



SUPREME
Associates Traders
Enduring Relationships



WATER DISINFECTION SYSTEM

Chlorination System

Chlorination System

The disinfection of water is necessary to eliminate pathogenic microorganisms and avoid the formation of bacteria in drinking water, avoid any microbial development in the distribution system.

Chlorination is the process of adding chlorine in drinking water to kill or inactive germs. Chlorine represents the most effective and economical method for disinfecting water, whether it is intended for civil, sanitary, industrial, wastewater or swimming pool use. In the treatment of water intended for human consumption it is customary to use which, once added to the water, creates chlorine by-products which attack, at the molecular level, the pathogenic organisms present in the water, whether they are virus, bacteria, algae or other organic substances.

Chlorination is mainly used: -

- Community Water Supply
- Health Emergencies
- Waters from wells or springs - Industrial process water
- Swimming pools
- Waste Water Treatment



WHO recommends 0.2 mg/ltr (ppm) Free Residual Chlorine(FRC) in the point of use for community water supply. Chlorine is available in Gas (Cl₂) , liquid(Sodium Hypochlorite- NaClO) and Powder- Bleaching as Calcium Hypochlorite -Ca(ClO)₂.Chlorine can be dosed through online dosing pumps in a required quantity. **Supreme** chlorine dosing stations represent the simplest and smallest dosing system, as all components are pre-installed and ready to use.

Why Supreme ?

Quality Products- Authorized distributor of world's leading Seko Italian Dosing Pumps for Nepal.

Qualified and Committed Team- 16+ Year's Experience, 16+ Sales & Support Team, 40 district coverage.

One Stop Solutions- Design, Supply, Installation of chlorination system as per requirement.

Constant Availability- Proper stock of components and spares. 600 + Chlorination System installed.

STANDARD DOSING SYSTEM SAT -CL1

Standard Dosing System is suitable for pumping water supply schemes and overhead supply schemes.

The standard dosing system SAT-CL1 is equipped with :

- Polyethylene chlorine storage tank with a capacity of 200 liters complete with loading cap and dosing pump stand. 40 mm Flush out valve and 20 mm chemical supply valves are installed in the tank. On demand storage tanks with greater capacity are available
- Mixer with plastic lamination in agitator chemical free material for chemical contact part
- SEKO Dosing pump completely made in acid-proof material, consisting in: head with membrane set to motion by variable frequency magnet, electronic circuit, from 0% to 100% flow adjustment device, suction and delivery accessories.

Technical Specification of SAT- CL1

Model	Max. Flow Rate	Max. Pressure	Power	Watt. Dosing Pump	Watt Mixer	Tank Volume
SAT- CL1	0-8 LPH	12 Bar	220 Vac	22 W	370 W	200 L



GRAVITY DOSING SYSTEM SA CL DROP

In case of logistic difficulties and/or high costs to connect to electrical network, the sterilization is always a problem, Supreme solves it in an easy and low cost way, designing and making the gravity dosing systems for chlorine. The gravity dosing systems are chlorinator that work without electric power supply, with great economical and practical benefits. Those models are suitable for surface water gravity supply schemes.

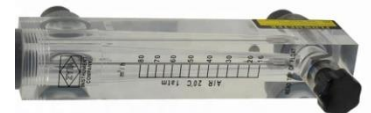
The gravity dosing system SAT-CLDROP is equipped with :

- Polyethylene chlorine storage tank with a capacity of 100 liters complete with loading cap and inbuilt level indicator 40 mm Flush out valve and 20 mm chemical supply valves are installed in the tank. On demand storage tanks with greater capacity are available
- Sodium Hypochlorite(liquid chlorine) or Bleaching powder is mixed manually in the tank. Solar operated 24 V DC mixer motor can be installed on demand.
- Chlorine goes to water tank through flow control valve with flow meter where we can measure per hour chlorine flow and control as per the requirement.

The Gravity dosing system CL DROP includes dosing unit, storage tank and connecting accessories.

Technical Specification of SAT- CL DROP

Model	Max. Flow Rate	Tank	Power	Tank Dia	Tank Height
SAT- CLDROP	0-25 LPH	100 L	220 Vac	390 mm	670 mm



ONSITE CHLORINE GENERATOR – NOBLE CHLOR Brine Based Chlorinator

Noble Chlor® electro chlorination system uses only common salt (no need to add any hazardous chemicals) to generate on site chlorine depending upon your requirement in a batch type system using an advanced electrolytic cell.

This chlorinated brine can be quantitatively added to disinfect your water and it provides safe, odorless, tasteful drinking water. It generates 0.8% Concentrated Sodium Hypochlorite suitable for water supply schemes, swimming pools, healthcare facilities etc.

The onsite chlorine generator NOBLE CHLOR is equipped with :

- Electrolyser with FRP Electrolysis Tank
- Sodium Hypochlorite storage tank.
- Chemical Dosing Pump Chlorine goes to water tank through flow control valve with flow meter where we can measure per hour chlorine flow and control as per the



Technical Specification of SAT- NOBLE CHLOR BRINE BASED BATCH CHLORINATORS

NOBLE CHLOR MODELS

Chlorinator MODELS	Capacity Chlorine Production (g/batch)	Volume of Hypochlorite Solution (L/batch)	Treatable Volume Per Batch @1ppm (Litres)	Treatable Volume Per Day (3 Batches)@1ppm (Litres)
NOBLECHLOR-15S	150	19	1,50,000	4,50,000
NOBLECHLOR-50S	550	70	5,50,000	16,50,000
NOBLECHLOR-100S	1100	140	11,00,000	33,00,000
NOBLECHLOR-200S	2000	250	20,00,000	60,00,000
NOBLECHLOR-300S	3000	375	30,00,000	90,00,000

Available in different capacities and continuous chlorinators on demand.

