

ENDOSAUBER ES Twin

- ✓ DUAL-SCOPE Washer
- ✓ Authorisation Security RFID Tag.
- ✓ RFID Endoscope Data Reader.
- ✓ Cleaning Data Bifurcation.
- ✓ Data Log Printer (Thermal Printer).
- ✓ USB Data Storage.
- ✓ Memory Backup Mode for Safe Cycle functions
- ✓ Cleaning With Water Rinse / Disinfectant / Enzymatic
- ✓ Compatible with Any Flexible Endoscope.
- ✓ Compatible With Any froth free Disinfectant.
- ✓ Can also be used with a SingleScope



Manufactured By

Endotech

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ENDOTECH

IN TOUCH WITH LIFE

Item Discription	Fully Automatic Dual Endoscope Washer
Quantity	One
Department	Endoscopy
Date	
Supplier	
Manufacturer	Endotech,103, Jaygopal Ind. Estate, B Parulekar Marg, Dadar (W), Mumbai- 400 028. Maharashtra (India)
Technical Specifications	
Model	Endosauber - ES TWIN (Dual Scope Automatic Endoscope Washer)
Number of Reprocessed Endoscopes	Max. 2 Endoscopes - simultaneously
Machine Designed for Use	Endoscope Washer - Table Top & Indoor Use only
Machine Dimensions	19" H x 27" W X 27" D (Inches) 47 H x 69 W X 69 D (cm)
Weight	50 Kg (Dry Condition) 55 Kg (When in use)
Power Cord & Socket	230 VAC / 6 Amp / 18 AWG / 3 Pin Computer Cord & Socket
Power Supply (At Inlet)	Voltage : 230 VAC Frequency : 50 Hz Input Current : 5 Amp
ELECTRICAL Protection	Replacable fuse 3 Amp (Inbuilt Spare fuse in Power Socket)
Water Supply Flow	10-12 ltr/min OR more when water Tap is fully open
Water Pressure Tolerance (Inlet)-Requirement	Between 0.2 to 0.3 Mpa (2 to 3 BAR) - 2-3 Kg
Water Supply Temperature-Req (INLET)	Max 25 °C (RECOMMENDED FOR ENDOSCOPE)
Disinfection Solution Tempreature-REQ (INLET)	Max 25 °C (RECOMMENDED FOR ENDOSCOPE)
Operating Tempreature	10 - 40 °C
WATER FILTER / Purifier	External Filter Required. R.O. OR U V Filtered water with Candle filter
Water Hardness	50 - 120 ppm (Parts per million)
Maximum fluid Delivery through Channels	1 ltr / min
Maximum Air Pump Pressure	29 PSI (2 BAR)
Cycle Time Range Setting (Disinfection /Water Rinse)	1 to 99 minutes
Pre-Cleaning & Enzymatic Wash cycle Time	Pre-Cleaning circulation: 1 Min Fixed / Enzymatic Wash : 3 Min Fixed
Air Purge (Through Endoscope Channels) with Drain	2 Min fixed Time
Cycle Completion indicator	Visual & Data Print
Compatible Endoscopes	Olympus Flexible & Immersible Endoscopes Fujinon Flexible & Immersible Endoscopes

Technical Specifications

	Pentax Flexible & Immersible Endoscopes
	Karl Storz Flexible & Immersible Endoscopes
Compatible With Bronchoscope	Yes
Compatible Disinfectant Solution	Compatible with any froth free Disinfectant
Compatible Soap / Detergent	Any Low Foam Liquid Soap
Tubings Available for Internal Endoscope Channel Cleaning	Biopsy / Suction / Air / Auxiliary (Elevator)
Cleaning Method	Exterior Cleaning : With Disinfectant / Water / Soap immersion
	Internal Channels Cleaning : With Disinfectant / Water / Soap flushing / Air Purge
Endoscope Immersion Tray Capacity	Approximately 14 Itrs
Disinfectant Solution Tank Capacity	Approximately 13 Itrs
Disinfectant Requirement for Cleaning	Approximately 11-12 Itrs
Level Sensor	Maintain appropriate level of fluid / Overflow / No Drain / Water Inlet Sensing
Display	LCD Display, Showing Running cycle Status
LED Indication	Liquid Circulation & Air Purge
RFID Functions	Works as single Scope if sensed only one Endoscope RFID & when sensed two Endoscopes works as Dual cleaning function to Avoid unnecessary Power, Disinfectant & Water Consumption.
	Default Scope 1 & Scope 2 Selection : in case of Breakdown in any side, operator can use any side individually. User can attached different Make Endoscope channel adaptors to Scope1 & Scope 2. It will help user to reprocess different Makes of Endoscopes without changing channel adaptors. If Make 1 adaptors connected to Scope 1 & Make 2 Adaptors connected to Sscope 2, user can set default scope option (Scope 1 OR Scope 2) for reprocess Make 1 Endoscope / Make2 Endoscope
Authorisation Security RFID Tag for Wash Cycle time setting	Wash cycle Time (Disinfectant Circulation & Water Rinse) can be set by Authorised person after sensing Security RFID Tag. Note : Contact Time of Disinfectant should be set as per recommended by Disinfectant Manufacturer. Water Rinse time should be set for minimum 2 Min
RFID Endoscope Data Reader	Easy Storage & printing of Endoscope details like Make, Type, Model, Serial No.
Cleaning Data Bifurcation	Disinfection Contact (Immersion) Time / Water Rinse Time / Total cycle Time / Cycle start Time / Cycle End Time / Auto cycle completion details (Auto1 / Auto2 / Manual)
Data Log Printer (Thermal Printer)	Data printing of Endoscope Cleaning details with Hospital Name / Date / Endoscope Make, Type, Model & Serial No / Disinfection Time, Water Rinse Time, Total Time Duration / Auto cycle completion (Auto1 / Auto2 / Manual)
USB Data Storage	Stored all cleaning data in USB Drive.
Memory Backup Mode for Safe Cycle functions	Time saver (In case of Power Failure, Cycle stops at any stage (Circulation / Air Flushing), it will starts where it had been stoped when power begins.
Functions	Auto 1 / Auto 2 / Manual / Time & Date Setting / Wash Cycle : External immersion & Internal Circulation Cycle Time Selection / Menu - of Default Scope Selection for primary Side (1st Scope OR 2nd Scope)
Cycle / Modes / Time	Auto 1 : Precleaning Water / Disinfectant / Water Rinsing (All with Air purge) / Time : 14 Min (If Disinfection Time set for 5 Min & Water Rinse 2 Min)

