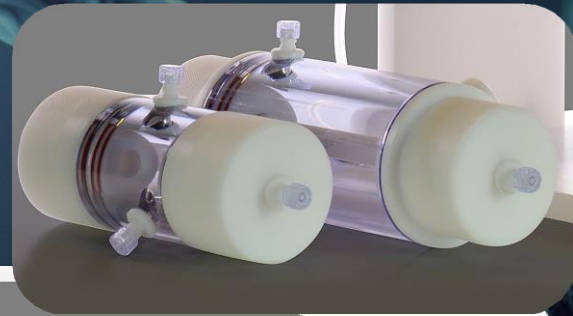




3D Culture Systems for a 3D World

## RCCMax



### Single Station Rotator Base

- Allows continuous feeding from external media bottle. Cells are retained in culture chamber via a molecular weight cutoff membrane.

### Power Supply

(with Tachometer and Ribbon Cable)

### Operation Manual

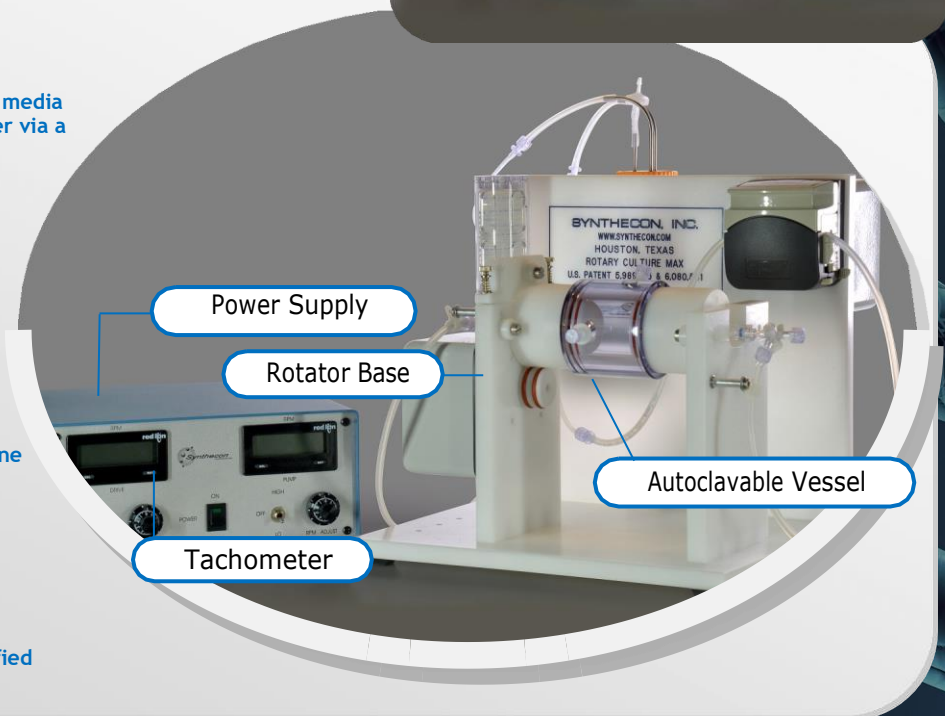
### Oxygenator

- Media flows through an external silicone oxygenator via a peristaltic pump .

### Peristaltic Pump

### Single or Dual Vessel

- Media can be exchanged, sampled, or modified without stopping vessel rotation.



## FAQ

- Q:** How are the cells oxygenated?
- A:** In a gas regulated incubator, gas diffuses through the silicone membrane located in the oxygenator assembly
- 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 RCMW a roller bottle system?
- A:** No. Roller bottles grow cells on the wall of the bottle in 2D. The RCMW 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.

