

## SPECIFICATION OF THE LASER MACHINE REQUIREMENT

### Dual wavelength laser unit

#### Technical Specifications

- Dual wavelength laser unit for treatment of varicose vein, hemorrhoid etc
- Machine should emit dual wavelength laser of 980nm and 1470nm
- Separately adjustable power output of 45 Watt (1470 nm / 15 Watt + 980 nm / 30 Watt)
- Aiming beam: 532 nm and 635 nm | Green 1mW, Red 4nW, user controlled intensity
- Should have multiple treatment modes which include but not limited to Continuous wave (CW), Pulse Mode and Derma mode)
- **Pulse duration /-break:** 0.01 – 60 sec / 0.01 – 60 sec
- **User Interface:** Touchscreen display for intuitive parameter control and preset procedures.
- **Cooling System:** Air-cooled system for efficient operation.
- **Power supply:** 110 – 240 VAC, 50 / 60 Hz, 450 VA
- **Should be light weight for easy carriage:** ideally below 10 Kg
- **Should be US FDA approved or CE marked**
- **Training:** Training to doctors, anesthesiologists, biomedical engineers and nurses must be provided

## Tumescent Infiltration Pump

### Technical Specifications

#### 1. Volumetric displacement

- Adjustable from **0–230ml/min.** providing precise control for infiltration needs.

#### 2. Maximum pressure with closed tube set

- Up to **2 bar**

#### 3. Power Supply:

- **100–240 V AC**, 50–60 Hz,

#### 4. Motor:

- High-performance, low-noise motor for consistent and reliable operation during long procedures.

#### 5. Control:

- Intuitive control panel with easy-to-read display for setting and monitoring flow rate and pressure.

#### 6. Operation Mode:

- Includes both manual adjustment and foot pedal for hands-free control.

#### 7. Tubing Compatibility:

- Compatible with standard infiltration tubing and cannulas used in tumescent procedures.

#### 8. Safety Features:

- Overpressure protection to prevent excessive delivery force.
- Automatic shutoff in case of malfunction or overpressure detection.

#### 9. Material:

- High-quality, medical-grade materials for durability and easy sterilization.

#### 10. Safety Standards:

- Certified to comply with international medical device standards, including CE marking and FDA approval.

#### 11. Training

- Training to doctors, anesthesiologists, biomedical engineers and nurses must be provided

## Robotic Smart Pullback Device Unit

to automatically pullout fiber during procedure, for efficient outcome.

### Technical Specifications

#### 1. Pulling speed

Adjustable speed of 0.5; 1.0; 1.5; 2.0 mm/s

#### 2. Fibers

- ELVeS Radial®, or equivalent
- ELVeS Radial 2ring® or equivalent
- ELVeS Radial® slim, or equivalent
- ELVeS Radial® 2ring slim or equivalent

#### 3. Power Supply

- 100–240 VAC, 50–60 Hz

#### 4. Safety Standards:

- Certified to comply with international medical device standards, including CE marking or US FDA approval.

#### 5. Training

- Training to doctors, anesthesiologists, biomedical engineers and nurses must be provided

### **1. Portable Scan Machine with Trolley**

### **2. Probes**

- Vascular Probe
- Soft Tissue Probe

### **3. Training**

- Application Training for Users
- Support Training for Biomedical Engineers

## Consumable Requirements

Accessories and Consumables for the following Procedures

	Details	No of Procedures for 3 months
1	Haemorrhoidectomy	60 cases
2	Ana Fistula	30 Cases
3	Pilonidal Sinus	30 Cases
4	Varicose Vein	20 Cases

Format for rates of the consumables and accessories required for the procedures

	Item Code No	Detail of the item	Qty	Rate
<b><u>Haemorrhoidectomy</u></b>				
			1	
			1	
			1	
<b><u>Ana Fistula</u></b>				
			1	
			1	
<b><u>Pilonidal Sinus</u></b>				
			1	
			1	
<b><u>Varicose Vein</u></b>				
			1	
			1	