Technical Specifications

	<p>Auto 2 : Soap (Enzymatic) Cleaning / Water Rinsing / Disinfectant / Water Rinsing (All with Air purge) / Time : 23 Min (If Disinfection Time set for 5 min & Water Rinse 2 Min).</p> <p style="text-align: right;">Note : In Auto 2 operation, put the appropriate amount of liquid soap in scope immersion Tray and start AUTO 2 function. Any Liquid Soap (Recommended froth free Concentrated) as per the ratio of dilution in water given by the Soap manufacturer.</p>
	<p>Manual : Can be select Water & Disinfectant Cycle individually as per user requirements.</p>
	<p>Note : In all Auto cycles, the total cycle operation time depends on Disinfectant OR Water immersion with Circulation Time. If using High level Disinfectant with set 5 min immersion Circulation time & 2 min for Water immersion Circulation time, then it will take 14 min for a complete reprocessing Cycle in Auto 1 & 19 Min in Auto 2.</p>
Cycle Duretion Time	<p>Precleaning : 1 Min Fixed Immersion + 2 Min Drain & Air Purge : Total 3 Min</p> <p>Soap (Enzymatic) : 3 Min Fixed immersion + 2 Min Drain & Air : Total 5 Min</p> <p>Disinfection : 5 Min (As per user setting) immersion & Circulation + 2 Min Drain & Air Purge : Total 7 Min</p> <p>Water Rinse : 2 Min (As per user setting) immersion & Circulation + 2 Min Drain & Air Purge : Total 4 Min</p>
Operational RFID Working	<p>Can be run Single Scope OR Dual Scope cleaning cycle at a time by RFID Card Sensing programm. Can Be run Only Scope 1 OR only Scope 2 function with using Default Scope Selection.</p>
Different Make Endoscope cleaning Mode	<p>User can wash two makes of endoscopes without changing original cleaning adaptors with selection of 'Default Scope Selection Mode'</p>
Leak Test	<p>Not Available. (We recommend External Leakage Test for Each Endoscopes. It is essential to leak test the endoscope according to the manufacturers instructions. A general outline of the procedure is provided below. All endoscopes should be leak tested prior to immersion and between each patient use. The leak test will detect damage to the interior or exterior of the endoscope. Proceed to angulate the scope UP/ Down & Left/ Right, while keeping the bending section completely submerged. This practice can expose any pinholes or tears that may have been concealed while the scope was in the straight position. Perforated channels of endoscopes are an infection control risk and damage may also occur to parts of the endoscope not designed for fluid exposure.)</p> <p>https://www.totalscopeinc.com/insiders-guide-better-scope-leak-testing/</p>
Free Accessories	<p>Printer Rolls : 02 Nos, USB Drive : 01 No, RFID Tags for Endoscopes : Maximum 10 Nos., Authorisation Security RFID Tag (Wash Cycle). (Extra Charges for additional Tags & Lost Tags with visit charges)</p>
Shelf Life Of Equipement	<p style="text-align: center;">Approx 5-7 Years</p>
Upgradation	<p>Upgradation is possible if any. (*Upgradation charges will be extra)</p>
Reusable liquid filters	<p>Air Channel Filter - Stainless Steel Mesh Filter (To Prevent Scope Air Channel Blockage during cleaning Process) / Suction filter - Stainless Steel Mesh filter</p>
Consumables	<p style="text-align: center;">Printer Rolls</p>
Endoscope Channel Connectors (Adaptors)	<p style="text-align: center;">Required Original Channel Connectors (Adaptors) supplied by Endoscope Manufacturer for leakfree connection.</p>
Requirements For Installation	<p>Stabilizer / RO Or UV Water with Candle filter / Stopcock at Water Inlet / External Water Pressure (2-3 Kg) / Platform OR Trolley / Drainage. Ask for Installation requirement drawing from manufacturer (ENDOTECH).</p>

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