

Technowood®

HEART LUNG SYSTEM

COMPO III NEO



SAFE

HI-TECH

EASY

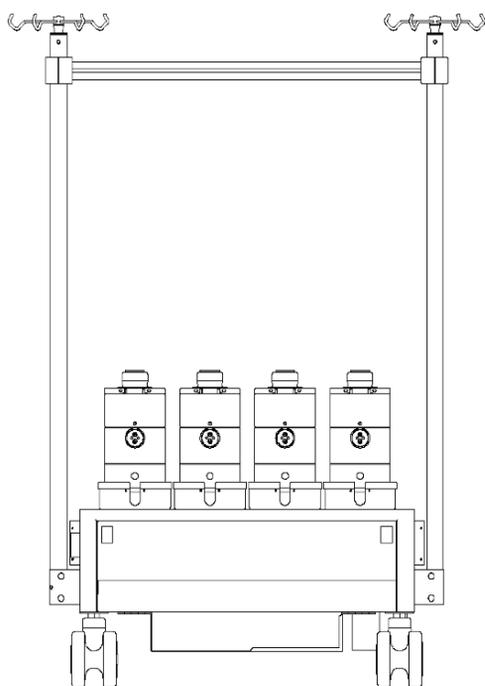
FRIENDLY

The most **COMPACT** design yet

Various medical devices are installed in operation rooms. This is especially true in Hybrid ORs where imaging devices are also installed. However, not all facilities have enough space for all these equipment.

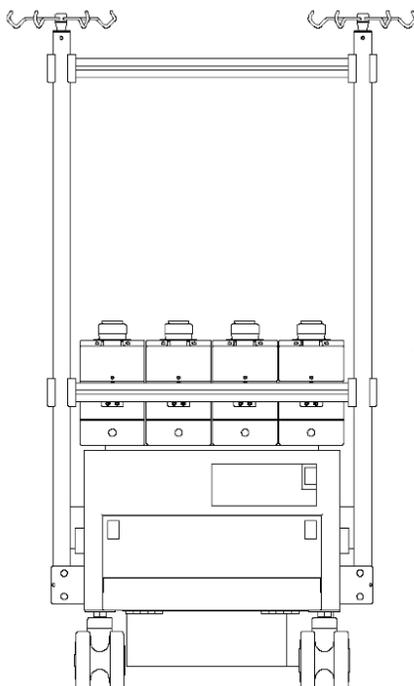
COMPO III NEO's space-efficient design allows for a greater working space for a more efficient workflow in the operating room.

**4-roller system
(before 2015)**



←--- 780mm ---→

**4-roller system
(2015)**



←--- 552mm ---→

**6-roller system
(2018)**



←- 449mm -→

*excluding mast

COMPO III NEO's compact, space-saving design have achieved a base size reduction of 331mm compared to the traditional 4-roller system.

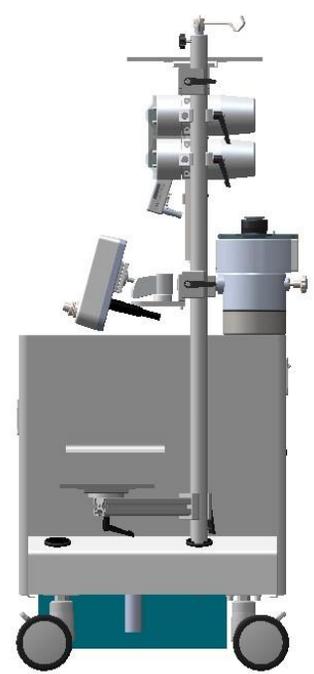
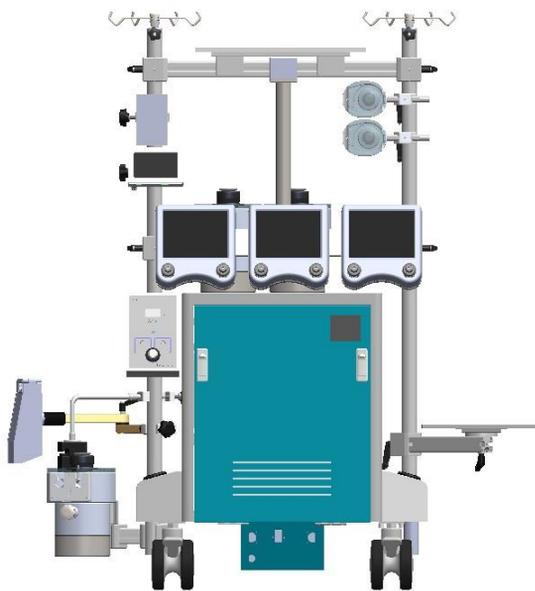
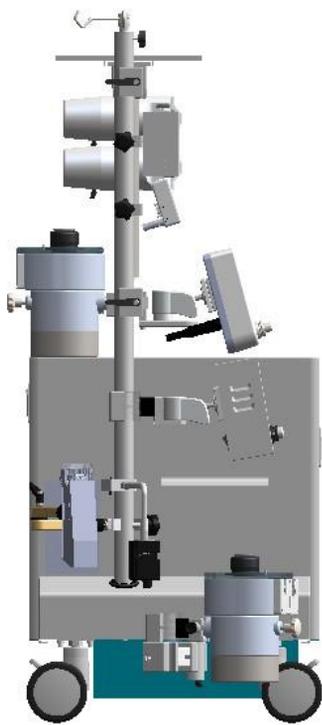
CUSTOMIZABLE BASE

