

## VAF™ Hydrocyclone Separator System LCS/CTS Series

### GENERAL INFORMATION

The LCS/CTS Series Hydrocyclone Separator skid provides a low-cost solution for cooling tower filtration as well as pretreatment for feed waters such as surface and well waters that contain high levels of sand or other large debris.

The VAF™ brand Hydrocyclone Separators are effective in removing suspended particles from any flow stream of water where the specific gravity (density) of the particle(s) is heavier than the fluid it is in. The more significant the difference in gravity between the water and the particle, the greater the efficiency of the removal process. Depending on the specific gravity of the particle and the viscosity of the flow stream, very small and denser particles can be removed.

An automatic purge controller and valve comes standard on all models. This eliminates the need for manual flushing, turning the separator into an automatic system.

**Optional Recovery Vessel:** a recovery bag filter option can be installed on the flush line of the separator and collect and filter out TSS in the system. The cleaned water is sent back to the suction side of the pump for recycle, eliminating any wastewater generation.

Backed by Evoqua's decades of experience, the LCS/CTS-Series separator skid provides performance and reliability at a cost-effective price.

### HOW IT WORKS

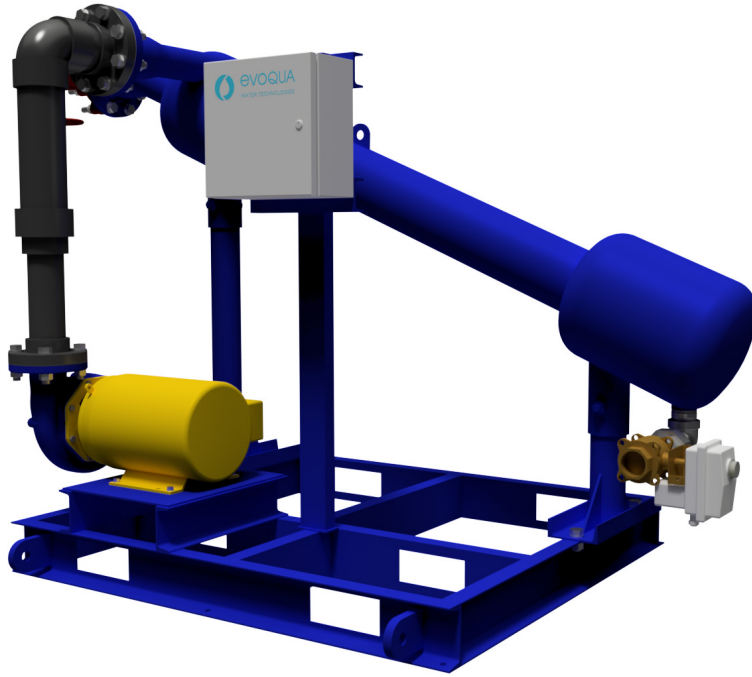
Liquids and solids enter the unit and begin travelling in a circular flow. This centripetal action forces heavier particles downward in a spiral motion to the separation chamber. The particles collect in this separation chamber and are purged from the system on a time interval. The processed water is drawn from the separator's vortex and up through the outlet. Available with optional recovery vessel.

### FEATURES & BENEFITS

- Plug and play design
- Minimal maintenance due to limited moving parts (pump and control valve)
- Simple installation
- Removal of up to 98% of solids 2.6 specific gravity and higher
- Heavy duty construction
- Flow range: 63 - 3,400 gpm
- Operating pressure 1.5 to 10Bar (25 to 150psi)
- Significantly reduces loading on downstream components

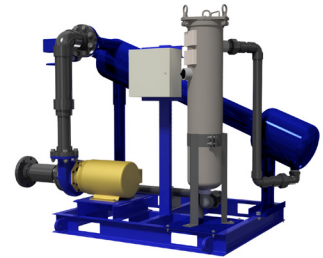
### CONTACT INFORMATION

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### CTS-SERIES

- Flow Range: 200 - 3,400 gpm
- Includes upgraded epoxy coated steel railed skid, VHS separator, throttle valve and auto purge valve.
- Options include pre-strainer and bag recovery vessel

