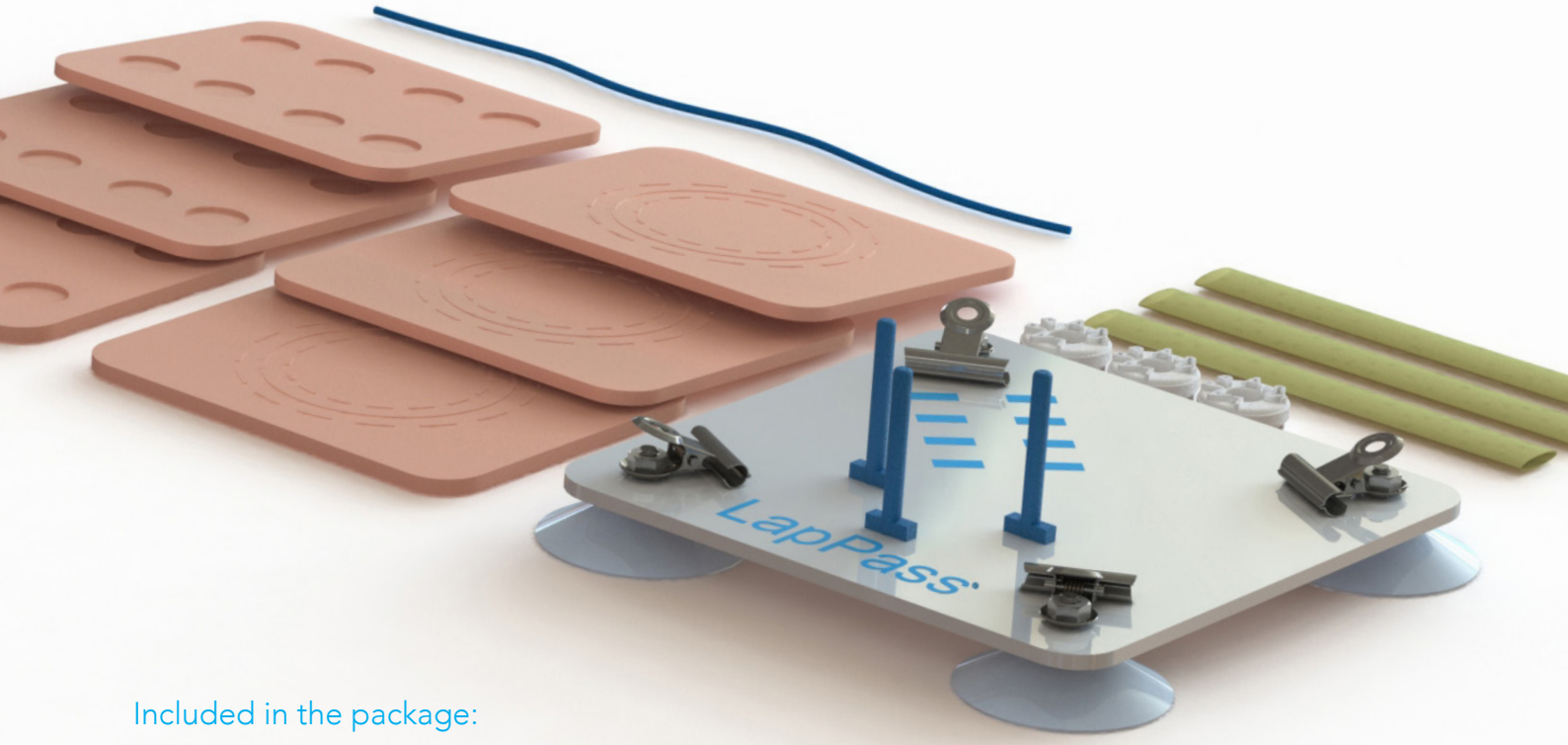
Inovus Medical's LapPass kits have been specifically developed to meet the requirements of the existing LapPass curriculum while prioritising practicality and efficacy in laparoscopic skills training. Each kit advances surgical training by providing enhanced realism without sacrificing standardisation.


Inovus
Medical
Inovus
Medical

LapPass

With the LapPass kit, trainees have access to various components that simulate different aspects of laparoscopic procedures. These interchangeable elements allow for a realistic and immersive training experience. Surgeons can practice essential skills such as trocar insertion, tissue manipulation, suturing, and other laparoscopic techniques required for the LapPass certification.

By offering a complete set of interchangeable elements, the LapPass kit ensures that surgeons have the necessary tools to train and progress through the certification program. Trainees can practice each skill in a controlled and repeatable manner, allowing for focused improvement and skill development.



Included in the package:

- hoops
- pegs
- 14cm of blue thread Foam block
- penrose drains
- suturing skin
- cutting skin

Product code: 00000766

LapPass Accessories

Cutting skin refill

Product code:
00000715
(Single unit)
Product code:
00001510
(Pack of 10)
Product code:
00001568
(Pack of 50)

Suturing skin refill

Product code:
00001522
(Single unit)
Product code:
00001512
(Pack of 10)

Penrose drain refill

Product code:
00001478
(Pack of 10)
Product code:
00001569
(Pack of 50)

