



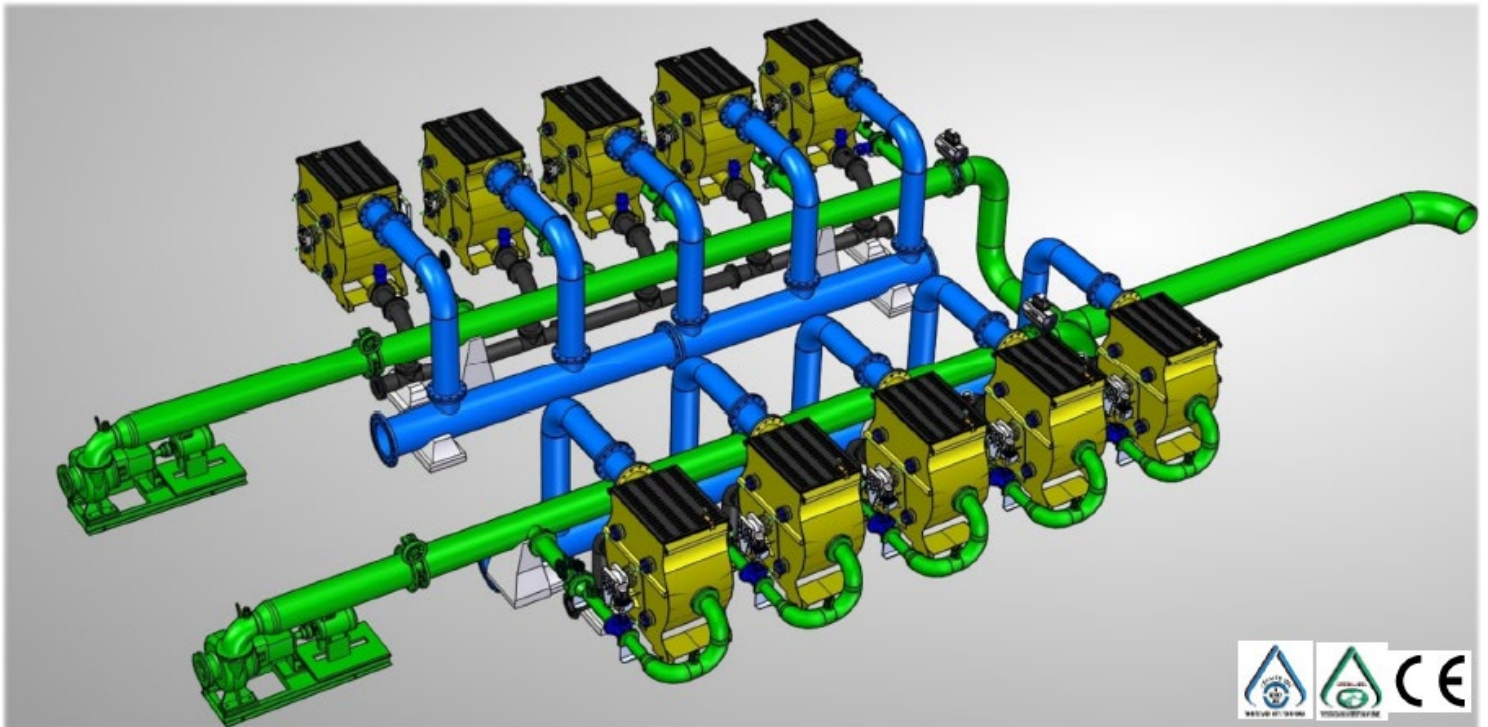
## SRCT-LS LARGE SCALE COOLING TOWER AUTOMATIC WATER TREATMENT SYSTEM

INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-  
OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

The **RECLEAN Pro** SRCT-LS employs the latest technologies to provide the best solution for ongoing cleaning, scale prevention, organic fouling removal and saves water. SRCT-LS is cost effective and environment friendly.

With SRCT-LS chemical treatment is not required. This allows operation of cooling towers at higher cycles of concentration than allowed by chemical treatment. SRCT-LS can save up to 50% of blow-down water. This savings can be extended up to 100%, since water contains no chemicals so blow-down water can be re-used for irrigation or general services.

SRCT-LS patented self-cleaning mechanism reduces maintenance costs and provides automatic and continuous water treatment at optimal efficiency.



