

## Gravity Feed Chlorinator:

### Description:

- Ensures continuous and constant quantity of chlorine solution by using a packed Absorption Tower.
- Capacity normally ranges from 200 Gms/hr to 40 Kgs/hr of Chlorine. [Higher capacities can also be provided on request]
- Simple design, very easy to operate and maintain.
- Fewer spares, less operating costs.

### Principle of Operation

- Chlorine Gas from Cylinders/ Tonners at regulated pressure passes through a Flow Control Valve, Rotameter/Flowmeter, Moisture-Trap and Check Valve to a Packed Absorption Tower where it gets uniformly mixed with the incoming water. The chlorine solution is then discharged to the point of application [normally discharged into a sump or reservoir at an elevation below the Absorption Tower only]. The Flow meter directly indicates the amount of chlorine consumed. It is very important that the required water flow to the Absorption Tower, should be constant and continuous at the time of operation for safety reasons.

### Flow Meter

Indicates directly the flow of Chlorine gas in terms of Grams/ Kilograms/ Pounds consumed per hour.

- Made of Borosilicate glass and calibrated for 0.2, 0.5, 1, 2, 3, 5, 6
- 10, 15, 20, 25, 30, 40 kgs/hr of chlorine gas.
- Accuracy is  $\pm 4\%$  of indicated flow.
- Flow can adjusted by a specially designed Flow Control Valve allied with the Flow meter.

### Process Tower

Comes in both Co-Current and Counter Current Types.

### Design

3000 parts of chlorine dissolves in one litre of water. Our design consideration is dissolution of 1500 parts of Chlorine in one litre of water.

- Chlorine gas is released inside the packed [PVC/PP Rashig rings] Absorption Tower with high velocity with  $360^\circ + 90^\circ$  turn ensuring a uniform and complete mixing.
- A "Compensating-Head" is provided to avoid Back-surge during pressure drop of Chlorine gas.



**GRAVITY FEED GAS CHLORINATION SYSTEM**