

Meril

More to Life



By Meril

A platform that combines the advantages of robotics with the benefit of Handheld instruments. Delivering mobility, ergonomics, and broad adaption ability in a handshake.

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# Meril Endo-Surgery

In line with the objective to design and develop novel, clinically relevant, state-of-art surgical devices, Meril is expanding its endo-surgery franchise. At Meril, we strive to create and develop products through innovative thinking, cutting edge technologies and collaboration with medical professionals and healthcare organizations, with an aim to identify clinical needs and translate them into market-leading solutions.

Meril's vision is to become a 'one-stop' solution for surgeons by providing them with an extensive product portfolio comprising absorbable & non-absorbable surgical sutures, tissue sealants, absorbable hemostats, hernia repair meshes, intra uterine devices, energy devices and mechanical closure devices.





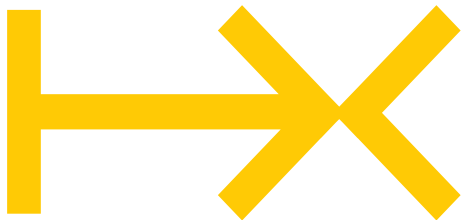
# The **HANDX**<sup>®</sup>

## YOUR HANDHELD SOLUTION

Robust yet compact and lightweight, HandX™ is a PLATFORM that combines the advantages of ROBOTIC with the benefit of Handheld instruments.

**HandX<sup>®</sup> empowers the surgeon's freedom, flexibility, proximity, control and range.**

- FDA cleared
- CE marked (MDR)
- A handheld surgical solution that combines the dexterity of robotic surgery with the benefits of an ergonomic modular handheld platform
- Potentially broadens the surgeon's MIS practice, by ensuring free and natural maneuverability, on the OT table.
- Streamlines the surgeon's natural hand motions into fluid movements inside the patient's anatomy
- Easy to use, powerful tool that is lightweight and natural





# COST EFFECTIVE

## **SIMPLIFIED, MODULAR, COST EFFECTIVE**

HandX<sup>®</sup> combines the advantages of robotics with the benefits of advanced handheld innovation for medical centers of any size and scope

- Suitable for any hospital surgical environment
- Modular technology platform
- Minimal set-up time
- No workflow disruption
- No maintenance Flexible economic model

- Short learning curve, designed to match and empower surgical teams of any skill level in any hospital OR
- Small OR footprint
- Enabler for converting Open, Lap surgeries to MIS
- High mobility and enabler for fast procedure turnover

# OPTIMAL FIT



- › Ergonomic comfort
- › Robust digital capacity in a lightweight handheld device
- › Accommodates various hand sizes
- › Ambidextrous
- › Natural grip



## KEEPING FLEXIBILITY AT HAND

HandX<sup>®</sup> easily adjusts to comfortably fit the grip of the surgeon's hand, it simply extends the human hand into the targeted areas, used with ease and free mobility.

# OPERATING SYSTEM

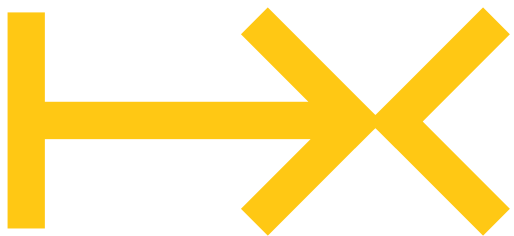
- › Compatible with regular 5 mm trocars
- › Software driven
- › Interfaces with rigid and flexible instruments
- › Support multiple end effectors
- › Fully articulated with 7 D O F +1 grasping .
- › Makes the procedure plan less sensitive to trocar position
- › Allows easy instrument replacement during surgery

## MODULAR AND FLEXIBLE SYSTEM

HandX™ facilitates complex MIS maneuvering, allowing efficient articulation, and smooth access to technically challenging areas.



