

# PRECISION IN EVERY MOTION

## mizzo

Endo 4000

Advanced Surgical Robotic System



# GLOBAL MED-TECH **HUB FOR HIGH QUALITY,** NEXT GENERATION **TECHNOLOGIES**

## **CORE OBJECTIVE**

To develop, manufacture & distribute clinically relevant, state-of-the-art & best-in-the class products to alleviate human suffering & improve quality of life.

Cardiovascular | Orthopedics | Endo-Surgery | In-Vitro Diagnostics  
ENT | Medical Robotics | Cell & Gene Therapy



# Our Vision: Transforming Surgery



## **Enhanced Patient Outcomes**

Better surgical results for all



## **Unparalleled Precision**

State-of-the-art robotic control



## **Universal Accessibility**

Quality care for everyone, everywhere



Welcome to Merai – Advancing Healthcare with AI and Robotics.

At Merai, we push the boundaries of technology to enhance patient care. Our expert team develops cutting-edge robotic systems and AI-driven diagnostics, improving outcomes and efficiency for medical professionals.

Join us on our journey as we shape the future of healthcare.

Merai – Technology. Innovation. Compassion.

**35 Merai**  
Subsidiaries

**12 Academies**  
Globally



**13500+**  
EMPLOYEES

**250+**  
PRODUCTS

**158+**  
COUNTRIES

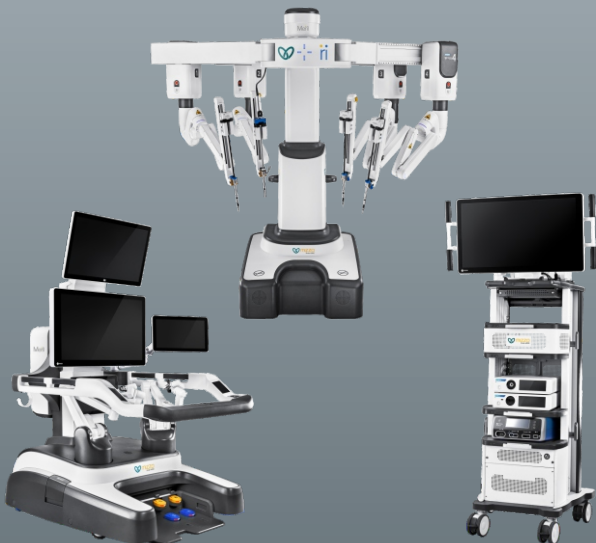


# MIZZO Endo 4000

## Advanced Surgical Robotic System

Step into the future of robotic-assisted surgery with Mizzo Endo 4000 a cutting-edge system engineered for unmatched precision, progress, and possibilities. With its open console, versatile arm cart, and universal vision cart, it elevates surgeon control, OR integration, and patient outcomes.

- Open Console Design
- Pre-surgery AI Planning
- Intraoperative Training
- Essential and Advanced Instrumentation
- Universal Vision Cart



# Open-Multiple Screen 3D HD Surgeon Console



# Advantages

## Extend the reach of surgeons



3D HD magnified view



User-friendly master-slave operation



Flexible surgical instruments



Extend the hand-eye limit of surgeons



## Prolong The Professional Life of Surgeons



The ergonomic design is optimized to greatly enhance surgeon's comfort and minimize fatigue during procedures.



Intelligent identification and filtering of tremors to enhance the precision of operations.



## Flexibility and Versatility



Complementary to minimally invasive surgery, Equipment is engineered for an integrated 3D-4K camera processing unit, with options for fluorescence-assisted systems and other energy platforms. intraoperative devices such as US, etc.



# Improve Surgical Accuracy and Comfort

## Multi-modal Image Navigation

Advanced imaging with 3D reconstruction, ultrasound, AI fusion, and remote support for precise decisions.



## Accurate and Safe Operating System

The 1:1 to 10:1 motion ratio ensures precise wrist control in microsurgeries, with auto-locking for safety.

## User Friendly Open Console Design

The open console design reduces strain, enhancing comfort and ergonomics during prolonged procedures.



# Flexible and Efficient Collaboration and Teaching

## Intra Operative Teaching Real-time Interaction

The open console fosters seamless collaboration and real-time observation, enhancing training, skill development, and surgical efficiency.



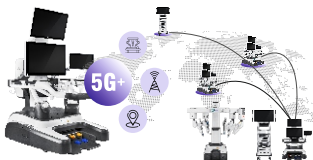
## Surgeon Independence & Optimized Processes

The integrated ValleyLab FX8 ensures precise energy control and easy preset switching, enhancing surgeon autonomy and workflow.



## Remote Surgery System\*

Remote surgery system facilitates real-time interactive teaching, expert guidance, and multidisciplinary collaboration, enhancing surgical precision and decision-making.



