



Advanced . Affordable . Accessible

Robotic Surgery



MADE IN INDIA, FOR THE WORLD

Benefits of SSI MANTRA ROBOTIC SURGERY



Fundamental benefits of Robotic Surgery: SSI Mantra Robotic Surgery facilitates smaller fingertip-sized incisions, resulting in reduced blood loss, minimal scarring, faster recovery times, and shorter hospital stays for patients, significantly enhancing the overall patient experience and outcomes.



Economical Operation and Maintenance: SSI Mantra offers a cost-effective solution for robotic surgery, reducing consumable costs and increasing uptime, making it more accessible for hospitals.



Higher Patient Volumes and Adoption Rates: SS Innovations' vision promotes the widespread adoption of robotic surgery, increasing patient volumes and positively impacting the healthcare industry.



Comprehensive Surgical Ecosystem: SSI Mantra, SSI Mudra and SSI Maya, are deployed under the SSI Sutra program to provide healthcare networks and professionals with an integrated surgical robotics ecosystem that enhances successful patient outcomes.



Made in India System: As a one-of-a-kind, locally developed technology, SSI Mantra empowers Indian doctors to add robotic surgery to their skillset, boosting the nation's healthcare capabilities.



Versatility of Technologies: SSI Mantra's compatibility with various technologies enhances the surgical experience, enabling surgeons to perform a wide range of procedures with precision and efficiency.



Rigorously Tested and Expert-backed Design: SSI Mantra is a meticulously tested system, developed with valuable input from world-renowned doctors and skilled engineers. Its ergonomic and future-forward design caters to the needs of surgeons, surgical staff, and patients, ensuring a seamless surgical experience.



The SSI Mantra Surgical Robotic System offers an Advanced, Accessible, and Affordable solution for the healthcare community. Our cost-effective design enables a broader range of hospitals to adopt robotic surgery, while cutting-edge technology ensures precision, efficiency, and versatility across various surgical specialties. Our comprehensive robotic surgery solution is poised to revolutionize patient care and redefine surgical outcomes.



Surgeon Command Center

Ergonomic
Open Faced Console

32 Inch 3D 4K Monitor
for True Depth View

24 Inch Touch Monitor
for System Controls

Surgeon-Friendly
Hand Controls

Head Tracking
Safety Feature

Advanced
Console Ergonomics



Patient Side Robotic Arm Carts

Modular
Robotic Carts

Freedom of
Patient Docking

3 / 4 / 5
Cart Connectivity

Absolute Stability
Parking Locks

Smaller Individual
Cart Footprint

Advanced
Touch Controls



Vision Cart

32 Inch 3D 4K Monitor
for OR Staff

OMNI 3D HD
Multimedia Recording

Articulating
3D Endoscope

Universal
Safety Features

Pre-Operative
Guidance Software

UPS
Battery Backup



SSI MUDRA

SSI Mudra endosurgical instruments, is designed to deliver precision and dexterity across multiple specialties. With over 30 different types of instruments, SSI Mudra enables surgeons to perform various procedures with enhanced control and accuracy. This versatile range of instruments ensures seamless integration with the SSI Mantra system, contributing to superior surgical performance and improved patient outcomes.