Hoops refill

Product code:
00001516

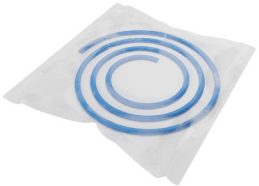
Pegs refill

Product code:
00001517

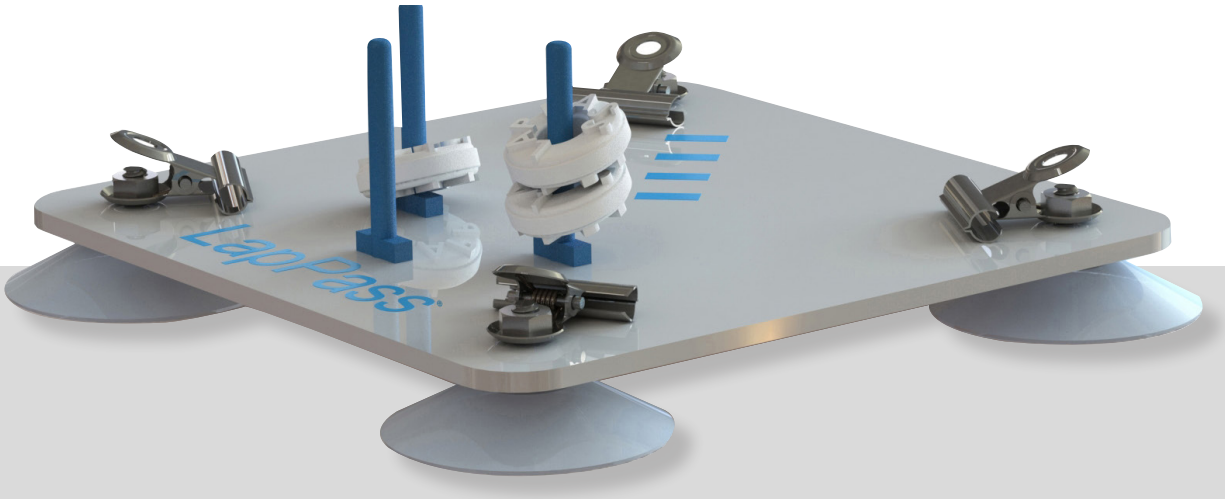
Foam block refill

Product code:
00000771

Thread refill



Product code:
00001479




Inovus
Medical®

partnership

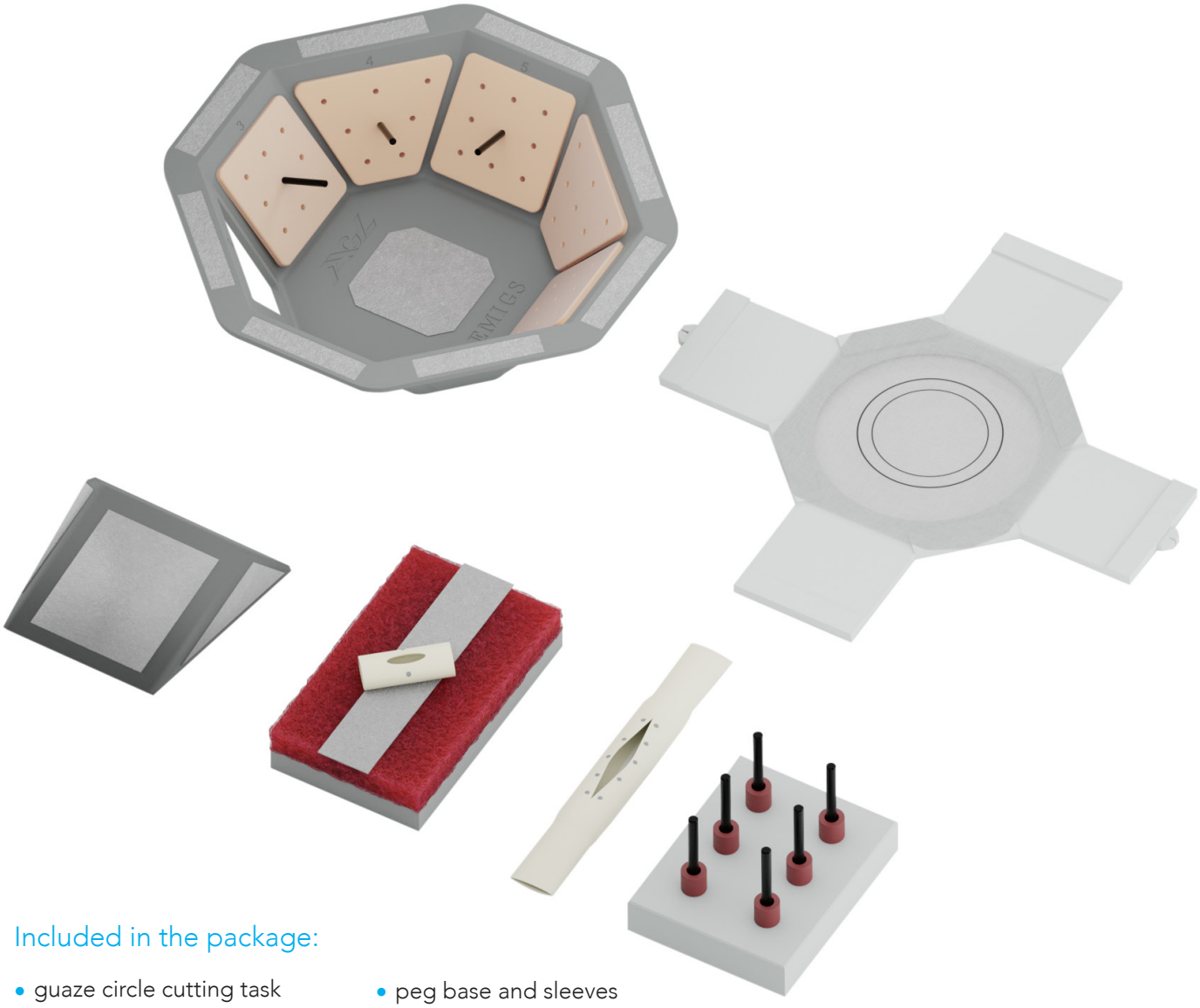
Inovus Medical is proud to be the exclusive partner of the American Association of Gynaecological Laparoscopists (AAGL) and the global leader in women's health, Hologic, for the manufacturing and delivery of equipment for the Essentials in Minimally Invasive Gynaecologic Surgery (EMIGS) programme.

