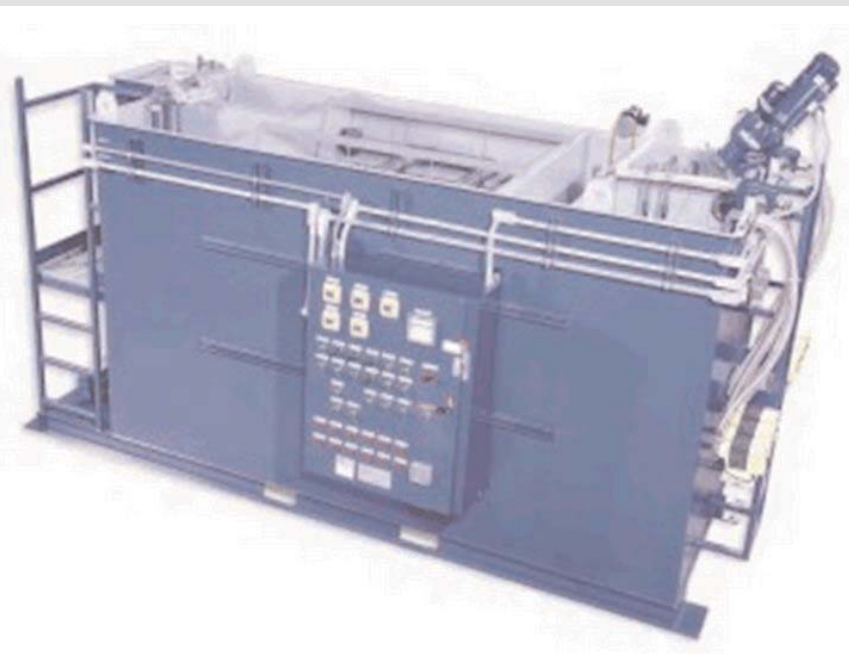


TotalTreat® CPS Continuous Precipitation System

SIEMENS

The TotalTreat® Continuous Precipitation System (CPS) is a packaged system used to perform continuous flow chemical precipitation and clarification. The system includes reaction tanks with chemical injection pumps, pH meters and mixers, flocculation chamber with mixer, clarifier, dual sludge age tanks, sludge age chamber feed pump, and an effluent clearwell. The CPS has been used in many industries and applications. Sludge removal and decant pumps are available as options. The CPS can be used as a stand alone unit or integrated as part of a larger system. The system requires influent, sludge process connections and a single power connection. The chemistry used in the CPS is selected to provide optimum treatment for the waste. The five standard equipment dosing pumps can be supplemented and additional instrumentation, such as ORP, are available as optional equipment.

CPS-10-2-5A



FEATURES

- NEMA-4X electrical enclosure
- Compact design for small footprint
- Inclined tube settling modules for clarification
- Dual sludge age tanks to improve filter press operation
- Epoxy coated carbon steel construction for superior corrosion resistance
- TEFC mixer motors
- Pre-piped
- Pre-wired
- Factory tested
- Stand alone operation

AVAILABLE STANDARD OPTIONS

- ORP transmitters/sensors
- Effluent chamber pH transmitter/sensor/recorder
- Automatic sludge valves
- Dual pH transmitters/sensors
- Dual ORP transmitters/sensors
- Additional chemical dosing pumps
- Sludge age tank decant pump
- Chamber 1 liner

