

# Totaltreat® Continuous Neutralization System (NS)

# SIEMENS

The TotalTreat® Continuous Neutralization System (NS) is a packaged system designed for continuous flow neutralization. The system includes reaction tanks with chemical injection pumps, pH meters and mixers and effluent clearwell. The system consists of a rectangular polypropylene tank with external steel reinforcement (polypropylene encased). Internally, the system consists of either two or three reaction chambers plus a final effluent clearwell. Standard system sizing is based on a 10-minute retention time in each chamber. Each chamber is a separate stirred tank reactor with individual pH control. Gross chemical dosing pumps and effluent flow meters are available as options. The TotalTreat® NS can be used as a stand alone unit or integrated as part of a larger system. The system requires influent, effluent and a single power connection. The chemistry used in the TotalTreat® NS is selected to provide optimum treatment for the waste.

*NS-100-2 Neutralization System*



## FEATURES

- NEMA-4X electrical enclosure
- Compact design for small footprint
- Polypropylene construction for superior corrosion resistance
- No inter-chamber piping required
- TEFC mixer motors
- Pre-piped
- Pre-wired
- Factory tested
- Stand alone operation
- Integrate with other wastewater products

## AVAILABLE STANDARD OPTIONS

- Effluent flow transmitter/sensor/recorder
- Dual pH transmitters/sensors
- Additional air operated (gross) dosing pumps

# Totaltreat® Continuous Neutralization System (NS)

SPECIFICATIONS								
Model Number	NS-10-2	NS-30-2	NS-50-2	NS-100-2	NS-150-3	NS-30-3	NS-50-3	NS-75-3
Nominal Flow Rate	10 gpm 2.3 m <sup>3</sup> /hr	30 gpm 6.8 m <sup>3</sup> /hr	50 gpm 11.4 m <sup>3</sup> /hr	100 gpm 22.7 m <sup>3</sup> /hr	10 gpm 2.3 m <sup>3</sup> /hr	30 gpm 6.8 m <sup>3</sup> /hr	50 gpm 11.4 m <sup>3</sup> /hr	75 gpm 17.0 m <sup>3</sup> /hr
Design Temperature	40° to 120° F / 4° to 49° C							
Maximum Influent pH Range (S.U)	1 to 13	1 to 13	1 to 13	1 to 13	0.5 to 13.5	0.5 to 13.5	0.5 to 13.5	0.5 to 13.5
Reaction Chambers	Two	Two	Two	Two	Three	Three	Three	Three
Reaction Chamber Volume	125/105 gallons 0.5/0.4 m <sup>3</sup>	350/320 gallons 1.3/1.2 m <sup>3</sup>	570/500 gallons 2.2/1.9 m <sup>3</sup>	1,100/1,020 gallons 4.2/3.9 m <sup>3</sup>	120/120/105 gallons 0.5/0.5/0.4 m <sup>3</sup>	360/360/320 gallons 1.4/1.4/1.2 m <sup>3</sup>	570/570/500 gallons 2.2/2.2/1.9 m <sup>3</sup>	850/850/780 gallons 3.2/3.2/3.0 m <sup>3</sup>
Clearwell Volume	16 gallons 0.06 m <sup>3</sup>	40 gallons 0.15 m <sup>3</sup>	70 gallons 0.26 m <sup>3</sup>	85 gallons 0.32 m <sup>3</sup>	16 gallons 0.06 m <sup>3</sup>	40 gallons 0.15 m <sup>3</sup>	70 gallons 0.26 m <sup>3</sup>	70 gallons 0.26 m <sup>3</sup>
Effluent Connection	2" Sched. 80 PVC FNPT	3" Sched. 80 PVC FNPT	4" Sched. 80 PVC FNPT	6" Polypropylene Flange	2" Sched. 80 PVC FNPT	3" Sched. 80 PVC FNPT	4" Sched. 80 PVC FNPT	4" Polypropylene Flange
Material of Construction	Polypropylene/Carbon Steel							
Mixers	Qty. 1 - Chamber Brawn, BD-33-350, 1750 rpm, 0.33 HP, 316SS Shaft/Impeller							
Chemical Pumps	Qty. 2 - Chamber LMI, PVC/Ceramic							
pH Instrumentation	Qty. 1 - Chamber GLI							
Effluent Chart Recorder	Qty. 1 - Honeywell							
Dimensions (L x W x H)	5'-1" x 3'-6" x 5'-1" 1,549 x 1,067 x 1,549 mm	7'-1" x 4'-6" x 6'-10" 2,159 x 1,372 x 2,083 mm	9'-2" x 4'-6" x 7'-10" 2,794 x 1,372 x 2,388 mm	11'-1" x 5'-6" x 9'-0" 3,378 x 1,676 x 2,743 mm	6'-11" x 3'-6" x 5'-1" 2,108 x 1,067 x 1,549 mm	10'-1" x 4'-6" x 6'-10" 3,073 x 1,372 x 2,083 mm	13'-2" x 4'-6" x 7'-10" 4,013 x 1,372 x 2,388 mm	13'-10" x 5'-6" x 9'-0" 4,216 x 1,676 x 2,743 mm
Shipping Weight	550 lbs 250 kg	1,100 lbs 500 kg	2,000 lbs 900 kg	3,500 lbs 1,590 kg	700 lbs 320 kg	1,650 lbs 750 kg	3,000 lbs 1,360 kg	4,050 lbs 1,830 kg
Operating Weight	2,650 lbs 1,200 kg	6,950 lbs 3,150 kg	11,600 lbs 5,260 kg	21,900 lbs 9,930 kg	3,330 lbs 1,510 kg	10,500 lbs 4,760 kg	17,400 lbs 7,890 kg	25,350 lbs 11,500 kg
Power	208-VAC, 3-Phase, 60-Hertz, 30-Amps, 5-Wire Service							
Compressed Air	5 cfm @ 100 psi 8.5 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	5 cfm @ 100 psi 8.5 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	10 cfm @ 100 psi 17 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	10 cfm @ 100 psi 17 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	5 cfm @ 100 psi 8.5 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	10 cfm @ 100 psi 17 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	20 cfm @ 100 psi 34 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor	20 cfm @ 100 psi 34 m <sup>3</sup> /hr @ 690 kPa, 10% duty factor

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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