# Multi-platform Supporting System

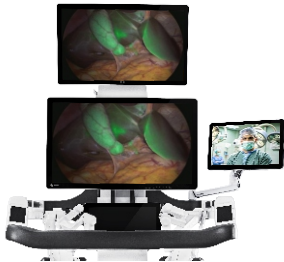
## Simulation Training System

Advanced training methods and a user-centric system drive rapid skill development, with tailored multi-stage courses enhancing learning efficiency.



## Modular Endoscopic Imaging System and Energy System\*\*

3D HD displays fluorescence and surgical field images simultaneously, with automatic luminance adjustment. The endoscopic imaging system is capable of supporting various surgical procedures, thereby improving equipment utilization.



## Digital Ecosystem\*

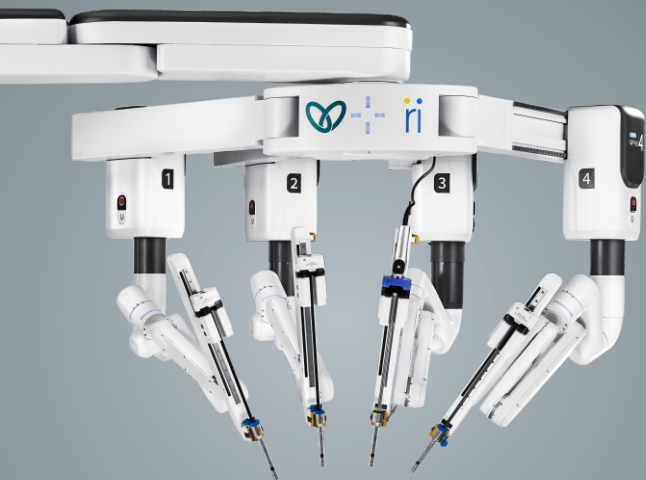
Intraoperative marking and cloud-stored videos support review, data analysis, and skill development, enhancing surgical learning and outcomes.



\* feature under development | \*\* Optional



# Arm Cart



Precision | Access | Efficiency

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# Precise

Arm control screen is equipped with user-friendly interface enabling swift arm positioning and accurate set up.



# Seamless

Optimized arm cart positioning to ensure seamless maneuverability and prevent collisions during surgery.

# Accessibility

Extensive boom rotation range for enhanced access during complex surgical procedures.



# Simplicity

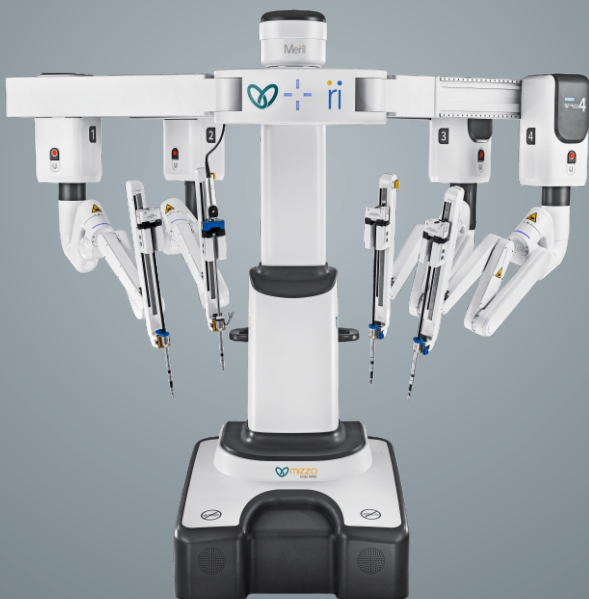
Simpler port placement and arm docking.

# Ergonomics

Surgeons can effortlessly navigate multiple quadrants, enabling them to perform a diverse range of minimally invasive procedures with enhanced precision and freedom.

# Details Un-veiled

Engineered to support procedures across a wide range of specialties with more anatomical access.



# Vision Cart



Universal

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Advanced

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Clarity

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# Energy

ValleyLab FX8 Generator delivers precise monopolar and bipolar energy. Integrated with ultrasonic system for hemostatic dissection and/or tissue coagulation.



## Universal Use

Suitable for open/lap and RAS maximizing the system's utilization within the hospital.

## Real-time Monitoring

The system information display screen shows the surgical field and guidance, synced with the surgeon's console.





32" 3D-HD display  
for ultra clear image  
display

3D-4K camera control unit

Electrosurgical Unit:  
ValleyLab FX8 paired  
with Ultrasonic System

# Instrumentation and Accessories



Flexibility | Dexterity | Reach

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# Essential and Advanced Instrumentation

Robotic instruments offer enhanced flexibility and a wider range of motion than natural movements, enabling precise, hand-like control in minimally invasive surgery.