**Xtend**  
Yourself  
Reach New Destinations



## PERSONALIZATION - EASE OF CONTROL



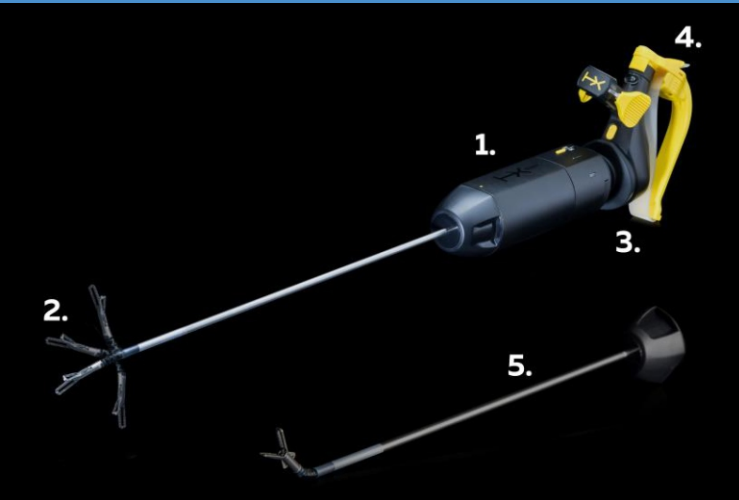
## DIRECT EXPERIENCE, VIRTUOSIC ARTICULATION, TAILORED TO THE SURGEON AND PROCEDURE

By scaling the surgeon's motions and forces, HandX™ imitates the surgeon's natural hand movements for full control.

- › Enables complex procedures
- › The articulation of the device allows flexible tissue access
- › Jaw movements mimic natural finger gestures
- › Up to 540 degrees jaw rotation, surgeon driven and adjustable
- › Personalized technology enables D O F customization
- › Scalable D O F enables customization of the performance envelope
- › Suitable for a wide variety of surgical approach



# TECHNICAL SPECIFICATION



## HandX technical information

1. Small drive unit supporting with additional motorized degrees of freedom over the conventional laproscopic instrument.
2. Wide range of efficient articulation instrument tips.
  - 3. > Control interface allowing scalable motion and forces.
  - 4. > Can interface with different instruments (rigid/flexible)
4. > A single control interface for all product portfolio
  - 5. > Natural ergonomics fits all hand sizes, no need for manual force
  - 6. > Single operation button
5. Disposable detachable tool

**HAND**  
**TEND**  
Yourself

# TECHNICAL SPECIFICATION

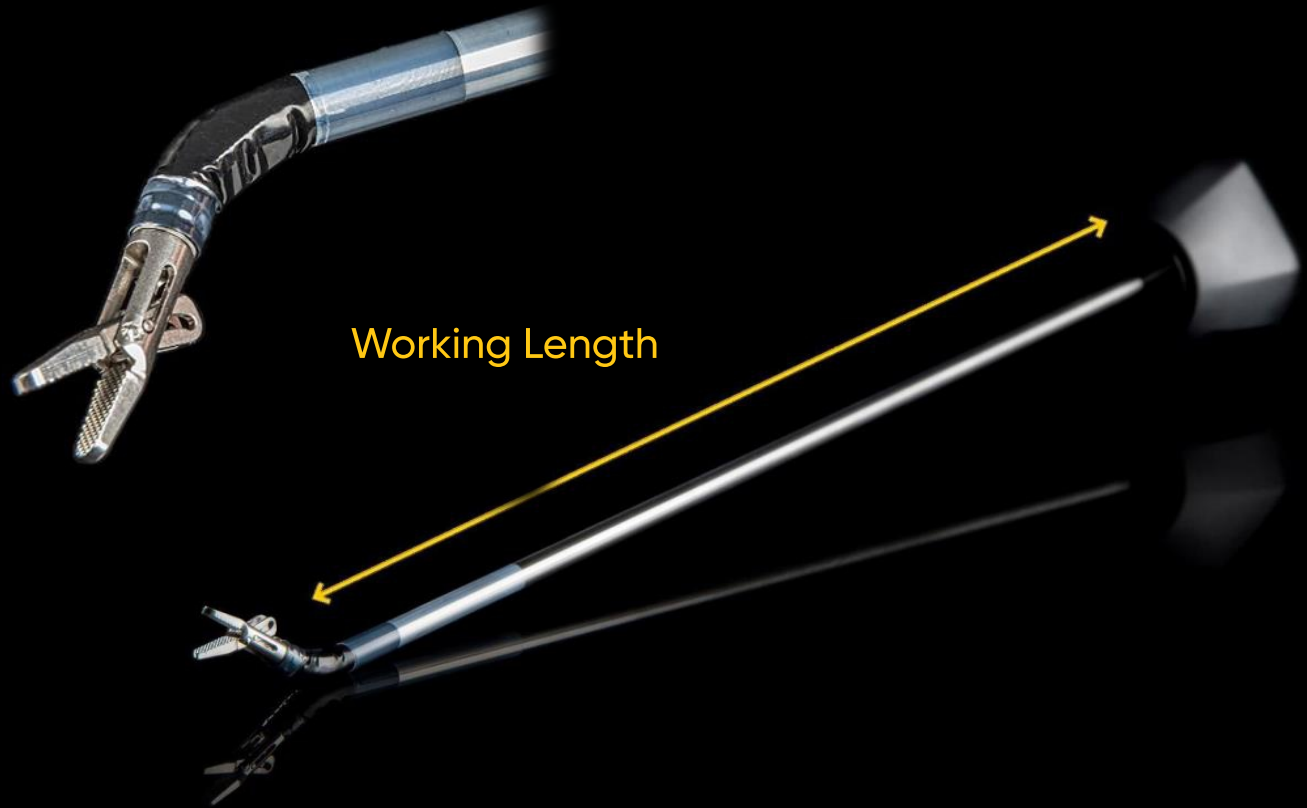
Description	End effector length	Working Length
<b>HandX® set Handpiece x 2, Power adapter x2</b>		
Instrument - Monopolar Hook	Active electrode 6 [mm]	327 [mm]
Instrument - Monopolar Spatula	Active electrode 7 [mm]	328 [mm]
Instrument - Monopolar Scissors	9 [mm]	345 [mm]
Instrument - Needle Holder	18 [mm]	350 [mm]
Instrument - Fenestrated Grasper	30 [mm]	362 [mm]
Instrument - Self Righting Needle Holder	16 [mm]	348 [mm]
Disposables Set (Cable, Arc, Pads)		