# RCCMax

## TECHNICAL SPECIFICATIONS-DIMENSIONS RCCMax

COMPONENT	HEIGHT	WIDTH	DEPTH
<b>Base</b>	9.0" (33.0 cm)	15.0" (38.1 cm)	13.0" (33.0 cm)
<b>Power Supply</b>	4.5" (11.4 cm)	9.5" (24.1 cm)	9.5" (24.1 cm)
COMPONENT	WEIGHT	ROTATIONAL SPEED	AIR PUMP FLOW RATE
<b>Base</b>	14.5 lbs (6.84 Kg)	7-40 RPM	—
<b>Power Supply</b>	6.5 lbs (3.06 Kg)	—	—
<b>Air Pump</b>	—	1-30 RPM	.5-15 mL/min

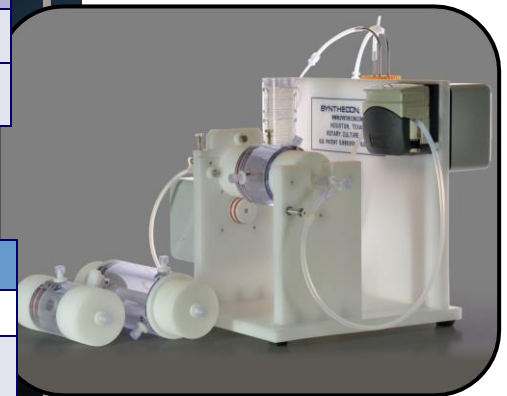
## RCCMax POWER AND ENVIRONMENTAL SPECIFICATIONS

POWER	VOLTAGE	FREQUENCY
<b>Power Supply Input</b>	85-260 VAC @ .5Amps	50-60 Hz
<b>Power Supply Output</b>	27 VDC @ .25Amps	50-60 Hz
ENVIRONMENT	TEMPERATURE	HUMIDITY
<b>Base</b>	50-105 °F (10-40 °C)	0-100% RH
<b>Power Supply</b>	50-80 °F ( 10-27 °C)	0-75% RH

## RCCMax COMPATIBLE CULTURE VESSELS

CULTURE VESSEL MODEL	SIZE	COMPATIBILITY
<b>Autoclavable RCCMax Vessel</b>	100 mL	Yes
<b>Autoclavable RCCMax Vessel</b>	125 mL	Yes
<b>Autoclavable RCCMax Vessel</b>	150 mL	Yes

A single or dual vessel can be manufactured. Visit [www.synthicon.com](http://www.synthicon.com) for more details.



**3D Culture Systems**  
for a 3D World

# RCCMax Vessels

## TECHNICAL SPECIFICATIONS-DIMENSIONS (Vessel Chamber- Inner Vessel)

VESSEL	CHAMBER ID	CHAMBER LENGTH	VESSEL OD	VESSEL LENGTH
<b>50mL</b>	1.663"	1.555"	2.863"	6.05"
<b>100mL</b>	1.668"	3.25"	2.868"	6.05"
<b>125mL</b>	1.750"	3.48"	2.95"	6.98"
<b>150mL</b>	1.75"	4.35"	2.95"	8.85"
<b>250mL</b>	2.125"	4.709"	3.325"	8.85"

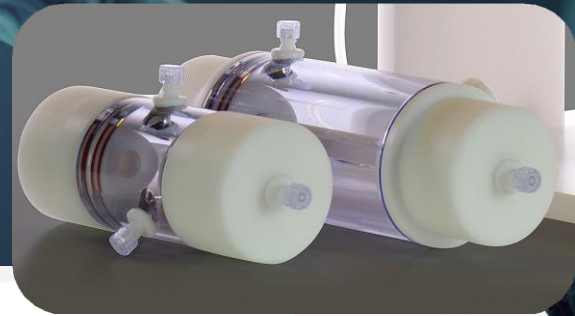
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for a 3D World



3D Culture Systems for a 3D World

## RCCMax

Dual



### Single Station Rotator Base

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### Power Supply

(with Tachometer and Ribbon Cable)