The pump base can be customized to accommodate different combinations of roller pumps, safety modules, masts, trays and other accessories for improved efficiency during procedures.



STANDARD SYSTEM BASE (4-6 roller pumps)

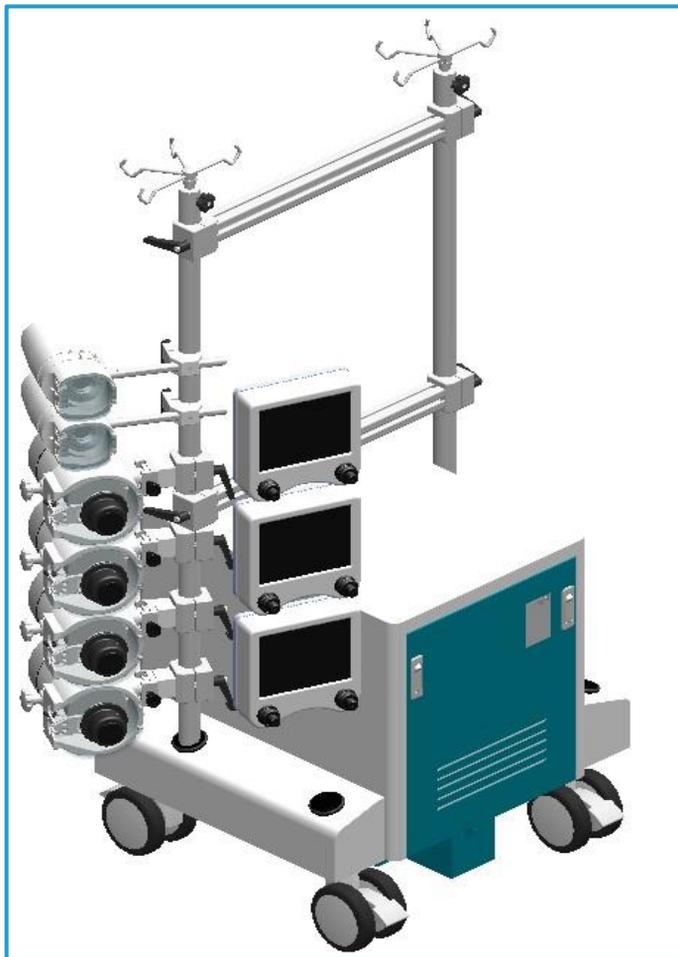
Power	AC230V 50/60Hz
	Max: 1500VA
Dimensions	740 (W) x 595 (D) x 745.5 (H) mm 70kg *excluding mast
Battery life	15 minutes (6 x 120mm pumps at 150rpm)
	60 minutes (2 x 120mm pumps at 150rpm)



Flexibility, Adaptability & **CONVENIENCE**

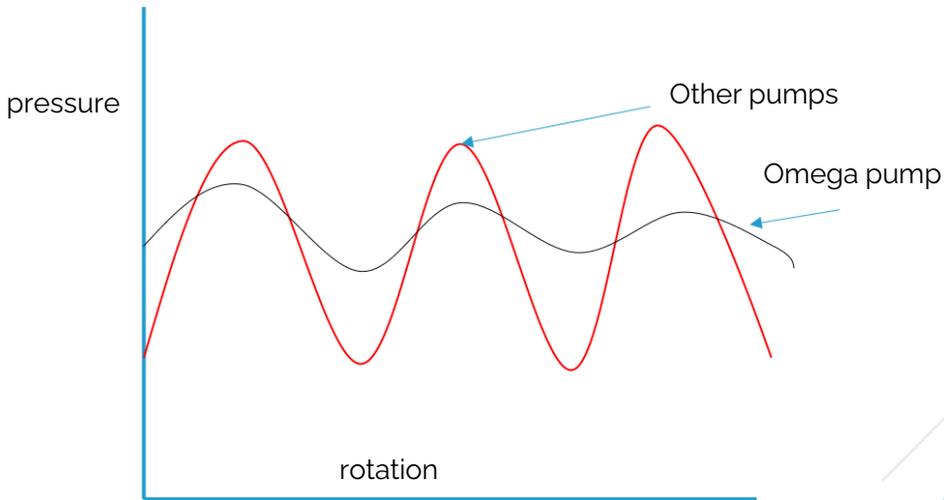
The COMPO series is the pioneer of modular heart-lung systems. All the components can be configured to suit a large variety of clinical needs. Roller pumps can be placed closer to the surgical field to decrease priming volume which results in reduced postoperative complications and faster patient recovery.