DOSING PUMPS – SEKO

We are proud to announce that we are the authorized distributor of SEKO products for Nepal. The Global provider of dosing pumps and metering solutions for the hygiene, water treatment and industrial processes markets. For more than 40 years, SEKO has designed and manufactured outstanding dosing pumps and metering solutions for the Cleaning and Hygiene, Water Treatment and Industrial Processes markets and now delivers these in over 100 countries globally.



A privately held company, SEKO is unique amongst its principal competitors through its scale and breadth of portfolio covering multiple business sectors and many different and varied applications and continues to deliver its way of doing business through over 1,000 employees.



Motor Driven Pump



Mechanical Diaphragm Pump

TEKNA AKS/AKL SERIES - Solenoid Dosing Pump

Pump Model	Pressure [bar]	Flow Rate [l/h]	Frequency max [stroke/min]	Stroke capacity [cc/stroke]	Connection [mm]		Power supply	Consumption [W]	
					Suction	Discharge		Min	Max
AKS 500N	20	0,4	120	0,06	4/6	4/7	100÷240 Vac	13,0	15,0
	16	0,8		0,11					
	10	1,2		0,17					
	6	1,5		0,21					
AKS 600N	20	2,5	120	0,35	4/6	4/7	100÷240 Vac	14,0	19,0
	18	3,0		0,42					
	14	4,2		0,58					
	8	7,0		0,97					
AKS 603N	12	4,0	160	0,42	4/6	4/6	100÷240 Vac	17,0	22,0
	10	5,0		0,52					
	8	6,0		0,63					
	2	8,0		0,83					
AKS 800N	16	7,0	300	0,39	4/6	4/6	100÷240 Vac	22,0	33,0
	10	10,0		0,56					
	5	15,0		0,83					
	1	18,0		1					
AKS 803N	5	20,0	300	1,11	8/12	8/12	100÷240 Vac	29,0	37,0
	4	32,0		1,78					
	2	62,0		3,44					
	0	110,0		6,11					

The Pressure Data in the table refer to the measured parameters on the plant, including the use of SEKO STANDARD injection fitting.

*Minimum consumption at 0 bar of back pressure (Patented)

SPRING SERIES- MS1- Mechanical diaphragm pump

Pump Model	Diaphragm Diameter [mm]	Stroke/min	Flow rate		Max back pressure				Suction/Discharge Connection		Electric Motor 50 Hz 3 phases [kW]
					bar		p.s.i.				
			l/h	gl/h	SS 316	PP/PVC	SS 316	PP/PVC	SS 316	PP/PVC	
M S 1 A 0 6 4 A	64	58	5.5	1.45	16	10*	232	145*	1/4" G F	1/4" G F	0,18 (A4)
M S 1 A 0 6 4 B		78	8	2.12							
M S 1 A 0 6 4 C		116	11	2.91							
M S 1 A 0 9 4 A	94	58	20	5.59	16	10*	232	145*	3/8" G F	1/4" G F	0,18 (A4)
M S 1 A 0 9 4 B		78	26	6.88							
M S 1 A 0 9 4 C		116	40	10.58							
M S 1 B 1 0 8 A	108	58	60	15.87	10	10	145	145	3/8" G F	3/8" G F	0,18 (A4)
M S 1 B 1 0 8 B		78	80	21.16							
M S 1 B 1 0 8 C		116	120	31.75							
M S 1 C 1 3 8 A	138	58	155	41	7	7	101	101	3/4" G F	3/4" G F	0,37 (C4)
M S 1 C 1 3 8 B		78	220	58.2					1" G F	1" G F	
M S 1 C 1 3 8 C		116	310	82					1" G F	1" G F	
M S 1 C 1 6 5 A	165	58	230	60.85	5	5	72.5	72.5	1" G F	1" G F	0,37 (C4)
M S 1 C 1 6 5 B		78	330	87.30							
M S 1 C 1 6 5 C		116	500	132.3							

* Available with special reinforced pump head for use with pressure up to 16 bar - 14" Field (Optional) in the Key Code identified by "H"

CHLORINATION ACCESSORIES

BLEACHING POWDER



Available Chlorine: Minimum 34%
 Appearance: white to slightly yellowish-white in appearance and shall be free from hard lumps and any visible impurities.
 Moisture: 0.30% Max (By Weight)
 Packing: 25 Kg HDPE bag and 50 Kg GI Drum.

CHEMICAL MIXING MOTOR



Mixing rod is divided into carbon steel and stainless steel, chemical sunbredge part as non corrosive plastic laminated. Mixing motor is selected according to capacity of the tank.

CHEMICAL TANK



Chemical Dosing Tank is manufactured using LLDPE, food grade and UV resistant. The tank top is flat for the fitting of chemical dosing pump and mixer agitator. It has water level indicator to measure the liquid in the tank. Available in 100 to 500 Ltr. capacity.