Through this landmark partnership, Inovus Medical's high fidelity hysteroscopy simulators, HystAR, and laparoscopic simulators, LapAR, will be provided to all 250 ACGME-approved residency programmes across North America. All residents working towards their EMIGS certification will also have access to our transformative surgical training platform, Totum. The hands-on laparoscopic curriculum will be delivered using our LaparoBowl modular platform, which is engineered to perfectly simulate operating in the female pelvis.

This collaboration allows us to play a key role in providing the tools needed for the EMIGS programme, ensuring that clinicians have access to high quality, specialized equipment and insightful real-time feedback that will enable them to train effectively and work towards skill mastery.

LaparoBowl

The EMIG platform uses a special pelvis-shaped bowl (a LaparoBowl) to simulate gynecologic laparoscopic surgery. The LaparoBowl manufactured by Inovus Medical will fit into our full range of lapaproscopic box trainer allowing trainees to work through the EMIGS program for minimally invasive gynecologic surgery (MIGS) specific board certification.



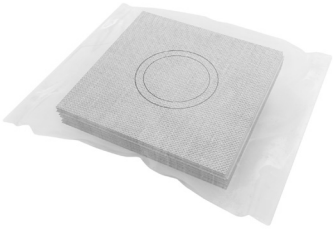
Included in the package:

- guaze circle cutting task
- short penrose target
- long penrose target
- large foam block
- peg base and sleeves
- wedge
- square silicone
- triangle silicone

Product code: 00000788

Gauze circle cutting task

Product code:
00001523
(Pack of 100)



Short penrose target

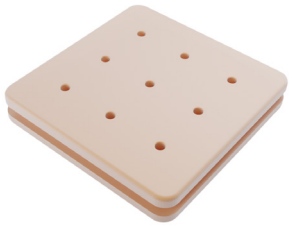
Product code:
00001570
(Pack of 100)

Long penrose target

Product code:
00001514
(Pack of 10)

Replacement square silicone for LaparoBowl

Product code:
00000687

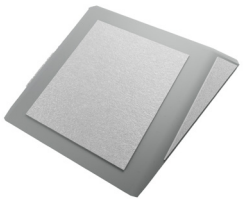


Replacement triangle silicone for LaparoBowl

Product code:
00000698

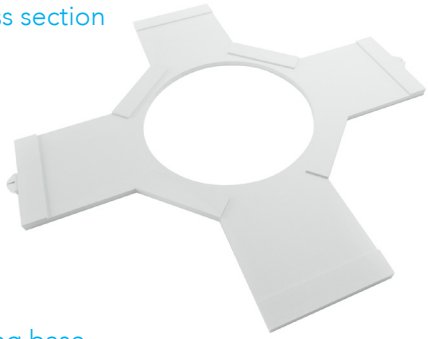
Replacement wedge for LaparoBowl

Product code:
00000798



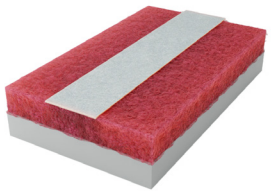
Replacement cross section for LaparoBowl

Product code:
00000790



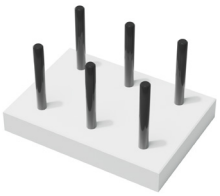
Replacement large foam block for LaparoBowl