# HANDPIECE



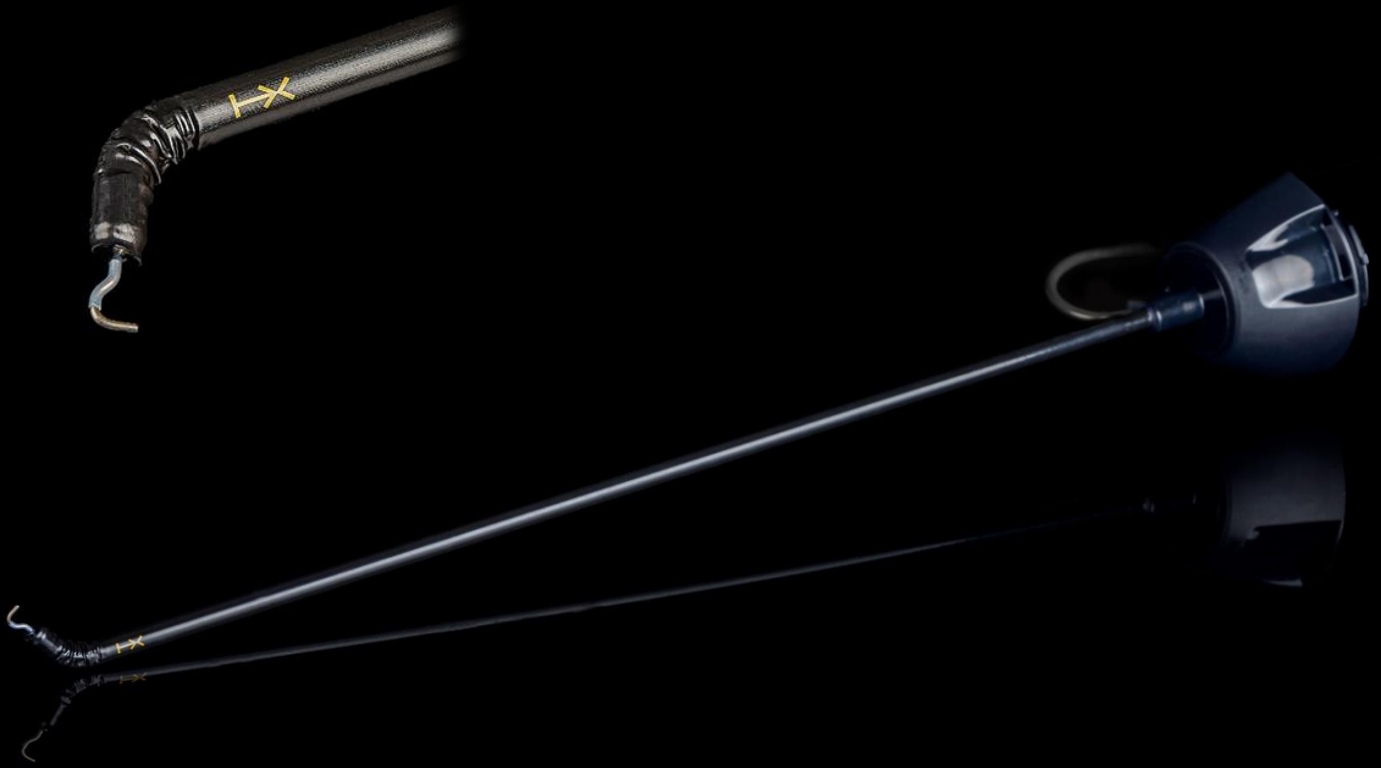
# NEEDLE HOLDER



# FENESTRATED GRASPER



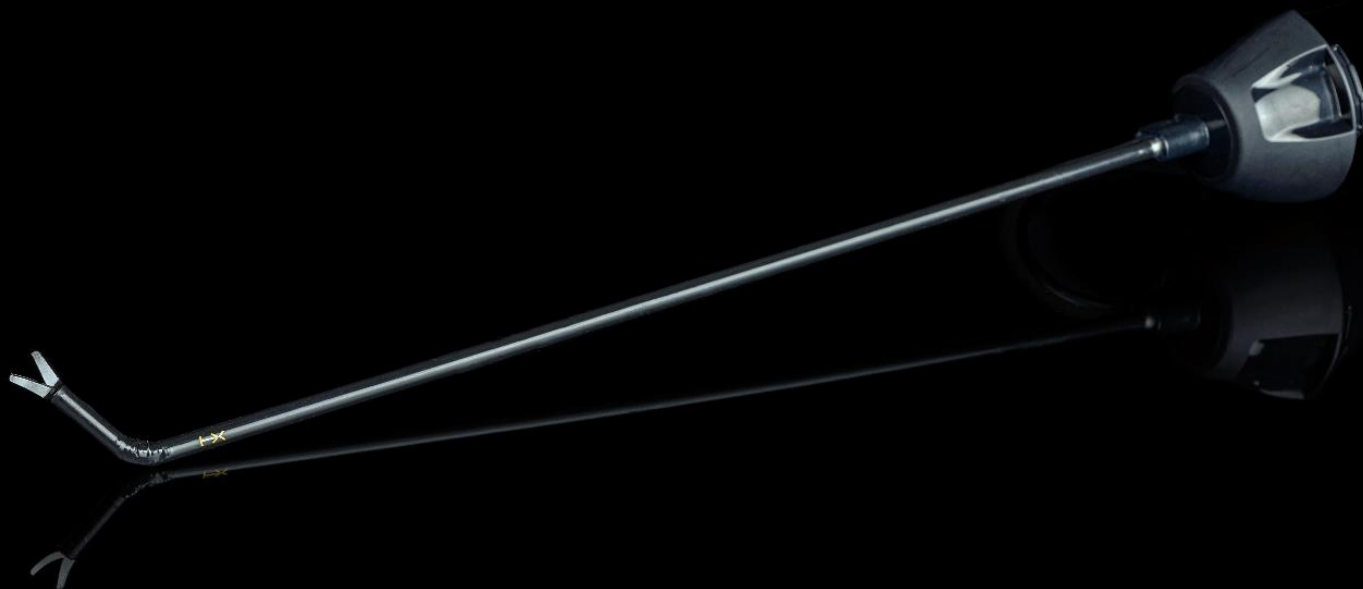
# MONOPOLAR HOOK



# MONOPOLAR SPATULA

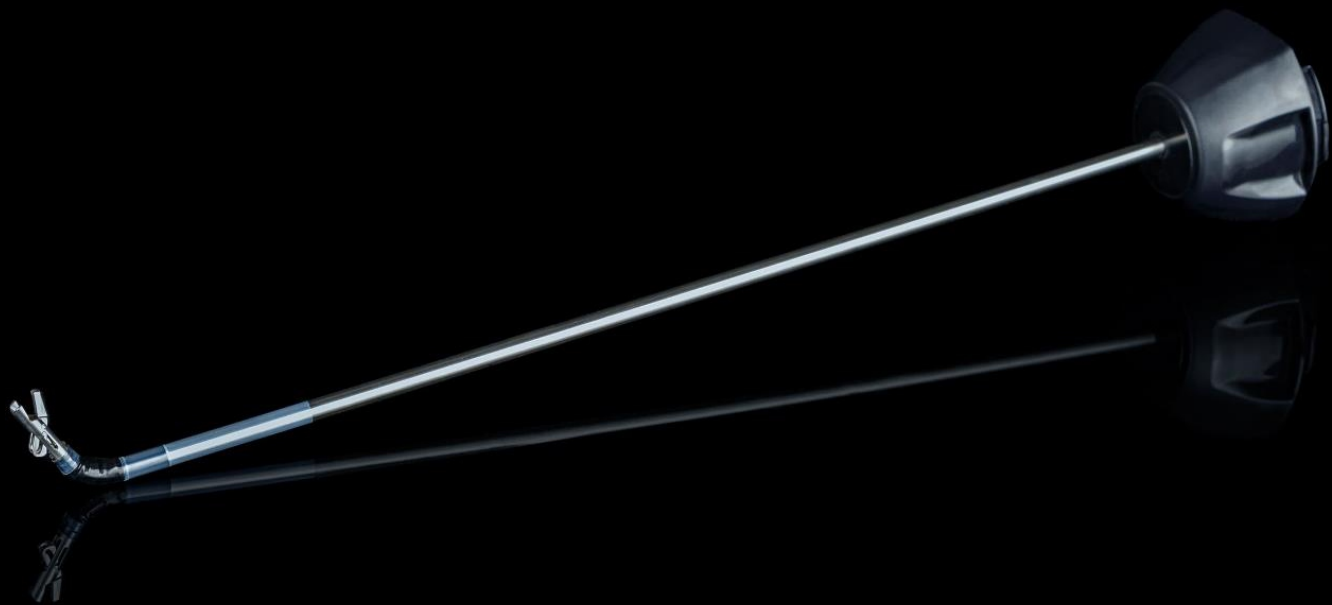


# MONOPOLAR SCISSORS





# SELF RIGHTING NEEDLE HOLDER



# DISPOSABLE SET



CAN **U** HAND **X** IT?

Meril

More to Life

# We Invite You To

# Xtend Yourself



## Disclaimer

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www.merillife.com

#### **Corporate Headquarters, Vapi**

Meril Endo-Surgery Pvt. Ltd.  
E1-E3, Meril Park,  