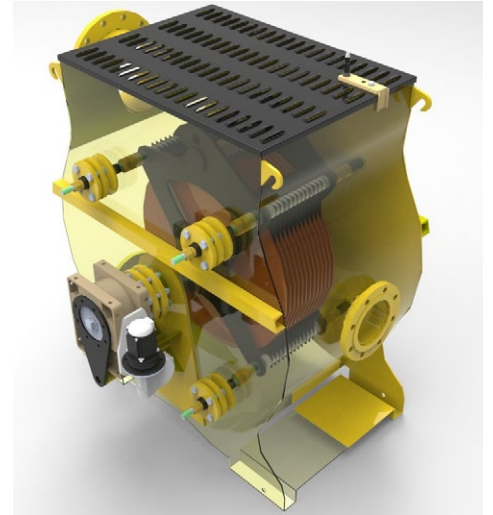


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OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

## KEY FEATURES

- Replaces chemical treatment.
- Reduces water consumption by operating at large cycles of concentration,
- 100% of blow-down water can be reused.
- Automatic self-cleaning mechanism for continuous, optimized water treatment.
- 100% water disinfection preventing growth of legionella, bacteria and algae.
- Creates an alkaline pH environment that prevents corrosion.
- Low operating and maintenance costs.
- Robust construction with long service life.
- Automatic and reliable turnkey system.





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INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

System Specifications – Capacity up to 1,200 m<sup>3</sup>/h

MODEL:	SRCT-LS-600	SRCT-LS-1200
<b>PERFORMANCE</b>		
Treatment Capacity (recirculation flow - m <sup>3</sup> /h)	600 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h
Treatment Capacity (recirculation flow - gpm)	2,200 gpm	4,400gpm
ΔT* (if higher, consult with RAISE Energy)	up to 5°C	up to 5°C
TR - Maximum CT capacity @ ΔT	1,000 TR	2,000 TR
Maximum water circuit volume - m <sup>3</sup>	30 m <sup>3</sup>	60 m <sup>3</sup>
Maximum water circuit volume - gallons	26,400 ga l	52,800 gal
Maximum water circuit volume - gr/hr (1)	5*	10*
<b>WORKING CONDITIONS</b>		
Work pressure	pressurized vessel	pressure vessel
Maximum pressure	8 bar (standard)	8 bar (standard)
Power consumption - W	0.3-0.5 kW	0.6-1.0kW
Power circuit voltage - V/Ph/Hz	360-450/3/50-60	360-450/3/50-60
Control circuit voltage - V/Ph/ Hz	360-450/3/50-60	360-450/3/50-60
Total power input - kW	0.3 kW (max)	0.6 kW (max)
Total running current - A	3x16A	3x16A
Total max current - A	20 A/24V	20 A/24V
Water temperature - C	10-40	10-40
<b>EQUIPMENT CHARACTERISTICS*</b>		
Water pump type	Centrifugal, electricity powered	Centrifugal, electricity powered
Water pump capacity	10 m <sup>3</sup> /h	15 m <sup>3</sup> /h
Controller	Allen Bradley/Delta	Allen Bradley/Delta
Communication mode	Modbus	Modbus
Housing	Single cell	Single cell
Coating	Fusion Bonded Epoxy	Fusion Bonded Epoxy



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INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

MODEL:	SRCT-LS-600	SRCT-LS-1200
<b>DIMENSIONS (w/o options)</b>		
Total Height -mm	1,100	1,100
Total Width - mm	740	740
Total Length - mm	800	800
Shipping Weight - Kg	150	160
Operating Weight - Kg	180	190
<b>CONNECTIONS</b>		
Water bleed piping (ND16/ANSI 150#)	1 1/2 1inch	2 inch
Water inlet piping (ND16/ANSI 150#)	3 inch	3 inch
Water outlet piping (ND16/ANSI 150#)	3 inch	3 inch
Water drain piping (ND16/ANSI 150#)	3 inch	3 inch
<b>OPTIONS / ACCESSORIES</b>		
Conductivity meter ( + bleed valves)	Endress & Hauser	Endress & Hauser
Remote control	Secomea	Secomea
Media filter	30 inch	36 inch
Media filter backwash water source	Make up / Tower	Make up / Tower
Skid with pump+sand filter+backwash valves	Available	Available
<b>WATER REQUIREMENTS - Fresh Water</b>		
<b>Make up water :</b>		
Conductivity - $\mu$ S/cm (If different consult RAISE Energy)	400-1500	400-1500
Chlorides - mg/L	>20	>20
pH	6.7-7.8	6.7-7.8
Toral hardness-ppm	20-1200	20-1200
<b>SUPPLIED BY CUSTOMER</b>		
Roof-top, housing	yes	yes
Inlet water connection	yes	yes
Outlet water connection	yes	yes
Drain point	yes	yes