MONOPOLAR CAUTERY INSTRUMENTS

MONOPOLAR CURVED SCISSORS
CAUTERY HOOK
CAUTERY SPATULA

BIPOLAR CAUTERY INSTRUMENTS

MARYLAND BIPOLAR FORCEPS
FENESTRATED BIPOLAR FORCEPS

CLIP APPLIERS

SMALL CLIP APPLIER
MEDIUM HEM-O-LOK™ CLIP APPLIER
LARGE HEM-O-LOK™ CLIP APPLIER

NEEDLE DRIVERS

LARGE NEEDLE DRIVER
MEGA NEEDLE DRIVER

GRASPERS

GRASPING FORCEPS
TENACULUM FORCEPS
LONG TIP FORCEPS
GRASPING RETRACTOR

SPECIALITY INSTRUMENTS

DeBAKEY FORCEPS
BLACK DIAMOND FORCEPS

SCISSORS

POTTS SCISSORS
ROUND TIP SCISSORS

ON-GOING DEVELOPMENT

MULTI-FIRE CLIP APPLIER
NADI - ANASTOMOTIC CONNECTOR
RESANO FORCEPS
SeVANA LARGE NEEDLE DRIVER - SUTURE CUTTER
15° SCALPEL BLADE
PADDLE BLADE
CADIERE FORCEPS
COBRA FORCEPS
CARDIAC PROBE GRASPER
DUAL BLADE RETRACTOR
ATRIAL RETRACTOR - SHORT RIGHT
SMALL GRASPING RETRACTOR
TIP-UP FENESTRATED RETRACTOR
MICRO BIPOLAR FORCEPS
CURVED BIPOLAR DISSECTOR
LONG BIPOLAR GRASPER
CARDIAC STABILIZER



NADI - AUTOMATED ANASTOMOTIC CONNECTOR

A miniaturized automated anastomotic connector, activated by a vascular surgeon or table-side team facilitates Coronary Anastomosis in a very efficient and reproducible way.



MULTI-FIRE CLIP APPLIER

A unique clip applier that eliminates the need to remove and reload the clip applying instrument, making clip application more efficient. Different sizes of clips shall be available based on the specific application.

**IMPROVE
CLINICAL
OUTCOMES
WITH
ADVANCED
DEXTERITY &
PRECISION
CONTROL**





SSI MAYA

SSI Maya mixed reality platform leverages innovative web3 technologies to offer immersive virtual and augmented reality experiences for pre- and intra-operative procedures. This pioneering solution supports training and mentoring of surgeons and surgical staff, fostering skill enhancement and elevating surgical outcomes.

INNOVATING SURGICAL TRAINING AND DIAGNOSTICS WITH MIXED REALITY TECHNOLOGIES



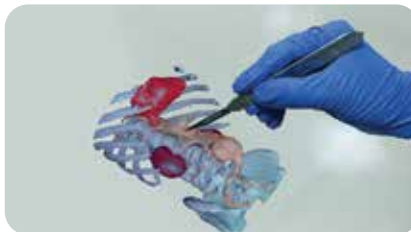
Holographic Anatomy

Adding an extra dimension to
Surgical Visualization



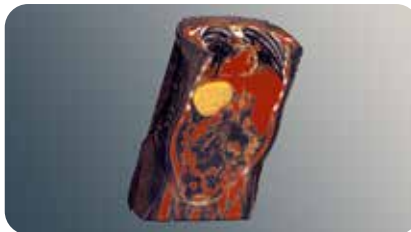
OR Tele-mentoring

Empowering Surgical
Collaboration and Proctoring
digitally



Virtual Surgical Training

Enhancing Robotic Surgery Skills
with Immersive procedures in
Virtual OR environments