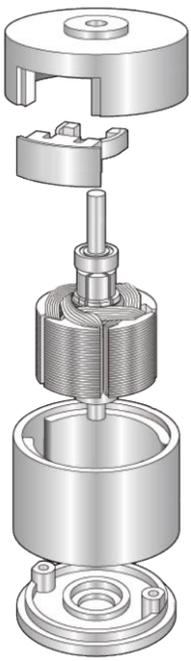




SDD Ω PUMP

The Technowood-specific omega roller sleeve was designed to lower pressure peaks during one rotation cycle resulting in reduced hemolysis.

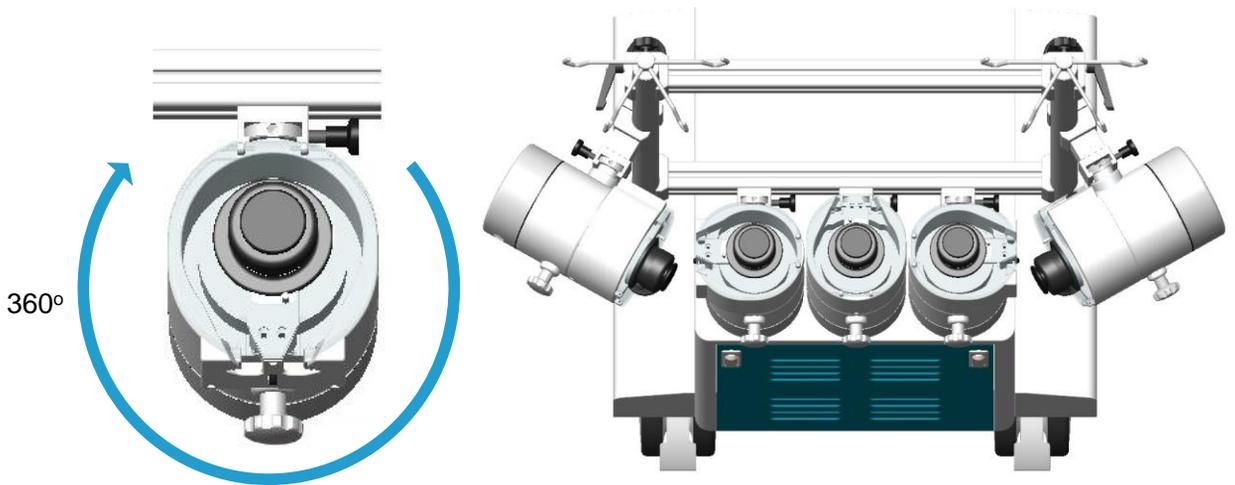




SEPARATE DIRECT DRIVE (SDD)

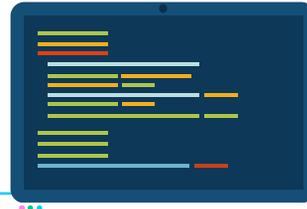
The 150mm and 120mm roller pumps have direct drive systems which enable the rollers to produce high torque even at low rpm. The lack of moving gears means there are fewer parts prone to failure from aging or stress as well as reduced noise during operation.

All pumps are modular - separate from the base and the control panel - for better ergonomics and work flow. The pump head itself can be rotated a full 360 degrees for better positioning relative to the surgical field.



Roller Pump Diameter	120mm	150mm	75mm
Model	BP120cIII	BP150cIII	BP75cIII
Dimensions (W x D x H)	140 x 152 x 225mm	17 x 182 x 225mm	91 x 112 x 219mm
Weight	8.8kg	9.8kg	6kg
Tube sizes	5/32, 3/16, 1/4, 3/8 4-9.6mm	1/4, 3/8, 1/2 6.4-12.7mm	5/32, 3/16, 1/4 4-6.4mm
Pump tubing	1 or 2 tubings	1 or 2 tubings	1 tubing
Rotational speed	Max 250rpm (Pulsatile: 400rpm)		
Rotation direction	clockwise, counterclockwise		
Occlusion	one-touch occlusion	one-touch occlusion	two-touch occlusion
Motor drive system	AC servo direct drive	AC servo direct drive	AC servo gear drive

SDDΩ PUMP CONTROLLER



Improved Visibility

The COMPO III NEO uses a high-resolution touch screen with an ergonomic display layout as its main controller.