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INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

System Specifications – Capacity up to 3,750 m<sup>3</sup>/h

MODEL:	SRCHS-2500	SRCT-LS-3750
<b>PERFORMANCE</b>		
Treatment Capacity (recirculation flow - m <sup>3</sup> /h)	2,500 m <sup>3</sup> /h	3,750 m <sup>3</sup> /h
Treatment Capacity (recirculation flow - gpm)	9,165 gpm	13,740 gpm
ΔT* (if higher, consult with RAISE Energy)	up to 5°C	up to 5°C
TR - Maximum CT capacity @ ΔT	4,000 TR	6,000 TR
Maximum water circuit volume - m <sup>3</sup>	100 m <sup>3</sup>	200 m <sup>3</sup>
Maximum water circuit volume - gallons	26,400 gal	52,800 gal
Maximum water circuit volume - gr/hr (1)	25*	50*
<b>WORKING CONDITIONS</b>		
Work pressure	pressurized vessel	pressure vessel
Maximum pressure	8 bar (standard)	8 bar (standard)
Power consumption - W	1.5-2.3 kW	2.5-4.6kW
Power circuit voltage - V/Ph/Hz	360-450/3/50-60	360-450/3/50-60
Control circuit voltage - V/Ph/ Hz	360-450/3/50-60	360-450/3/50-60
Total power input - kW	1.5 kW (max)	3 kW (max)
Total running current - A	3x16A	3x16A
Total max current - A	100A/24V	200 A/24V
Water temperature - C	10-40	10-40
<b>EQUIPMENT CHARACTERISTICS*</b>		
Water pump type	Centrifugal, electricity powered	Centrifugal, electricity powered
Water pump capacity	20 m <sup>3</sup> /h	30 m <sup>3</sup> /h
Controller	Allen Bradley/Delta	Allen Bradley/Delta
Communication mode	Modbus	Modbus
Housing	Single cell	Single cell
Coating	Fusion Bonded Epoxy	Fusion Bonded Epoxy



# SRCT-LS LARGE SCALE COOLING TOWER AUTOMATIC WATER TREATMENT SYSTEM

INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

MODEL:	SRCHS-2500	SRCT-LS-3750
<b>DIMENSIONS (w/o options)</b>		
Total Height -mm	1,100	1,100
Total Width - mm	740	740
Total Length - mm	800	800
Shipping Weight - Kg	300	330
Operating Weight - Kg	330	360
<b>CONNECTIONS</b>		
Water bleed piping (ND16/ANSI 150#)	1 1/2 1inch	2 inch
Water inlet piping (ND16/ANSI 150#)	3 inch	3 inch
Water outlet piping (ND16/ANSI 150#)	3 inch	3 inch
Water drain piping (ND16/ANSI 150#)	3 inch	3 inch
<b>OPTIONS / ACCESSORIES</b>		
Conductivity meter ( + bleed valves)	Endress & Hauser	Endress & Hauser
Remote control	Secomea	Secomea
Media filter	30 inch	36 inch
Media filter backwash water source	Make up / Tower	Make up / Tower
Skid with pump+sand filter+backwash valves	Available	Available
<b>WATER REQUIREMENTS - Fresh Water</b>		
<b>Make up water :</b>		
Conductivity - $\mu$ S/cm (If different consult RAISE Energy)	400-1500	400-1500
Chlorides - mg/L	>20	>20
pH	6.7-7.8	6.7-7.8
Toral hardness-ppm	20-1200	20-1200
<b>SUPPLIED BY CUSTOMER</b>		
Roof-top, housing	yes	yes
Inlet water connection	yes	yes
Outlet water connection	yes	yes
Drain point	yes	yes



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INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