Product code:
00000691



Replacement 6 peg base for LaparoBowl

Product code:
00000706



Replacement sleeves for 6 peg base

Product code:
00000692

Replacement pegs for LaparoBowl

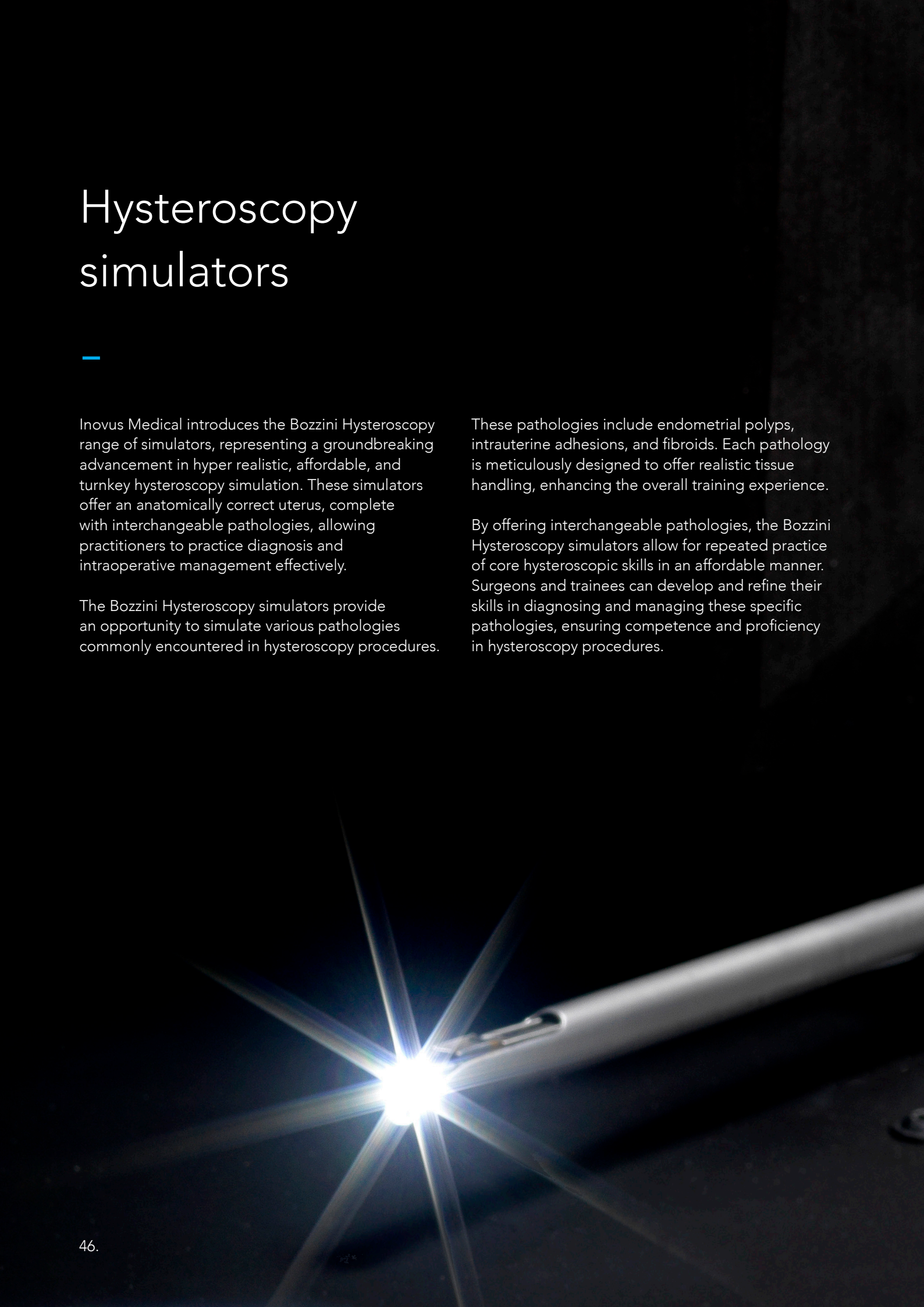
Product code:
00000740

Hysteroscopy simulators

Inovus Medical introduces the Bozzini Hysteroscopy range of simulators, representing a groundbreaking advancement in hyper realistic, affordable, and turnkey hysteroscopy simulation. These simulators offer an anatomically correct uterus, complete with interchangeable pathologies, allowing practitioners to practice diagnosis and intraoperative management effectively.

The Bozzini Hysteroscopy simulators provide an opportunity to simulate various pathologies commonly encountered in hysteroscopy procedures. These pathologies include endometrial polyps, intrauterine adhesions, and fibroids. Each pathology is meticulously designed to offer realistic tissue handling, enhancing the overall training experience.

By offering interchangeable pathologies, the Bozzini Hysteroscopy simulators allow for repeated practice of core hysteroscopic skills in an affordable manner. Surgeons and trainees can develop and refine their skills in diagnosing and managing these specific pathologies, ensuring competence and proficiency in hysteroscopy procedures.



Global Community of Hysteroscopy

partnership

Through our partnership with the Global Congress on Hysteroscopy (GCH), Inovus Medical has been able to advance hysteroscopy training by providing accessible state-of-the-art simulators to hysteroscopists worldwide.

Inovus Medical's evolving ecosystem of hysteroscopy simulators will play a crucial role in hands-on skills training workshops at GCH training events and the GCH congress, offering a comprehensive, immersive learning experience for attendees.

The partnership also includes a collaborative research project to validate the effectiveness of our HystAR simulators and Totum digital surgery platform in delivering remote hysteroscopy skills training and certification. Through rigorous research, we aim to ensure these tools deliver optimal outcomes and meet the highest possible standards in surgical training.


22120321 CE
CE 0197

Low fidelity hysteroscopy simulators

The low fidelity Bozzini Hysteroscopy Basic package offered by Inovus Medical is a cost-effective and portable system designed specifically for hysteroscopy simulation. This package caters to the requirements of training centres and medical device companies that already have imaging capabilities in place but are seeking to enhance their training experience with the realistic features of the Bozzini Hysteroscopy system.

The basic package is designed to complement existing imaging setups, allowing users to integrate the Bozzini Hysteroscopy system seamlessly into their current infrastructure. By doing so, training centres and medical device companies can take advantage of the life-like simulation provided by the Bozzini system without duplicating imaging capabilities they already possess.

Bozzini Basic
Hysteroscopy Simulator

The basic package allows the end user to experience hands on "wet lab" simulation thanks to its fully irrigatable uterine models. The models are specifically designed to offer highly realistic simulation of irrigation management during hysteroscopy.

The package comes with five anatomically correct uteri that can be mounted in an anteverted or retroverted position. The uteri allow simulated vaginoscopy, visualisation of the external os, navigation of the cervical canal and visualisation of the uterine cavity and ostia. Each wet lab uterus contains 8 to 10 resectable polyps that are manufactured from a proprietary water based substrate. The polyp substrate reacts like real tissue when operated on with energy devices and morcellators making this the perfect option for demonstration and training of medical devices. The hyper-realistic tissue handling not only shows medical devices in their best light but also offers the perfect platform for affordable, high volume training with standard hysteroscopy instruments.

The Bozzini system can be used anywhere, from the skills lab to a conference centre, making it a clean and portable solution for training the skills required for operative and office-based hysteroscopy procedures.

Included in the package:

- uterus retaining case and mount system
- table clamp
- drip tray
- 5 x single use wet lab uterus
- models (with 8-10 polyps)
- soft carry case

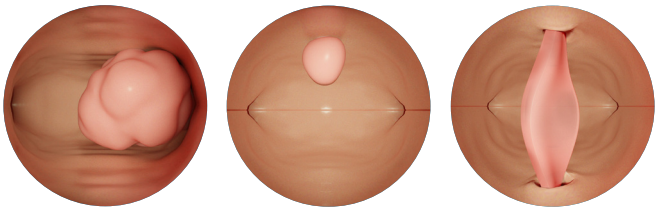
Product code: 00001259

- Uterus base unit and stand

- Drip tray

- 5 x Uterus models

Internal views of pathologies



EMIG Hysteroscopy
H1 and H2 Task Trainer

The EMIG Hysteroscopy Trainer H1 and H2 provide comprehensive tools for teaching and improving essential hysteroscopy techniques.