All the data the perfusionist need to know, all in one compact, user-friendly screen. Colors and names can be assigned according to the use of each pump, making it easy to distinguish between pumps.



Superior Operability

Display settings can be changed simply by touching the icons allowing for a more intuitive operation.

Enhanced Safety

The level / bubble / pressure sensor settings and status are represented by visual signals which allows the perfusionist to respond immediately given any situation.



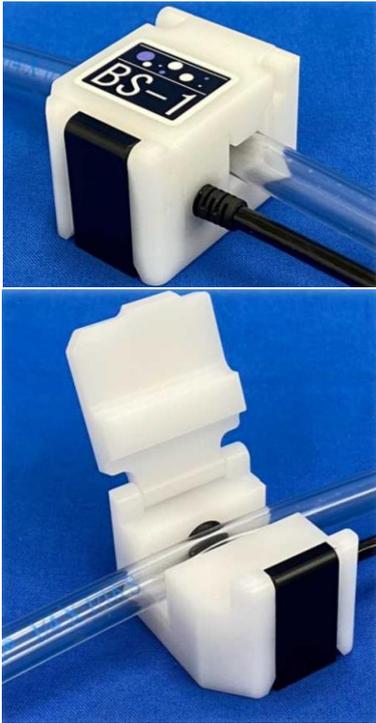
The COMPO III NEO also supports a cardioplegia delivery-specific control panel for a safe and easy cardioplegia administration.



PUMP CONTROLLER CP4000CC

Pump speeds	0-250rpm (pulsatile: 400rpm)
Flow (unit)	rpm, ml/min, ml/kg, l/m ² , % (2 units can be displayed simultaneously)
Status display	Pump type, Tube size, BSA, Pump name/color
	Level, bubble and pressure sensor status
Pressure monitor	Pressure monitor for both positive and negative pressure
	-200 to 800 mmHg (6 ranges to choose from) 2 channel display (3 CP4000CC = Max: 6 channels) Installed with pressure control function. When pressure limit is exceeded, an alarm is triggered and pump rotation is automatically adjusted.
Temperature monitor	2 channels 0 to 50°C (3 CP4000CC = Max: 6 channels) YSI-400 series compatible;
Timer	4 channels available. Alarm range: 1-900mins
2 Tactile Knobs	For general and fine adjustment of pump speed

SAFETY modules



BS-1 or 2 Bubble Sensor

When air bubbles (>0.1ml) are detected, a sound alarm is triggered and the pump automatically stops**.

	BS-1	BS-2
Type	Ultrasonic detection	Ultrasonic detection
Performance	0.1ml and above	0.1 ml and above
Tubing size	1/4 × 1/16	3/8 × 3/32
Maximum detectable flow rate	2.5L/min	5L/min
Power	Compliant with connected equipment	Compliant with connected equipment

**When connected to Technowood Pump Controller

LScIII Level Sensor

Operates through a two-point sensor system:
 S1- alert (upper limit)
 S2- warning (lower limit)

Fluid levels reaching the upper limit will trigger the pump to slow down to decrease the flow rate. Fluid levels reaching the lower limit will trigger an emergency pump stop**.



Type	Non-contact optical system
Sensor	2 point system (warning/emergency stop)
Power	40VA (max)
Can be operated individually	

**When connected to Technowood Pump Controller

PScIIINEO Pressure Sensor

The circuit internal pressure can be simultaneously measured through two independent channels.

9 pressure ranges to choose from -200 to 800mmHg

Can be integrated with the pump controller to manage pump operation.



DCBcIII Data Box

Equipped with multipurpose thermometers and timers with an alarm function.

Thermometer	0 - 50°C ± 0.5
Timer	0 – 999min can be set in 5min increments
Dimensions	80 x 160 x 185mm (D x W x H)
Weight	2.3kg
Power	15VA



VOcIII Occluder

The display on the VOc III shows the tubing's cross-sectional area ratio (0- 100%).

The coarse and fine tuning knobs can be used to set the tubing size and regulate the venous return flow.





Technowood®

www.technowood.co.jp

JAPAN

Technowood Corporation

Tel: +81 (3) 3856-4111

Fax: +81 (3) 3856-4113

USA

Technowood America Corporation

Tel: +1 (714) 434-8713

Fax: +1 (714) 434-8715

INTERNATIONAL

Technowood International Pte. Ltd.

Tel: +81 (3) 3898-5252

Fax: +81 (3) 3898-5252