## Essential

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### **Monopolar Curved Scissors**

Urology | Gynaecology | Oncology



### **Large Permanent Cautery Hook**

Thoracic surgery | general surgery



### **Monopolar Straighten Scissors**

Urology | Hepatobiliary | Oncology



### **Small Permanent Cautery Hook**

Thoracic surgery | Hepatobiliary



### **Maryland Bipolar Forceps**

General Surgery | Gynaecology | Oncology



### **Fenestrated Bipolar Forceps**

Urology | Gynaecology | Thoracic Surgery  
General surgery



### **Mini Non-invasive Tip Round Fenestrated Bipolar Graspers**

Urology | Gynaecology | Thoracic Surgery  
General surgery



### **Cadiere Forceps**

Urology | Gynaecology | Thoracic surgery  
General surgery



### **Fenestrated Forceps**

Urology | Gynaecology



### **Tip Up Double Fenestrated Grasper**

General surgery | Gynecology

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## Double Fenestrated Grasper

General Surgery | Gynaecology

\*Feature  
Under  
Development

## Teneculum Forceps\*

General Surgery | Gynaecology  
Oncology | Urology



## Large Needle Driver

Urology | Gynaecology | Thoracic Surgery  
General surgery | Oncology



## Small Needle Driver

Urology | Gynaecology | Thoracic Surgery  
General surgery | Oncology



**Disposable Ultrasound Soft Tissue Scalpel**

Urology | Gynaecology | Thoracic Surgery  
General surgery



**Curved Dissector**

Urology | General Surgery



\*Feature  
Under  
Development

**Vessel Sealer\***

General Surgery | Gynecology | Urology  
Colorectal | Bariatric Surgery



\*Feature  
Under  
Development

**Clip Applicators\***

General Surgery | Gynecology  
Urologic Surgery | Hepatobiliary



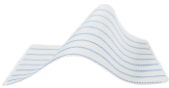
\*Feature  
Under  
Development

**Stapling\***

General Surgery | Gynecology | Colorectal  
Bariatric Surgery

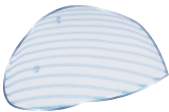
# Meril Hernia Repair Solutions

Superior Barrier  
Maximum Protection

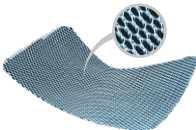


An Intraperitoneal Mesh  
**MERINEUM™ MESH**  
Tissue Separating Dual Layer Mesh  
Polylactide-caprolactone / Polypropylene Mesh

Meticulously Mimics  
the Inguinal Anatomy



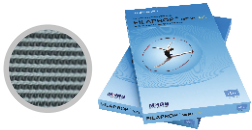
**FILAPROP™ 3D MESH**  
Polypropylene Anatomical Mesh



**MERIGROW™ MESH**  
Polypropylene Macroporous Light Weight Mesh



**FILAPROP™ MESH**  
Polypropylene



**FILAPROP™ MESH Soft**  
Polypropylene Soft

Empower Your Fixation with Precision: Unleash the  
Potential of Mesh fixation Technology



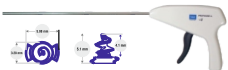
**i-Tack™ A**

Poly (Lactide-co-glycolide)  
Powered Absorbable Mesh Fixation Device  
5mm For Laparoscopic Hernia Repair



**i-Tack™ N**

Titanium  
Powered Non Absorbable Mesh Fixation  
Device 5mm For Laparoscopic Hernia Repair



1. Trigger 2. Handle 3. Shaft

Absorbable Mesh Fixation Device  
**PROFOUND™ A**  
Poly(lactide-co-glycolide)



1. Trigger 2. Handle 3. Shaft

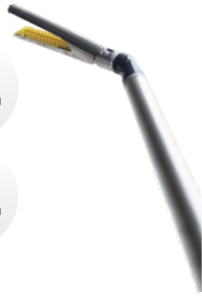
Non-Absorbable Mesh Fixation Device  
**PROFOUND™ N**  
Titanium

# Mechanical Closure Devices



## RELOADS WITH OPEN STAPLE LEG LENGTH

amazingly  
agile



Trio™ Reloads



MeSic™  
Compact Ultrasonic System



Monik™ | Trocar  
The Series of Features



Eliro | Trocar  
Disposable Bladeless Trocar

# A Comprehensive Range of Sutures

(Customized Solutions for Laparoscopic and Robotic Assisted Surgeries)