The H1 model is suited for basic to intermediate training, while the H2 model offers advanced features for more complex training scenarios. Both models contribute significantly to the skill development of medical professionals in the field of gynecology, with a primary focus on teaching correct hysteroscopy techniques and emphasizing positional awareness and accuracy.

H1 and H2 models offer a realistic and controlled environment for trainees to practice and refine their hysteroscopy techniques, specifically designed for use with the Hystar system.

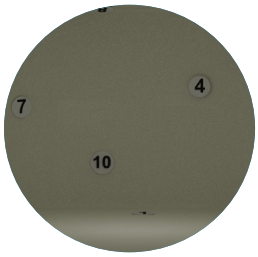
Included in the package:

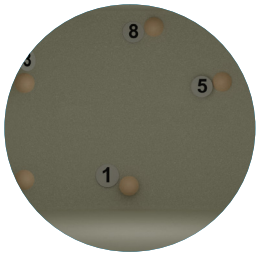
- uterus retaining jig
- cervix
- H1 and H2 Tasks
- pack of 15 polyps

Product code: 00001582

- H1 task
- H2 task

- Pack of 15 polyps





Internal views of EMIG hysteroscopy H1 and H2 tasks

partnership

Medium fidelity hysteroscopy simulators

The Bozzini Hysteroscopy medium fidelity simulators provided by Inovus Medical offer a simulated "full stack system" that delivers a highly realistic experience for training hysteroscopy skills.

These simulators are designed to provide trainees with a hyper-realistic experience, allowing them to develop and enhance their hysteroscopy skills in an immersive environment.

The medium fidelity simulators of the Bozzini Hysteroscopy range replicate the full stack system of hysteroscopy procedures. This means that the simulator includes all the essential components and instruments typically used in hysteroscopy, such as the hysteroscope itself, fluid management systems, and other necessary tools. By incorporating these components, the simulator aims to recreate the entire hysteroscopy setup and provide a comprehensive training experience.

Bozzini
Hysteroscopy Simulator

This simulator is supplied with a standard 4mm hysteroscope, two hysteroscopic instruments, an HD camera system, and 15" monitor and monitor stand. The compact table top design makes it the perfect system for use in simulation centres, doctors' offices or as a mobile training solution.

The camera and hysteroscope are powered by the Bozzini light system. The Bozzini light system allows simulated endoscopic procedures to be performed with real endoscopic devices at an affordable price.

Included in the package:

- hysteroscopy base unit to position uterus
- clamp for fixing base unit
- 2 x non-pathological uterus – also used for interchangeable polyps and adhesions
- 1 x uterus with submucosal fibroid
- 50 x polyps
- 3 rolls of adhesions
- 1 x 4mm, 30° or 0° hysteroscope
- 1 x hysteroscope introducer
- 1 x hysteroscopic grasping forceps
- 1 x hysteroscopic scissors
- 1 x camera unit
- 1 x bozzini light source
- 1 x light lead
- 1 x 15" monitor
- 1 x monitor stand

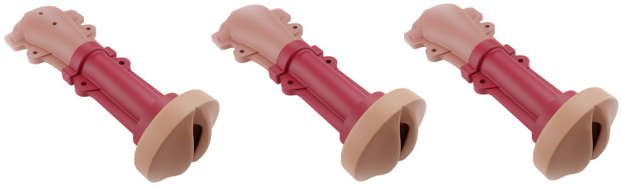
Product code: 00001265

Two Year Extended Warranty
Product code: 00001583

- Uterus base unit and stand

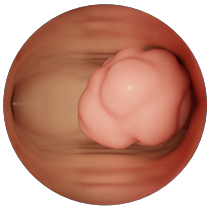
- Bozzini light source

- Hystersocopic grasping forceps and scissors
- Practice scope handling with real scope and camera

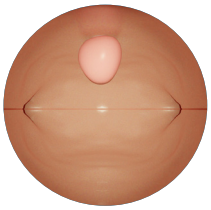


- 2 x non-pathological uterus and 1 x uterus with submucosal fibroid, polyps, and adhesions

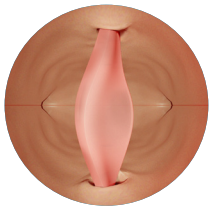
Internal views of pathologies



Hyper-realistic pathologies



Resection of polyps



Resection of adhesions

High fidelity hysteroscopy simulators

The HystAR Pro and HystAR are advanced technologies that provide educational institutions and device companies with a unique opportunity to deliver highly realistic and fully tracked hysteroscopy simulations. These simulations offer a level of fidelity and scale that was previously unachievable.

One of the key features of the HystAR Pro and HystAR systems is their ability to track the user's movements and actions in real-time. This means that the system can provide immediate feedback and performance metrics, allowing users to dynamically assess their technique and improve their skills.

The tracking technology also enables instructors or supervisors to monitor and evaluate trainees' progress remotely, enhancing the efficiency and effectiveness of the training process.

By offering hysteroscopy simulation at an unprecedented scale, the HystAR Pro and HystAR systems have the potential to revolutionise hysterosopcy education and device training. These technologies provide a safe and controlled environment for learners to practice and refine their skills without the need for live patients.


Inovus
Medical

HystAR

The HystAR serves the demand for distance learning in hysteroscopy simulation by providing a convenient and accessible platform for education and training. It allows learners to develop their skills in hysteroscopy at their own pace and from any location, minimising the need for physical resources and increasing the efficiency of training programmes.

Overall, the HystAR contributes to advancing the field of hysteroscopy education by offering a novel and immersive approach to distance learning, helping to meet the demand for skilled hysteroscopy practitioners.

