

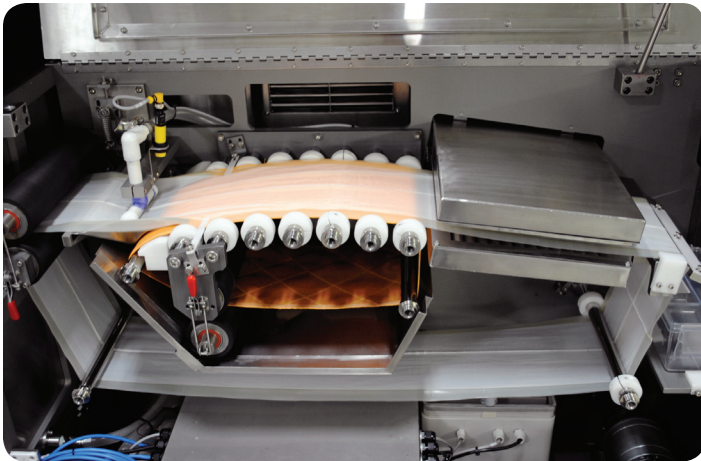


# Protect Nutrients & Enhance Efficiency

through low-energy Dewatering & Separation

## The SLS Lab Model

...the latest in low-energy solid-liquid separation technology



### A NEW SEPARATION TECHNOLOGY UNLIKE ANY BEFORE

Recognized by the US Department of Energy's Advanced Research Projects Agency, the SLS Lab Model uses an innovative, gentle separation technique to **REDUCE** operating expenses by up to 90% & **MAINTAIN** nutrient integrity.

## VALUE

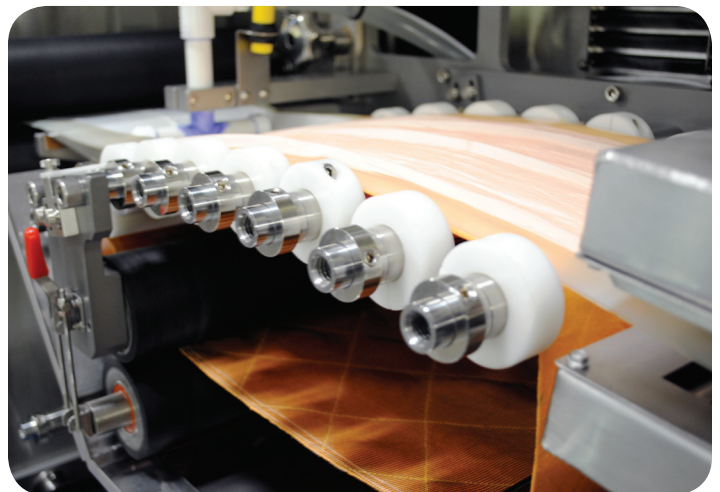
- cut costs* - Clean effluents to reduce waste handling costs
- transform waste* - Create valuable co-products from waste through nutrient recovery
- outperform competition* - Separate solids with up to 90% less energy than a centrifuge

selected by



U.S. DEPARTMENT OF  
**ENERGY**

ideal for researchers in food, chemical, mineral, algae, nutraceutical, waste effluent and water remediation applications



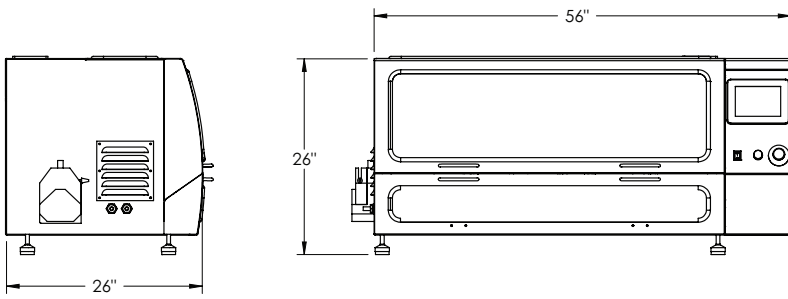
a technology from



*please contact us at [Sales@AlterE.com](mailto:Sales@AlterE.com)  
or call (937) 645-4618.*

# The SLS Lab Model Specs

a more efficient separation system



## standard features:

- Quick-change belt system for easy maintenance
- Automated in-feed solution control
- Safety interlock and mechanical protection
- Attractive & functional stainless steel design

## optional features:

- Integrated heating sub-system to remove material at "flake" (~95%+ solids)
- PLC integrated Wet Material Removal sub-system (air knife system) to remove material at "paste" (~20-40% Solids)
- PLC integrated Pressurized Belt Rinse sub-system for easy cleaning
- Automated Control Package Upgrade (includes integrated PLC and HMI controls) for ease of use
- Custom trolley assembly (wheeled support frame package) for high mobility
- Multi-belt options for large range of separation capabilities including secondary effluent separation



## power requirements

US and Canada	115VAC, 15A, 60Hz
EU**	230VAC, 15A, 50Hz
Air	100 PSI

## operation

Operator Interface	Console with analog speed controls, pump direction and power switch
Automated Control	Pump Start/Stop via media level sensing
MEDIA INPUT	Up to approximately 0.22 Gal/min***
OUTPUT	Relative****
Ambient Temp. Range	0-104 deg F
Relative Humidity	20-50%
Max Membrane Belt Speed	9.2 in/min
Max Dewatering Belt Speed	70.7 in/min
Normal Operating Speed - Dewatering	~60 in/min (152.4cm/min)
Normal Operating Speed - Membrane	~2.5 in/min (6.35cm/min)

## dimensions/weight

Overall	56" x 26" x 26" (142cm x 66cm x 66cm)
Weight	~350LB (160Kg)

\*Subject to change based on customization options at time of purchase.

\*\*Additional charges may apply for power conversion

\*\*\*Based on test results for pumping potable water only.

\*\*\*\*Dependent upon input media density (%Solids), desired dewatered moisture content (%Solids Output), particle size, relative humidity, screen selection & other characteristics

## components

DC Motor Control	Control Input	115(230)VAC; 50/60Hz; 2.5A
	Armature Supply	0-130(0-240)VDC; 2A
	Horsepower Range	0.6
DC Gearmotor (Membrane Drive)	Voltage	90VDC
	Current	.62A
	Horsepower	1/20
	Torque	74 in-lbs
	Ratio	49:1
	Form Factor	1.4
DC Gearmotor (Dewatering Drive)	Voltage	90VDC
	Current	.62A
	Horsepower	1/20
	Torque	20 in-lbs
	Ratio	12.9:1
Positive Displacement Pump	Power Specifications	90VDC; 1.1A
	Materials	Acetal, Aluminum, Delrin
Heater Assembly (Optional)	Capacity	500W
	Max Temperature	450F (232C)
	Max Operating Temperature	190F (87.8C)
	Thermocouple Type	J (-100F to +1600F [-73C to 871C])
Temperature Control (Optional)	Display	Programmable, 7 segment LED/zone
	Accuracy	+/-0.25%
	Output Type	DC Pulse

for any inquiries or comments on how the SLS Lab Model can enhance or enable the value of your separation processes please contact us at [sales@altere.com](mailto:sales@altere.com) or call (937) 645-4618