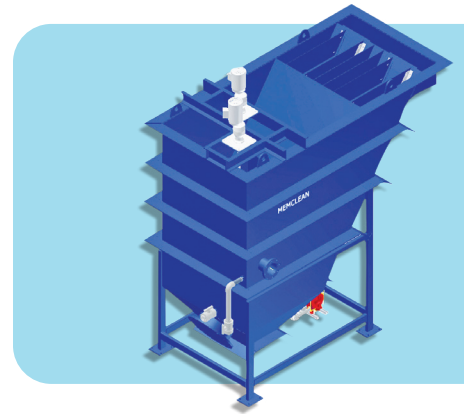


Memclean® HS High Solids Clarifier



The Memclean HS high solids clarifier is designed to flocculate and settle insoluble contaminants present in a wastewater stream. The unit is designed with a lamella style settler with a wide plate spacing to allow the system to handle high solids removal, up to 1,500 parts per million of total suspended solids. The unit can be provided as a stand-alone item or used in conjunction with other wastewater products such as a chemical reaction tank system, a filter press, etc.

For units rated for 100 gallons per minute or less, a Memclean HS clarifier consists of a rapid mix compartment, polymer flocculation section and the lamella style clarifier. The rapid mix tank is provided with a mixer to rapidly blend the polymer with the wastewater stream. The flocculation section includes an electrically driven, variable speed, slow speed mixer to enhance the proper growth of the flocculation particles. The lamella style clarifier includes an air operated diaphragm pump to periodically remove the settled solids from the bottom of the clarifier. For units that are rated for 150 gallons per minute or more, the rapid mix and flocculation tanks are optional.

Polymer from an optional chemical make-up tank is added to the wastewater in the rapid mix chamber. From the rapid mix chamber, the wastewater gravity flows to the slow mix chamber where polymer flocculation occurs. Following polymer addition and flocculation, the wastewater will flow by gravity through the inclined plate settler for the separation of the insoluble contaminants from the clear supernatant.

The supernatant from the clarifier will gravity flow out of the unit. The settled solids will be periodically removed from the bottom of the clarifier via an air operated diaphragm pump.

The Memclean HS clarifier is manufactured from carbon steel with polypropylene constructed separator packs.



MCPI-900-150-HS, MCPI-1200-200-HS, MCPI-1500-250-HS & MCPI-2000-300-HS

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MEMCLEAN® HS CLARIFIER FAMILY

Model Number	MCPI-300-50-HS	MCPI-600-100-HS	MCPI-900-150-HS	MCPI-1200-200-HS	MCPI-1500-250-HS	MCPI-2000-300-HS
Flow Rate	50 gpm 11.34 m ³ /hr	100 gpm 22.71 m ³ /hr	150 gpm 34.07 m ³ /hr	200 gpm 45.34 m ³ /hr	250 gpm 56.78 m ³ /hr	300 gpm 68.14 m ³ /hr
Maximum Influent TSS	1,500 mg/L	1,500 mg/L	1,500 mg/L	1,500 mg/L	1,500 mg/L	1,500 mg/L
Material of Construction	carbon steel, painted exterior	carbon steel, painted exterior	carbon steel, painted exterior	carbon steel, painted exterior	carbon steel, painted exterior	carbon steel, painted exterior
Plate Construction	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene
Rapid Mix Volume/Floc Tank Volume	100-gal (0.4 m ³) 900-gal (3.4 m ³)	200-gal (0.8 m ³) 1,300-gal (4.9 m ³)	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below
Rapid Mix Mixer	1/3 HP, 460-V / 3-Phase / 60 Hertz 316 SS	1/3 HP, 460-V / 3-Phase / 60 Hertz 316 SS	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below
Flocculation Mixer	1/3 HP, 460-V / 3-Phase / 60 Hertz 316 SS	1/2 HP, 460-V / 3-Phase / 60 Hertz 316 SS	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below	Flocculation system separate, see table below
Air Operated Sludge Withdrawal Pump	(Qty 1) 1" ARO cast iron constructed	(Qty 1) 1" ARO cast iron constructed	(Qty 2) 1-1/2" ARO cast iron constructed	(Qty 2) 1-1/2" ARO cast iron constructed	(Qty 2) 1-1/2" ARO cast iron constructed	(Qty 2) 1-1/2" ARO cast iron constructed
Actual Plate Area	528 sq ft 49.1 m ²	1,056 sq ft 98.1 m ²	1,584 sq ft 147.2 m ²	2,112 sq ft 196.2 m ²	2,752 sq ft 255.7 m ²	3,520 sq ft 327.0 m ²
Effective Settling Area	300 sq ft 27.9 m ²	600 sq ft 55.7 m ²	900 sq ft 83.6 m ²	1,200 sq ft 111.5 m ²	1,500 sq ft 139.4 m ²	2,000 sq ft 185.8 m ²
Quantity of 16 ft ² plates	33	66	99	132	172	220
Plate Spacing	2" 5.08 cm	2" 5.08 cm	2" 5.08 cm	2" 5.08 cm	2" 5.08 cm	2" 5.08 cm
Dimensions (L x W x H)	138" x 73" x 160" 351 x 185 x 406 cm	196" x 73" x 160" 498 x 185 x 406 cm	200" x 111" x 207" 508 x 282 x 526 cm	205" x 144" x 210" 520 x 366 x 533 cm	215" x 150" x 215" 546 x 381 x 546 cm	215" x 184" x 215" 546 x 467 x 546 cm
Shipping Weight	7,000 lbs 3,175 kg	9,000 lbs 4,082 kg	11,000 lbs 4,989 kg	13,500 lbs 6,123 kg	14,000 lbs 6,350 kg	16,000 lbs 7,257 kg

MEMCLEAN HS FLOCCULATION SYSTEMS

Flocculation System Model No	included above	included above	FLOC-900-150-HS	FLOC-1200-200-HS	FLOC-1500-250-HS	FLOC-2000-350-HS
Rapid Mix / Floc Tank Volume	included above	included above	250-gal (0.9 m ³) 1,700-gal (6.6 m ³)	300-gal (1.1 m ³) 2,200-gal (6.6 m ³)	300-gal (1.1 m ³) 2,700-gal (10.2 m ³)	300-gal (1.1 m ³) 2,700-gal (10.2 m ³)
Rapid Mix Mixer	included above	included above	1/3 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	1/3 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	1/3 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	1/3 HP, 460-V / 3-Phase / 60 Hertz, 316 SS
Flocculation Mixer	included above	included above	1 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	1 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	2 HP, 460-V / 3-Phase / 60 Hertz, 316 SS	2 HP, 460-V / 3-Phase / 60 Hertz, 316 SS
Dimensions (L x W x H)	included above	included above	90" x 111" x 207" 228 x 282 x 526 cm	90" x 144" x 210" 228 x 366 x 533 cm	90" x 150" x 215" 228 x 381 x 546 cm	110" x 184" x 215" 279 x 467 x 546 cm
Shipping Weight	included above	included above	3,500 lbs 1,587 kg	4,000 lbs 1,814 kg	5,000 lbs 2,267 kg	6,000 lbs 2,721 kg



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