Included in the package:

- hysteroscopy base unit to position uterus
- clamp for fixing base unit
- 2 x non-pathological uterus – also used for interchangeable polyps and adhesions
- 1 x uterus with submucosal fibroid
- 50 x polyps
- 3 rolls of adhesions
- 1 x 4mm, 30° or 0° hysteroscope
- 1 x hysteroscope introducer
- 1 x hysteroscopic grasping forceps
- 1 x hysteroscopic scissors
- 1 x camera unit
- 1 x bozzini light source
- 1 x light lead

Product code: 00001290

*Laptop not included

HystAR and Totum - Connect to perfect surgical technique

HystAR simulators are powered by Totum, the holistic platform that creates a connected surgical training ecosystem.

Totum allows instrument motions to be mapped and recorded digitally, to generate rich objective data on surgical performance. The objective data is aggregated, managed, and shared with trainers via the Totum web portal.

HystAR
HystAR Pro

Powered by

TOTUM®

Guiding the way to surgical success

Connect with mentors, peers, and examiners to share best practice

Harnessing the power of data to transform surgical training

Objective performance metrics guide improvements in surgical technique and operative flow

Unlocking the power of practice

Video capture and debrief provides an ecosystem for review, refinement, and mastery of surgical procedures

Dynamic assessment, universal recognition

Issue certificates of competency, gain CPD/CME points for time spent training, perform work based assessments and OSATS

TOTUM® To learn more about the complete Totum ecosystem of connected surgical training, visit **www.inovus.org**

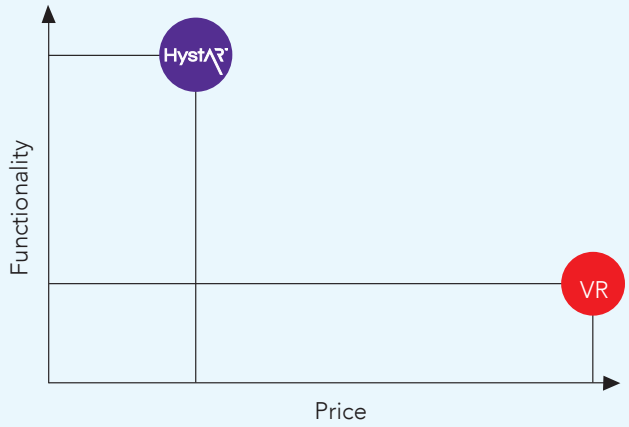
HystAR Pro - Democratising high fidelity hysteroscopy simulation

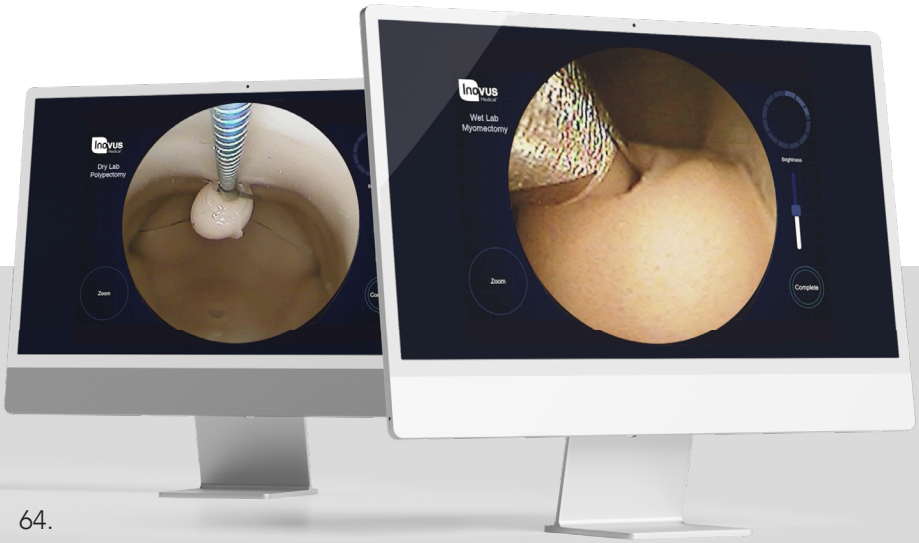
The HystAR Pro simulator includes dry lab and wet lab uterus models. All models are anatomically correct including vaginal vault, cervix, and intrauterine landmarks. The dry lab models have interchangeable pathologies for practising diagnosis and intraoperative management. Dry lab pathologies include endometrial polyps, intrauterine adhesions, and fibroids. The pathologies offer true-to-life tissue handling and are a low-cost way of delivering repeated practice of these core hysteroscopic skills.

The wet lab models include polyps, fibroids, and a model for endometrial resection. The wet lab pathologies are made from Inovus Medical's proprietary water-based substrate and produce natural haptics when operating with a range of hysteroscopic devices such as morcellators and resectoscopes. Both types of uterus model can be positioned in an anteverted and retroverted orientation allowing trainees to experience the different approach needed for each.

Key features of HystAR Pro

- Soft tissue models with full anatomy including vaginal vault, cervix, and uterine landmarks
- Full procedure simulation including polypectomy, myomectomy, and adhesiolysis
- Record, review, and track training progress and performance with Totum
- Soft tissue models generate natural haptics
- Learn safe use of real instruments including morcellators and energy devices
- Objective feedback on key metrics of surgical performance





Full procedure simulation across dry lab and wet lab procedures.

HystAR Pro

This sleek, compact trolley system meets all hysteroscopy training requirements from delivering basic, intermediate, and advanced hysteroscopy skills courses in simulation centres through to pre-operative warm up in the clinical setting. Unlimited user licences mean there is no limit to the number of surgeons that can be trained with the HystAR Pro.