### Operation Manual

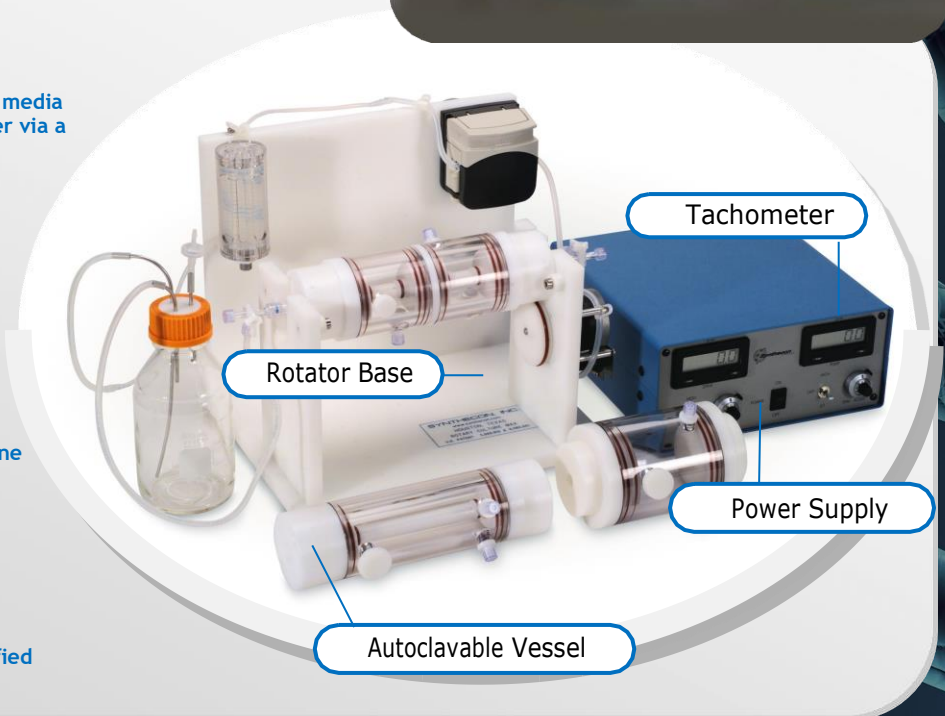
### Oxygenator

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### Peristaltic Pump

### Single or Dual Vessel

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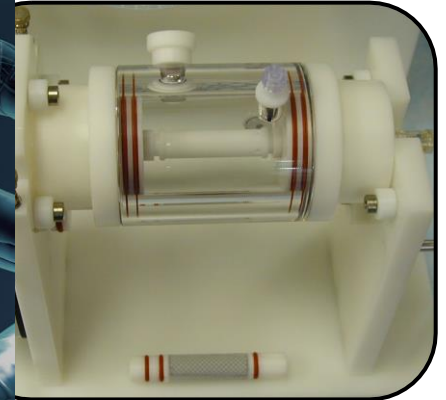
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Synthecon can design and build systems to user's specifications.

# RCCMax Dual

## TECHNICAL SPECIFICATIONS-DIMENSIONS RCCMax Dual

COMPONENT	HEIGHT	WIDTH	DEPTH
<b>Base</b>	9.0" (33.0 cm)	15.0" (38.1 cm)	13.0" (33.0 cm)
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COMPONENT	WEIGHT	ROTATIONAL SPEED	AIR PUMP FLOW RATE
<b>Base</b>	14.5 lbs (6.84 Kg)	7-40 RPM	—
<b>Power Supply</b>	6.5 lbs (3.06 Kg)	—	—
<b>Air Pump</b>	—	1-30 RPM	.5-15 mL/min



## RCCMax Dual POWER AND ENVIRONMENTAL SPECIFICATIONS

POWER	VOLTAGE	FREQUENCY
<b>Power Supply Input</b>	85-260 VAC @ .5Amps	50-60 Hz
<b>Power Supply Output</b>	27 VDC @ .25Amps	50-60 Hz
ENVIRONMENT	TEMPERATURE	HUMIDITY
<b>Base</b>	50-105 °F (10-40 °C)	0-100% RH
<b>Power Supply</b>	50-80 °F ( 10-27 °C)	0-75% RH

## RCCMax COMPATIBLE CULTURE VESSELS

CULTURE VESSEL MODEL	SIZE	COMPATIBILITY
<b>Autoclavable RCCMax Vessel</b>	50 mL	Yes

A single or dual vessel can be manufactured. Custom volumes available. Visit [www.synthecon.com](http://www.synthecon.com) for more details.

**3D Culture Systems**  
for a 3D World

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