TOTALTREAT CPS SPECIFICATIONS

SPECIFICATIONS				
Model Number	CPS-10	CPS-30	CPS-50	CPS-100
Two Reaction Chambers	230 gallons, 0.87 m ³ (each)	330 gallons, 1.3 m ³ (each)	520 gallons, 2.0 m ³ (each)	1,070 gallons, 4.0 m ³ (each)
Flocculation Chamber	45 gallons, 0.17 m ³	130 gallons, 0.49 m ³	500 gallons, 1.9 m ³	770 gallons, 2.9 m ³
Clarification Chamber	710 gallons, 2.7 m ³	1,600 gallons, 6.1 m ³	2,600 gallons, 9.8 m ³	3,690 gallons, 14.0 m ³
Two Sludge Thickening Chambers	260 gallons, 0.98 m ³ (each)	400 gallons, 1.5 m ³ (each)	920 gallons, 3.5 m ³ (each)	1,340 gallons, 5.1 m ³ (each)
Effluent Chamber	90 gallons, 0.34 m ³	105 gallons, 0.40 m ³	480 gallons, 1.8 m ³	850 gallons, 3.2 m ³
Two Reaction Chamber Dosing Pumps	Chamber—LMI, PVC/Ceramic	Chamber—LMI, PVC/Ceramic	Chamber—LMI, PVC/Ceramic	Chamber—Air Operated Double Diaphragm, ARO
Reaction Chamber Mixer	Chamber—Brawn, BD-33-350, 1750 rpm, 0.33 HP, 316 SS Shaft & Impeller	Chamber—Brawn, BD-33-350, 1750 rpm, 0.33 HP, 316 SS Shaft & Impeller	Chamber—Brawn, BD-33-350, 1750 rpm, 0.33 HP, 316 SS Shaft & Impeller	Chamber—Brawn, BD-33-350, 1750 rpm, 0.33 HP, 316 SS Shaft & Impeller
Flocculation Chamber Pump	LMI, PVC/Ceramic	LMI, PVC/Ceramic	LMI, PVC/Ceramic	Air Operated Double Diaphragm, ARO
Flocculation Chamber Mixer	Bodine 636 Paddlewheel Type, Gear Drive, 14 rpm, 0.083 HP, 304 SS & Polypropylene	Bodine 636 Paddlewheel Type, Gear Drive, 14 rpm, 0.083 HP, 304 SS & Polypropylene	Bodine 636 Paddlewheel Type, Gear Drive, 14 rpm, 0.083 HP, 304 SS & Polypropylene	Bodine 636 Paddlewheel Type, Gear Drive, 14 rpm, 0.083 HP, 304 SS & Polypropylene
Sludge Age Chamber Feed Pump	Air Operated Double Diaphragm, ARO	Air Operated Double Diaphragm, ARO	Air Operated Double Diaphragm, ARO	Air Operated Double Diaphragm, ARO
VALVES AND PIPING				
Influent	By Customer	By Customer	By Customer	By Customer
Sludge Decant	1" - PVC Schedule 80	1" - PVC Schedule 80	1" - PVC Schedule 80	1" - PVC Schedule 80
Process Effluent	1-1/2" - PVC Schedule 80	1-1/2" - PVC Schedule 80	2" - PVC Schedule 80	3" - PVC Schedule 80
Filter Press Feed	1-1/2" - PVC Schedule 80	1-1/2" - PVC Schedule 80	1-1/2" - PVC Schedule 80	2" - PVC Schedule 80
Effluent Clearwell - Emergency Overflow	3" - PVC Schedule 80	3" - PVC Schedule 80	4" - PVC Schedule 80	6" - PVC Schedule 80
Air Line (CDA)	1/2" - NPT	1/2" - NPT	1/2" - NPT	1/2" - NPT
Water Line (ICW)	3/4" - PVC Schedule 80	3/4" - PVC Schedule 80	3/4" - PVC Schedule 80	3/4" - PVC Schedule 80
INSTRUMENTS				
pH	Qty. 2—GLI	Qty. 2—GLI	Qty. 2—GLI	Qty. 2—GLI
UTILITIES REQUIRED				
Power	208 Y-VAC, 3-Phase, 60-Hertz, 30 Amps, 5-Wire Service	208 Y-VAC, 3-Phase, 60-Hertz, 30 Amps, 5-Wire Service	208 Y-VAC, 3-Phase, 60-Hertz, 40 Amps, 5-Wire Service	208 Y-VAC, 3-Phase, 60-Hertz, 50 Amps, 5-Wire Service
Compressed Air	20 cfm @ 100 psi (34 m ³ /hr @ 690 kPa), 10% duty factor	20 cfm @ 100 psi (34 m ³ /hr @ 690 kPa), 10% duty factor	20 cfm @ 100 psi (34 m ³ /hr @ 690 kPa), 10% duty factor	20 cfm @ 100 psi (34 m ³ /hr @ 690 kPa), 10% duty factor
Industrial Cold Water	70 gpd @ 40 psi 0.01 m ³ /hr @ 276 kPa	130 gpd @ 40 psi 0.02 m ³ /hr @ 276 kPa	230 gpd @ 40 psi 0.04 m ³ /hr @ 276 kPa	540 gpd @ 40 psi 0.09 m ³ /hr @ 276 kPa
CONSTRUCTION				
Material	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
Paint - Internal	Internal—Two Coats Cyclo-Aliphatic Amine Epoxy—Total Coating Thickness 8.0 to 10.0 MDFT	Internal—Two Coats Cyclo-Aliphatic Amine Epoxy—Total Coating Thickness 8.0 to 10.0 MDFT	Internal—Two Coats Cyclo-Aliphatic Amine Epoxy—Total Coating Thickness 8.0 to 10.0 MDFT	Internal—Two Coats Cyclo-Aliphatic Amine Epoxy—Total Coating Thickness 8.0 to 10.0 MDFT
Paint - External	External—Two Coat Acrylic-Aliphatic Urethane—Total Coating Thickness 3.5 to 4.8 MDFT—Federal Blue	External—Two Coat Acrylic-Aliphatic Urethane—Total Coating Thickness 3.5 to 4.8 MDFT—Federal Blue	External—Two Coat Acrylic-Aliphatic Urethane—Total Coating Thickness 3.5 to 4.8 MDFT—Federal Blue	External—Two Coat Acrylic-Aliphatic Urethane—Total Coating Thickness 3.5 to 4.8 MDFT—Federal Blue
Overall Dimensions (L x W x H)	11'-6" x 6'-9" x 8'-5" 3,505 x 2,057 x 2,565 mm	15'-9" x 6'-9" x 8'-5" 4,801 x 2,057 x 2,565 mm	18'-5" x 9'-6" x 9'-11" 5,613 x 2,896 x 3,023 mm	27'-5" x 9'-6" x 11'-0" 8,357 x 2,896 x 3,023 mm
Overseas Container	Yes	Yes	No	No
Shipping Weight	4,600 lbs 2,090 kg	6,300 lbs 2,860 kg	8,400 lbs 3,810 kg	12,200 lbs 5,530 kg
Operating Weight	18,000 lbs 8,160 kg	32,100 lbs 14,560 kg	53,800 lbs 24,400 kg	80,200 lbs 36,380 kg

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.

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