Included in the package:

- 1 x uterus mounting case and table mount
- 1 x clamp for fixing uterus mounting case and table mount
- 1 x hysteroscopic scissors
- 1 x hysteroscopic biopsy forceps
- 3 x non-pathological uterus models (INO-UT-01)
- 5 x pack of adhesions
- 5 x pack of polyps
- 1 x bottle of lubricant
- 1 x mobile trolley system with adjustable operating height and integrated fibreoptic light source
- 1 x integrated computer with Totum software pre-installed
- 1 x 22" touch screen monitor
- 1 x 4mm, 0° or 30° hysteroscope (depending on centre preference)
- 1 x hysteroscope introducer
- 1 x endoscopic camera
- 1 x light lead
- 1 x monitor stand
- 1 x operating stool for seated procedures
- admin access to Totum

Product code: 00001482

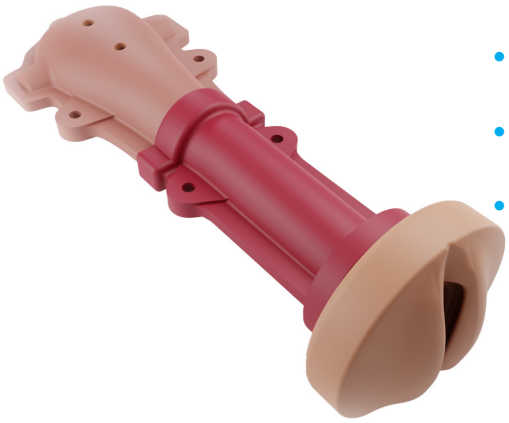
Hysteroscopy Accessories

Replacement uterus non-pathological

Product code:

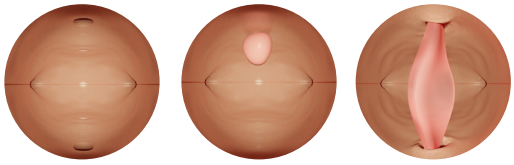
5mm 00001310

3mm 00001316



- Comes as standard with the Bozzini Hysteroscopy Simulator, HystAR and HystAR Pro
- Can be used with the Bozzini Hysteroscopy Basic
- Use as a non-pathological uterus for basic camera handling skills
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Add adhesions and polyps for dry lab procedural training
- Available with a 5mm or 3mm cervical canal

Internal views of pathologies



Hyper-realistic pathologies

Resection of polyps

Resection of adhesions

Adhesions refill

Product code:

00001273

- Pack of 3m for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

Polyps refill (sharp dissection)

Product code:

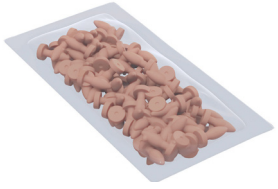
00001275

- Pack of 50 for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

Polyps refill (blunt dissection)

Product code:

00001276



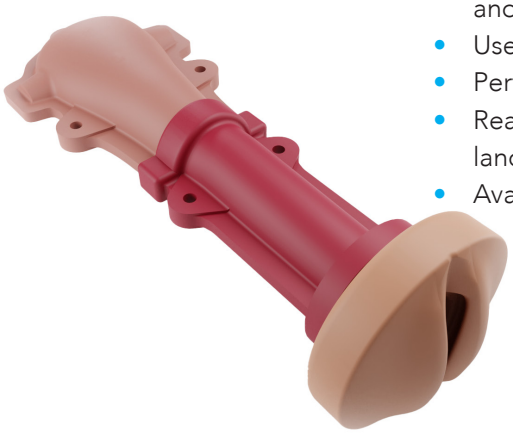
- Pack of 50 for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

Replacement uterus fibroid

Product code:

5mm 00001319

3mm 00001318



- Comes as standard with the Bozzini Hysteroscopy Simulator
- Can be used with the Bozzini Basic, HystAR, and HystAR Pro
- Use multiple times for diagnostic procedures
- Perform myomectomy with cold cutting scissors
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

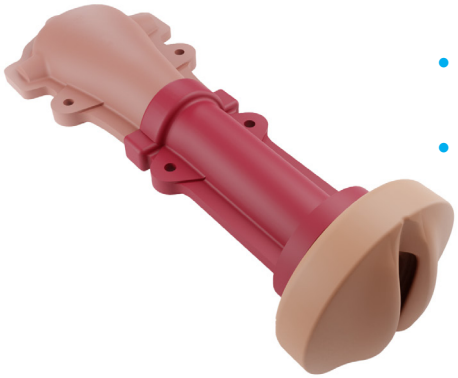
Internal view of pathology

Replacement uterus polyps for morcellator

Product code:

5mm 00001343

3mm 00001344



- Single use wet lab training model
- Comes as standard with the Bozzini Hysteroscopy Basic
- Contains nine polyps for morcellation training designed for use with distension media and morcellators
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

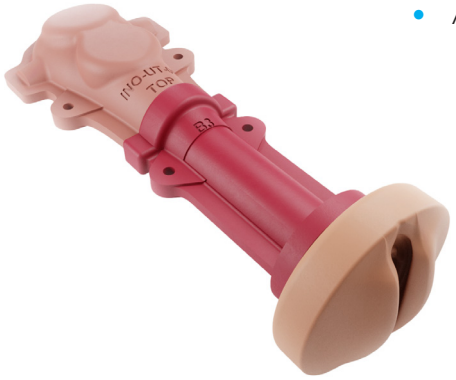
Internal view of pathology

Replacement uterus wetlab

Product code:

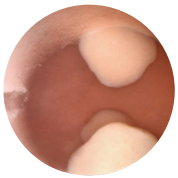
5mm 00001360

3mm 00001359



- Single use wet lab training model
- Suitable for TRS or bipolar resection
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

Internal view of pathology



Replacement polyps

Product code:

00001470

- Pack of 15 polyps
- For use with the EMIGS Hysteroscopy Trainer 00001582

Hysteroscopy Accessories

Hysteroscopy biopsy forceps

Product code:
00000667

Hysteroscopy scissors (Flexible)