Survey No.135/2/B & 174/2  
Muktanand Marg, Chala,  
Vapi - 396 191, Gujarat, India.  
T: +91 260 3052 100  
F: +91 260 3052 125  
E: endosurgery@merillife.com

#### **International Sales & Marketing**

Meril Endo-Surgery Pvt. Ltd.  
612, B-Wing, Bonanza,  
Sahar Plaza, Andheri East,  
Mumbai 400 059  
Maharashtra, India.  
T: +91 22 3935 0700  
F: +91 22 4047 9717  
E: askinfo@merillife.com

#### **India Sales & Marketing**

Meril Endo-Surgery Pvt. Ltd.  
601, Midas, Sahar Plaza J.B. Nagar,  
Andheri East, Mumbai 400 059  
Maharashtra, India.  
T: +91 22 307 32400

#### **Meril South America**

DOC MED LTDA,  
Sao Paulo, Brazil.  
1079-Cep: 04077-003 - Moema  
T/F: +55 11 3624 5935/6

#### **Meril GmbH**

Bornheimer Strasse 135 - 137  
D-53119 Bonn, Germany.  
T/F: +49 228 7100 4000/1

#### **Meril Tibbi Cihazlar**

İmalat Ve Ticaret A. S.  
6, Mimar sinan Mah.,  
Çavusbasi Cad. Özde Sok.  
Aydin Eksi Is Merkezi Kat:1  
Cekmekoy/Istanbul, Turkey.  
T: +90 53 2272 5172

#### **Meril South Africa**

Meril SA Pty Ltd  
Unit 7, Stoney Ridge Office Park  
Cnr Witkoppen Rds & Waterford Place  
Paulshof, Sandton  
Johannesburg  
T: +27 11 465 2049  
F: 086 471 7941