System Specifications – Capacity up to 9,000 m<sup>3</sup>/h

MODEL:	SRCT-IS-9000	SRCT-LS-14000	SRCT-LS-14000
<b>PERFORMANCE</b>			
Treatment Capacity (recirculation flow - m <sup>3</sup> /h)	9,000 m <sup>3</sup> /h	14,000 m <sup>3</sup> /h	70,000 m <sup>3</sup> /h
Treatment Capacity (recirculation flow - gpm)	39,600 gpm	61,600 gpm	308,200 gpm
ΔT* (if higher, consult with RAISE Energy)	up to 5°C	up to 5°C	up to 5°C
TR - Maximum CT capacity @ ΔT	15,000 TR	23,000 TR	115,000 TR
Maximum water circuit volume - m <sup>3</sup>	600 m <sup>3</sup>	1,000 m <sup>3</sup>	5,000 m <sup>3</sup>
Maximum water circuit volume - gallons	158,500 gal	264,000 gal	1,320,000 gal
Maximum water circuit volume - gr/hr (1)	200*	300*	1500*
<b>WORKING CONDITIONS</b>			
Work pressure	open vessel	open vessel	open vessel
Maximum pressure			
Power consumption - W	8-15 kW	16-31 kW	80 kW (normal), 156 kW (max)
Power circuit voltage - V/Ph/Hz	360-450/3/50-60	360-450/3/50-60	360-450/3/50-60
Control circuit voltage - V/Ph/ Hz	360-450/3/50-60	360-450/3/50-60	360-450/3/50-60
Total power input - kW	12 kW (max)	24 (max)	75 kW (max)
Total running current - A	3x32A	3x32A	3x150A
Total max current - A	500 A/24V	1000 A/24V	5 units of 1,000 A/24V
Water temperature - C	10-40	10-40	10-40
<b>EQUIPMENT CHARACTERISTICS*</b>			
Water pump type	Centrifugal, electricity powered	Centrifugal, electricity powered	Centrifugal, electricity powered
Water pump capacity	50 m <sup>3</sup> /h	100 m <sup>3</sup> /h	500 m <sup>3</sup> /h
Controller	Allen Bradley/Delta	Allen Bradley/Delta	Allen Bradley/Delta
Communication mode	Modbus	Modbus	Modbus
Housing	Single cell	Single cell	Single cell
Coating	Fusion Bonded Epoxy	Fusion Bonded Epoxy	Fusion Bonded Epoxy



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INTEGRATED ELECTRO-DEPOSITION, ELECTRO-CHLORINATION AND ELECTRO-OXIDATION WITH SELF-CLEANING MECHANISM FOR LARGE SCALE COOLING TOWERS

MODEL:	SRCT-IS-9000	SRCT-LS-14000	SRCT-LS-14000
<b>DIMENSIONS (w/o options)</b>			
Total Height -mm	1,490	1,490	4,120
Total Width - mm	1,295	1,295	2,300
Total Length - mm	1,320	1,320	12,000
Shipping Weight - Kg	1,200	1,400	16,000
Operating Weight - Kg	2,200	2,400	22,000
<b>CONNECTIONS</b>			
Water bleed piping (ND16/ANSI 150#)	N/A	N/A	N/A
Water inlet piping (ND16/ANSI 150#)	6 inch	6 inch	5 x 6 inch for 12 inch manifold
Water outlet piping (ND16/ANSI 150#)	10 inch	10 inch	5 x 10 inch for 16 inch manifold
Water drain piping (ND16/ANSI 150#)	6 inch	6 inch	5 x 6 inch for 6 inch manifold
<b>OPTIONS / ACCESSORIES</b>			
Conductivity meter ( + bleed valves)	Endress & Hauser	Endress & Hauser	Endress & Hauser
Remote control	Secomea	Secomea	Secomea
Media filter	N/A	N/A	N/A
Media filter backwash water source	N/A	N/A	N/A
Skid with pump+sand filter+backwash valves	N/A	N/A	N/A
<b>WATER REQUIREMENTS - Fresh Water</b>			
<b>Make up water :</b>			
Conductivity - $\mu$ S/cm (If different consult RAISE Energy)	400-1500	400-1500	400-1500
Chlorides - mg/L	>20	>20	>20
pH	6.7-7.8	6.7-7.8	6.7-7.8
Toral hardness-ppm	20-1200	20-1200	20-1200
<b>SUPPLIED BY CUSTOMER</b>			
Roof-top, housing	yes	yes	yes
Inlet water connection	yes	yes	yes
Outlet water connection	yes	yes	yes
Drain point	yes	yes	yes

\*Depend on the chloride level of the treated water