



MCPI-600-100-MS, MCPI-1200-200-MS

MEMCLEAN® MS MEDIUM SOLIDS CLARIFIER

The Memclean® MS medium solids clarifier is designed to flocculate and settle insoluble contaminants present in a wastewater stream. The unit is designed as a lamella style settler, and will handle up to 750 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 that are rated 200 gallons per minute or less, the Memclean MS 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 settled solids from the bottom of the clarifier. For units that are rated for 300 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 settling tank for the separation of insoluble contaminants from the clear supernatant.

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

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



MCPI-1800-300-MS MCPI-2400-400-MS, MCPI-3000-500-MS and MCPI-4000-600-MS

MEMCLEAN® MS CLARIFIER FAMILY

Model Number	MCPI-600-100-MS	MCPI-1200-200-MS	MCPI-1800-300-MS	MCPI-2400-400-MS	MCPI-3000-500-MS	MCPI-4000-600-MS
Flow Rate	100 gpm 22.71 m ³ /hr	200 gpm 45.43 m ³ /hr	300 gpm 68.14 m ³ /hr	400 gpm 90.85 m ³ /hr	500 gpm 113.56 m ³ /hr	600 gpm 136.28 m ³ /hr
Maximum Influent TSS	750 mg/L	750 mg/L	750 mg/L	750 mg/L	750 mg/L	750 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/Floc Tank Volume	100-gal (0.4m 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			
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 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			
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	1,056 sq ft 98.1 m ²	2,112 sq ft 196.2 m ²	3,168 sq ft 294.3 m ²	4,224 sq ft 392.4 m ²	5,504 sq ft 511.3 m ²	7,040 sq ft 654.0 m ²
Effective Settling Area	600 sq ft 55.7 m ²	1,200 sq ft 111.5 m ²	1,800 sq ft 167.2 m ²	2,400 sq ft 223.0 m ²	3,000 sq ft 278.7 m ²	4,000 sq ft 371.6 m ²
Quantity of 16 ft ² plates	66	132	198	264	344	440
Plate Spacing	1" 2.54 cm	1" 2.54 cm	1" 2.54 cm	1" 2.54 cm	1" 2.54 cm	1" 2.54 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	215" x 150" x 215" 546 x 381 x 546 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	7,500 lbs 3,402 kg	10,000 lbs 4,536 kg	14,500 lbs 6,577 kg	15,000 lbs 6,803 kg	15,500 lbs 7,030 kg	17,500 lbs 7,937 kg

MEMCLEAN® MS FLOCCULATION SYSTEMS

Flocculation System Model No	included above	included above	FLOC-1800-300-MS	FLOC-2400-400-MS	FLOC-3000-500-MS	FLOC-4000-600-MS
Rapid Mix / Floc Tank Volume	included above	included above	300-gal (1.1 m ³) 2,700-gal (10.2 m ³)	400-gal (1.5 m ³) 3,600-gal (13.6 m ³)	500-gal (1.9 m ³) 4,500-gal (17.0 m ³)	600-gal (2.3 m ³) 5,400-gal (20.4 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	110" x 111" x 207" (279 x 282 x 526 cm)	120" x 144" x 210" (305 x 366 x 533 cm)	120" x 150" x 215" (305 x 381 x 546 cm)	132" x 184" x 215" (335 x 467 x 546 cm)
Shipping Weight	included above	included above	6,000 lbs 2,721 kg	7,000 lbs 3,175 kg	7,500 lbs 3,402 kg	8,500 lbs 3,855 kg



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