AI DICOM

Artificial Intelligence Powered
DICOM Data Processing



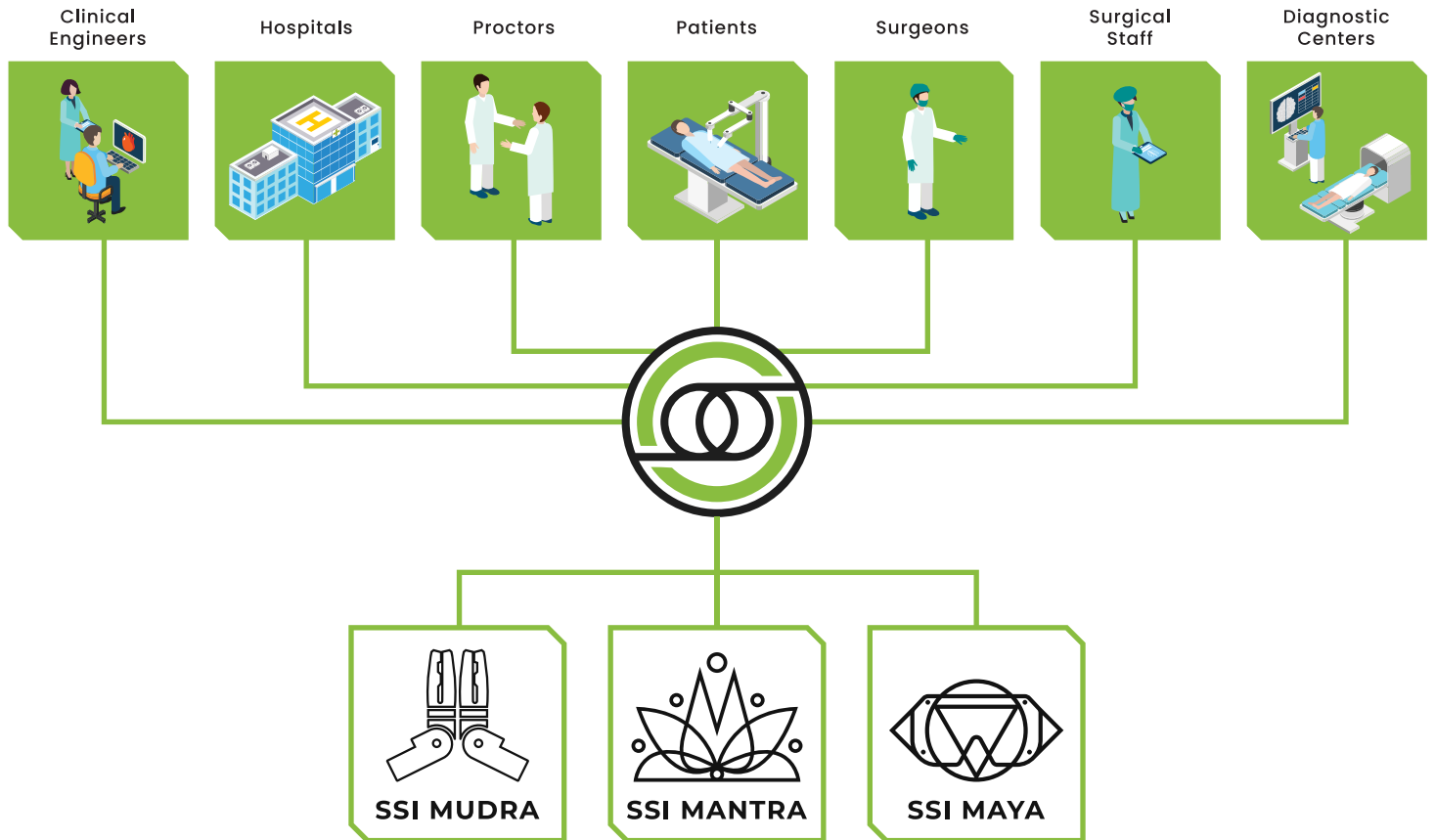
SSI Mixed Reality Headset

- Wide range of Mixed Reality healthcare applications for training, proctoring and surgical visualization
- 3D HD stereoscopic endoscope vision
- 6 DOF headtracking
- 106 degree FOV with pancake lenses
- Medical grade materials and standards
- Device Variants to accommodate surgeon ergonomics like on-board processing, microLED displays, Reality Overlay and more...



SSI SUTRA

SSI Sutra, is an all-inclusive robotic surgery ecosystem that integrates products such as SSI Mantra, SSI Mudra, and SSI Maya with hospitals, patients, surgeons, surgical staff, and clinical engineers. This unified network fosters efficient collaboration and leverages advanced technology to enhance the surgical experience, ultimately contributing to improved clinical outcomes for each patient.



Comprehensive Ecosystem

Connecting stakeholders of a healthcare system for a successful patient outcome.

Robotic Surgery Focus

Built around the state-of-the-art SSI Mantra surgical robotic system.

Optimizing Surgery

Aims to enhance robotic surgery in India and globally.