Product code:
00001267

Hysteroscopy scissors (Rigid)

Product code:
00001269

Endoscopic Camera

Product code:
00001047

Hysteroscope 0°

Product code:
00000661

Hysteroscope 30°

Product code:
00001260

Obturator

Product code:
00000987

Replacement screen cable

Product code:
00000857

Replacement Power cable

Product code:
0000779

Replacement Light source cable

Product code:
00001268

LED Light lead

Product code:
00001264

Replacement WiFi dongle

Product code:
00001537

Replacement nuts and bolts

Product code:
00001536

Hard shell carry case

Product code:
00001237

- Accommodates Bozzini Hysteroscopy Simulator
- Hard outer shell with custom foam inserts to accommodate entire system and associated instruments

Wheeled carry case

Product code:
00000211

- Outer soft shell wheeled carry case containing the following inner cases:
  - Inner case to house HystAR components and camera
  - Camera case
  - Instrument case
  - Scope and introducer case

Hard Shell Flight Case

Product code:
00001234

The wheeled hard outer shell flight case is designed to offer maximum protection, ease of use, and mobility for the HystAR Pro system and its instruments. With its durable construction, secure latching mechanisms, and user-friendly features like the custom foam inserts and drop-down ramp, this flight case ensures safe and efficient transportation of the system and associated instruments.

- Wheeled hard outer shell flight case with custom fitted foam inserts
- 5-ply, phenolic bond marine plywood, 8mm thickness
- Fixed reinforced galvanised steel edging to all sides
- 4 x butterfly recessed galvanised steel latches
- 4 x recessed galvanised steel handles
- Fixed internal drop down ramp
- Equipped with 4 x 100 mm blue industrial style wheels (2 x with brakes)


TOTUM

Totum mobile direct procedural skills training

The Totum Mobile App is a revolutionary tool that transforms procedural skills training and assessment through digitisation and remote access. Its features enable enhanced efficiency, effectiveness, and collaboration in the education and evaluation of procedural skills.

With the Totum Mobile App, learners can conveniently record their procedural training sessions using their mobile phones. This flexibility allows them to capture their practice sessions from any location, eliminating the need for physical presence in a specific training facility. The recorded videos can be securely stored and easily shared with instructors or evaluators for feedback and assessment.

One of the significant advantages of the Totum Mobile App is the ability to receive feedback remotely. Learners can submit their recorded procedures to instructors or mentors, who can review the videos and provide valuable feedback. This remote feedback mechanism saves time, reduces logistical challenges, and enables more frequent and efficient evaluations.

Totum - Digitising the learning of procedural skills

With the Totum Mobile App, direct procedural skills training can now be recorded, shared, and assessed from any location. Totum mobile allows the digitization of any procedural skills trainer, allowing programmes to fast track their digitalisation of procedural skills teaching and assessment.

The user's mobile phone is mounted above task trainers such as the Inovus Basic Surgical Skills Base. The phone records procedures, which can then be reviewed and assessed in the Totum web application.

Remote learning and certification

Powered by Totum for purposeful practice

Totum's video capture and fdebrief feature allows users to review their performance and receive remote coaching from connected mentors. Mentors and examiners can issue certificates of competence directly through the Totum portal.

By linking with the Totum platform, the app allows over 30 direct procedural skills to be assessed remotely by trainers. In this way coaching can be closely focused on the individual's technique and specific areas for improvement.

The Totum Mobile App can be used to capture training sessions on any brand of procedural skills trainer by setting the mobile phone up in its cradle and focusing the phone's camera on the skills trainer. Procedural videos are captured and aggregated in Totum, allowing programs to easily and cost-effectively digitise their procedural skills learning, and assessment.

Key features of Totum

- Designed for use with iOS and Android devices
- Recorded procedure simulations stored, managed, and available to share remotely
- Procedures categorised by skill type, making them easily retrievable by mentors and peers for review and assessment
- Create certificate templates specific to your programme and issue these within Totum
- Expand the capacity of your skills lab by delivering remote skills training and assessment

Totum mobile licence

Product code:
00001589

TOTUM

To learn more about the complete Totum ecosystem of connected surgical training, visit **www.inovus.org**

Basic Surgical Skills

Tabula base

Product code:
00000743

- Advanced laparoscopic skills & basic surgical skills training
- Perform knot tying and tying at depth
- Ideal for institutions performing basic surgical skills training

Basic surgical skills base

Product code:
00000651

Affordable and realistic platform for teaching Basic Surgical Skills
Designed alongside senior surgical educators
Highly realistic incision and suturing skin pads
Perform deep and superficial wound closure
The Inovus Medical BSS base allows the following skills to be practised:

- surgical hand ties
- surgical instrument ties
- tying at depth
- basic skin incision
- suturing
- I&D of abscess
- drainage of cyst
- wide local excision of skin lesion with wound closure

TOTUM package

Product code:
00001461

The Totum package includes:

- surgical hand ties
- surgical instrument ties
- tying at depth
- basic skin incision
- suturing
- I&D of abscess
- drainage of cyst
- wide local excision of skin lesion with wound closure
- suturing instrument kit
- tripod
- mobile phone app subscription

Basic Surgical Skills Accessories

Basic surgical skills suturing refill

Product code:
00001432

- Refill for the incision and suturing pad on the BSS base
- Designed specifically for use with the Inovus Medical BSS base
- Tissue under tension when incised
- Reusable

Basic surgical skills abscess refill

Product code:
00001406

- Refill for the incision and suturing pad on the BSS base
- Designed specifically for use with the Inovus Medical BSS base
- Realistic training on abscess I&D, cyst drainage, and wide local excision of a skin lesion
- Single use product must be replaced after use

Totum package tripod replacement

Product code:
00001462

Totum package suturing kit replacemer

Product code:
00001464

*Mobile phone not included

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Surgical Training Remastered

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