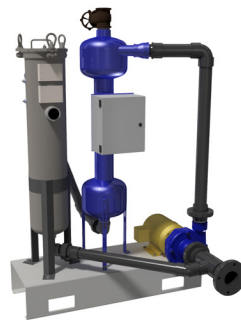


CTS Recovery Vessel



### LCS-SERIES

- Flow Range: 63 - 345 gpm
- Includes Stainless Steel skid base, VHS separator, outlet throttle valve and auto purge valve.
- Options include pre-strainer and bag recovery vessel



LCS Recovery Vessel

## AUTO PURGE

MODEL	FLOW M3/HR (GPM)	LINE SIZE CM (IN)				FOOTPRINT CM (IN)	WEIGHT KG (LBS)	HORSEPOWER	
		INLET(460VAC)	INLET(380VAC)	OUTLET	FLUSH (NPT)			460VAC/60Hz	380VAC/50Hz
LCS-120	14-27 (63-120)	5.1 (2)	5.1 (2)	5.1 (2)	2"	851x568 (34x23)	140 (305)	3	3
LCS-180	23-41 (100-180)	7.6 (3)	7.6 (3)	6.4 (2.5)	2"	851x568 (34x23)	185 (408)	5	5
LCS-260	28-59 (125-260)	10.2 (4)	10.2 (4)	7.6 (3)	2"	851x568 (34x23)	220 (485)	7.5	7.5
LCS-340	43-78 (190-345)	10.2 (4)	10.2 (4)	10.2 (4.0)	2"	851x568 (34x23)	256 (565)	7.5	7.5
CTS-400	45-91 (200-400)	10.2 (4.0)	7.6 (3)	10.2 (4.0)	2"	2090x1289 (83x51)	446 (983)	15	20
CTS-700	83-159 (365-700)	12.7 (5)	15.2 (6)	15.2 (6)	2"	2673x1569 (105.3x61.8)	712 (1570)	20	20
CTS-950	114-216 (500-950)	15.2 (6)	15.2 (6)	15.2 (6)	2"	2673x1569 (105.3x61.8)	823 (1815)	20	25
CTS-1600	182-363 (800-1600)	20.3 (8)		20.3 (8)	2"	2962x1708 (117x68)	1405 (3098)	60	
CTS-2300	295-522 (1300-2300)	25.4 (10)		25.4 (10)	2"	3202x2045 (126x81)	1796 (3960)	60	
CTS-3400	460-772 (2025-3400)	25.4 (10)		30.5 (12)	2"	4029x2299 (159x91)	2302 (5074)	100	

## RECOVERY VESSEL

MODEL	FLOW M3/HR (GPM)	LINE SIZE CM (IN)				FOOTPRINT CM (IN)	WEIGHT KG (LBS)	HORSEPOWER	
		INLET(460VAC)	INLET(380VAC)	OUTLET	FLUSH (NPT)			460VAC/60Hz	380VAC/50Hz
LCS-120-RV	14-27 (63-120)	5.1 (2)	5.1 (2)	5.1 (2)	N/A	1118x1201 (44x48)	175 (388)	3	3
LCS-180	23-41 (100-180)	7.6 (3)	7.6 (3)	6.4 (2.5)	N/A	1118x1201 (44x48)	223 (492)	5	5
LCS-260	28-59 (125-260)	10.2 (4)	10.2 (4)	7.6 (3)	N/A	1118x1201 (44x48)	262 (577)	7.5	7.5
LCS-340	43-78 (190-345)	10.2 (4)	10.2 (4)	10.2 (4.0)	N/A	1118x1201 (44x48)	298 (657)	7.5	7.5
CTS-400	45-91 (200-400)	10.2 (4.0)	7.6 (3)	10.2 (4.0)	N/A	2090x1289 (83x51)	488 (1075)	15	20
CTS-700	83-159 (365-700)	12.7 (5)	15.2 (6)	15.2 (6)	N/A	2673x1569 (105.3x61.8)	762 (1680)	20	20
CTS-950	114-216 (500-950)	15.2 (6)	15.2 (6)	15.2 (6)	N/A	2673x1569 (105.3x61.8)	869 (1916)	20	25
CTS-1600	182-363 (800-1600)	20.3 (8)		20.3 (8)	N/A	2962x1708 (117x68)	1470 (3241)	60	
CTS-2300	295-522 (1300-2300)	25.4 (10)		25.4 (10)	N/A	3202x2045 (126x81)	1880 (4144)	60	
CTS-3400	460-772 (2025-3400)	25.4 (10)		30.5 (12)	N/A	4029x2299 (159x91)	2386 (5260)	100	