Collaboration

Brings together experts in surgery, technology, and engineering.

Improved Patient Outcomes

Patient centric design for higher robotic surgery adoptions and clinical success.

MULTI-SPECIALTY SURGICAL APPLICATIONS

The SSI Mantra Surgical Robotic System is designed to derive excellence in multispecialty clinical applications

CARDIAC

Beating Heart TECAB
(Single vessel, Multiple vessel)
IMA Harvesting
Coronary Anastomosis
Congenital Defects
Valve Repair and Replacement
Tumors
Ablation for Arrhythmias
Pericardial pathologies
LV Lead Implantation

THORACIC

Thymectomy
Esophagectomy
Pneumonectomy
Lobectomy
Mediastinal Resection
Pulmonary Wedge Resection

GENERAL SURGERY

Cholecystectomy
Nissen Fundoplication
Gastric Bypass
Gastrectomy
Colorectal
Hemicolectomy
Sigmoidectomy
Adrenalectomy
Appendectomy
Bowel Resection

UROLOGY

Prostatectomy
Nephrectomy
Partial-Nephrectomy
Cystectomy
Pelvic Lymphadenectomy
Pyeloplasty
Ureterectomy
Ureterolithotomy
Ureteral Implantation

GYNAECOLOGY

Hysterectomy
Myomectomy
Endometriosis Resection
Pelvic Lymphadenectomy
Sacrocolpopexy
Salpingo-Oophorectomy
Tubal Reanastomosis
Tubal Ligation
Vaginal Prolapse Repair

HEAD AND NECK

Radical Tonsillectomy
Tounge Base Resection
Hemi-Thyroidectomy
Total-Thyroidectomy
Supraglottic Laryngectomy
Neck Dissection

HOLISTIC TRAINING APPROACH

SSI Innovations' training approach includes didactic sessions, on-site and off-site training system, on-site proctoring and virtual lab training. Our technology allows for tele-mentoring using the latest high speed internet connectivity for increased efficiency and cost-effectiveness.



"THE VISIONARY, THE VISION AND THE BENEFICIARY"

The visionary, Sudhir Srivastava, MD, is a globally renowned Robotic Cardiac Surgeon leading a team of highly talented engineers and support staff in the development of the SSI Mantra system. The SSI team is aided by acclaimed robotic surgeons and highly experienced consultants from around the world. The committed and focused efforts have resulted in the affordable multi-arm SSI Mantra Surgical Robotic System that would benefit many more patients around the world to decentralize access and excellence.



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Disclaimer: Robotic Surgery is a type of medical procedure that incorporates robotic systems controlled by surgeons to operate on qualified patients. Not every patient may be eligible for robotic surgery. Selection of patients for robotic surgery is based on the patient's anatomy, physical and physiological characteristics, and ailment histories and under the consultation of the patient's attending physician. SS Innovations is not involved in any patient selection process. Surgical complications are common in every type of surgery, including robotic surgery. The complication may include but is not limited to injury to tissues and organs, conversion of minimally invasive surgery to open or laparoscopic procedures, or even death. Patients must consult with their doctors and research information on the risks and benefits associated with robotic surgery.

Disclaimer: The SSI MANTRA™ Surgical Robotic System is intended to be used by qualified and trained physicians in an operating room environment according to the specifications set forth by experienced professionals and representatives for the procedure. The SSI MANTRA™ Surgical Robotic System should be used only by surgeons trained and qualified by SS Innovations to demonstrate adequate robotic surgery skills to perform tasks associated with each procedure with this device. Training provided by SS Innovations is limited to using the SSI MANTRA™ Surgical Robotic System only and does not replace the necessary medical training and experience required to perform robotic surgery.

All pictures shown here are for illustration purposes only; the actual product may vary due to product enhancements.

Sudhir Srivastava Innovations Pvt. Ltd. and The SSI Mantra Surgical Robotic System are certified in ISO 13485:2016 medical device quality management and is authorized for sale by the The Central Drugs Standard Control Organisation (CDSCO) under Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India.