



# SYNTHECON

3D Culture Systems for a 3D World

## RCCS-4H



### 4 Station Rotator Base

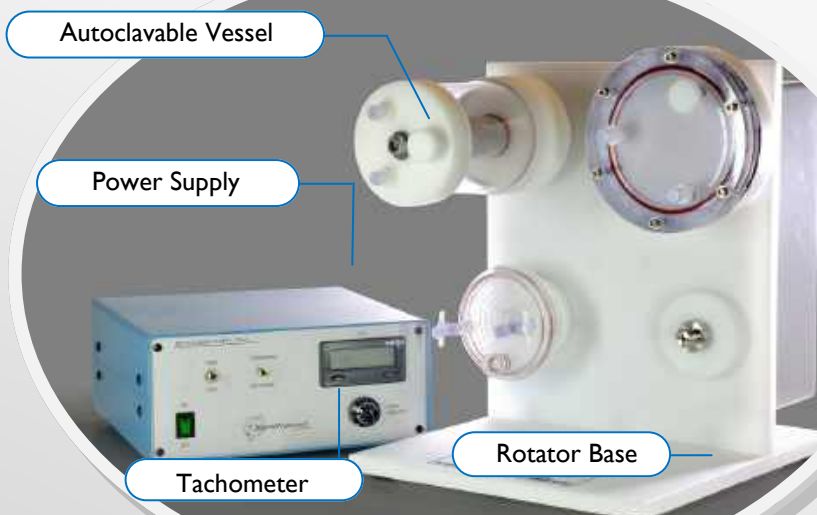
### Power Supply

(with Tachometer and Ribbon Cable)

### Operation Manual

### 4 Autoclavable Culture Vessels

- Low cost, easy to use system which makes the technology available to most laboratories.
- Four autoclavable STLV or HARV type culture vessels of your choice . This system is compatible with both autoclavable and disposable vessels.



## FAQ

**Q:** How are the cells oxygenated?

**A:** In a gas regulated incubator, gas diffuses through the silicone membrane of the bioreactor.

**Q:** Do the cells stay in one place in the bioreactor?

**A:** No, they continuously fall through the media during vessel rotation. The continuous motion of the cells in media facilitates their exposure to nutrients.

**Q:** Is the RCCS a roller bottle system?

**A:** No. Roller bottles grow cells on the wall of the bottle in 2D. The RCCS grows cells in suspension, either as 3D spheroids or on scaffolds/beads.

## The Synthecon Rotary Cell Culture System

Produces differentiated high density, three dimensional tissue cultures.

Membrane oxygenation provides bubble free operation, which results in an extremely gentle culture.

Operates in standard incubators. Samples may be easily drawn at any time.

Ideal for growing and maintaining normal tissues, cancer tumors spheroids and bacteria/virally infected tissue models.

Synthecon can design and build systems to user's specifications.

\* For additional FAQs visit [www.synthecon.com/faq](http://www.synthecon.com/faq)

RCCS-4H

# RCCS-4H

## TECHNICAL SPECIFICATIONS-DIMENSIONS RCCS-4H

COMPONENT	HEIGHT	WIDTH	DEPTH
Base	13.0" (33.0 cm)	12.0" (30.5 cm)	12.0" (30.5 cm)
Power Supply	4.5" (11.4 cm)	9.375" (23.8 cm)	9.5" (24.1 cm)
COMPONENT	WEIGHT	ROTATIONAL SPEED	AIR PUMP FLOW RATE
Base	14.5 lbs (6.84 Kg)	4-47 RPM	—
Power Supply	9.5 lbs (4.48 Kg)	—	—
Air Pump	—	—	18 SCFH (8.5 L/min)

## RCCS-4H POWER AND ENVIRONMENTAL SPECIFICATIONS

POWER	VOLTAGE	FREQUENCY
Power Supply Input	USA 110-120 VAC @ .5Amps EU 220-240 VAC @ .5Amps	50-60 Hz
Power Supply Output	12 VAC @ .9 Amps 30 VDC @ .25Amps	50-60 Hz
ENVIRONMENT	TEMPERATURE	HUMIDITY
Base	50-105 °F (10-40 °C)	0-100% RH
Power Supply	50-80 °F ( 10-27 °C)	0-75% RH

## RCCS-4H COMPATIBLE CULTURE VESSELS

CULTURE VESSEL MODEL	SIZE	COMPATIBILITY
Disposable HARV *	10 mL	Yes
Disposable HARV *	50mL	Yes
Autoclavable HARV	1 mL	Yes
Autoclavable HARV	2 mL	Yes
Autoclavable HARV	4 mL	Yes
Autoclavable HARV	10 mL	Yes
Autoclavable HARV	50 mL	Yes
Autoclavable STLV	55 mL	Yes
Autoclavable STLV	110 mL	Yes
Autoclavable STLV	250 mL	Yes
Autoclavable STLV	500 mL	Yes

\* Disposable vessels are available in the High Aspect Ratio Vessels (HARVs). Each vessel is individually packaged and gamma sterilized. Vessels are supplied four to a pack. Four Autoclavable HARVs or STLVs are provided with the RCCS-4H System. All other compatible vessel types are ordered separately. Visit [www.synthecon.com](http://www.synthecon.com) for more details.



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