**MITSU AB™**  
Antibacterial with Triclosan



**PINION™**  
Knotless Suture



Distinguished strength for life long support

**FILAPROP™**  
Polypropylene Suture



Excellent handling characteristics with secured wound closure

**FILASILK™**  
Silk Suture



Enduring Strength for long-term wound support

**FILAXYN™**  
Polydioxanone Suture



A Reliable choice for scarless Sub-cuticular suturing

**FILAPRON™**  
Polyglactaprone 25 Suture



**MERICRON XL™**  
Polyester Suture



**FILAMIDE™**  
Polyamide (Nylon) Suture



**MITSU™**  
Polyglactin 910 Suture



**MITSU FST™**  
Polyglactin 910 Fast Suture



# Ligating Clips

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**MIRUS™**  
Ligating Clip | Titanium



**MIRUS™**  
Ligating Clip | Polymer



# Meril Biosurgical Solutions

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Absorbable Hemostat  
**MERIZELLE™**  
Oxidized Regenerated Cellulose



**STANDARD**  
Fine Weave of ORC  
12 Units



**FIBER**  
Tufts of Soft, Light Weight ORC  
12 Units



**WOVEN**  
Denser Weave of ORC for Heavier Bleeding  
12 Units

Topical Skin Adhesive  
**MERIGLU™**  
High Viscosity Tissue Adhesive  
N-Butyl Cyanoacrylate



**WE GOT YOU  
GLUED to the  
best outcomes.**

# Comprehensive Training Pathway

## Hands-On Lab Training

To ensure seamless adoption of Mizzo Endo 4000, we offer a dedicated 2-day lab training program:

**Day 1:** Surgeon console training on a high-fidelity simulator and bedside team training on the system.

**Day 2:** Wet lab training on animal tissue to build practical expertise.



### KOL-Supported Cases

Gain valuable insights and guidance from Key Opinion Leaders during supported cases, designed to boost team confidence and mastery.

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### Extended Clinical Support

We provide a comprehensive clinical support program, ensuring ongoing assistance and continuous knowledge enhancement for optimal outcomes with Mizzo Endo 4000.



# Training and Education

## Transforming Patient Care Through **CLINICAL EDUCATION**

Dedicated live case transmissions for  
Cardio, Ortho, Surgery on regular basis

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Targeted 10,000 HCP for educational programs

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10,000+ doctors participated

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Large auditorium, 750+ seating capacity

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3000+ employees trained



# Service Support

We are committed to ensuring your surgical robotic system operates seamlessly, allowing you to focus on delivering exceptional patient care.

## Preventive Maintenance

Scheduled maintenance ensures your system remains in optimal condition, minimizing downtime and maintaining consistent, reliable performance.

## Training & Education

We offer comprehensive training programs to ensure your surgical and technical teams are fully proficient in operating the system with confidence and efficiency.

## Extended Clinical Support

An on-site clinical application specialist, backed by a comprehensive support program, delivers continuous assistance and ongoing knowledge development to maximize outcomes with the Mizzo Endo 4000.



# Multiple Surgical Applications



## Urology Surgery

1. Prostatectomy
2. Nephrectomy
3. Cystectomy
4. Adrenalectomy
5. Ureteric reimplantation and countless others



## Gynaecology Surgery

1. Hysterectomy
2. Vesicovaginal Fistula
3. Sacrocolpopexy
4. Vaginoplasty with bowel reposition
5. Myomectomy and countless others



## General Surgery

1. Bariatric surgery
2. Hernias
3. Gastrectomy
4. Nissen Fundoplication
5. Pancreatic duodenectomy (Whipple) and countless others



## Thoracic Surgery

1. Thymectomy
2. Lobectomy
3. Esophagectomy
4. Pneumonectomy
5. Mediastinal Cyst and countless others



## GI Surgery

1. Gastrojejunostomy
2. Lower Anterior Resection
3. Gastric Bypass
4. Abdominoperineal Resection & countless others



## Onco Surgery

All radical procedures of the above anatomies



## Head Neck Surgery

1. TORS
2. Neck resection
3. Thyroidectomy and countless others

**100+ Types of Robotic**  
Assisted Surgeries are Possible



# mizzo

## Endo 4000



### Disclaimer

Meril reserves the right to update design, packaging, specifications and options without prior notice. For the latest details, please contact your local Meril sales representative.

Note: Technical data may vary within defined tolerances, and reproduced images may lose some detail. Product availability differs by country, and future availability cannot be guaranteed.

Patient outcomes vary based on factors like patient condition, disease and surgeon experience.

The owner of the Meril's Mizzo Endo 4000 must ensure proper training, supervision and adherence to cleaning, disinfection, and sterilization guidelines per the User's Manual. Use in clinical settings requires verification of proper processing.

The ValleyLab™ FX8 energy platform, powered by intelligent TissueFect™ technology, is a trademarked product of Medtronic. All trademarks, product names, and logos are the property of Medtronic and its affiliates.