

In the following we give a general view of our standard chemical feed systems which can however be supplied according to the customer's specification.

Fields of application

- Swimming pools
- Potable water treatment
- Waste water treatment
- Boilers
- Cooling towers
- and others

Chemical Feed Systems are most suitable for metering

- sodium hypochloride
- flocculants
- softeners
- cleansing agents
- acids
- caustics, etc.

Advantages

Easy to order

Just choose one of four tank sizes and the appropriate pump. We provide you with a complete system that prepares, mixes and meters about any chemical.

Easy startup

All equipment will be preassembled. All you have to do is fill the tank, mount the injection nozzle and plug in the pump.

Easy to modify to meet special requirements

In addition to the standard version, we offer various accessories and fittings such as backpressure/relief valves, electric agitators, moisture cartridges, etc., depending on the actual application.

Each standard system includes:

- metering pump
- closed polyethylene tank:
45 l / 60 l / 100 l / 200 l
- hand mixer
- discharge line
- injection nozzle
- suction line & foot valve

Specifications

General

The Chemical Feed System from JESCO is a preassembled system which is ready for operation when it reaches your plant. The standard version includes a PE tank, a MAGDOS pump, a suction line with foot valve, an injection nozzle and a hand mixer. It is



used in potable water and waste water treatment applications, cooling towers, boilers or swimming pools where preparing, mixing and metering of chemicals is required.

Tank

Depending on the application, you can choose either a 45 l, 60 l, 100 l or 200 l tank, made of UV-stabilized polyethylene and fitted with a screw cap and EPDM seal. Since tightness is guaranteed, these tanks are especially suitable for aggressive, toxic or degassing media. The tank assembly also includes a drain at the bottom, a level gauge and tapped holes for mounting the pump. Max. temperature resistance is 70°C.

Metering pump

With the standard tank system, we offer a MAGDOS electronically controlled magnetically driven diaphragm metering pump with variable stroke length and stroke frequency. As an option, it is also available with automatic 0(4)...20 mA control. (See MB, ET and BW of the MAGDOS series for a detailed description.)

The pump will be supplied with an adapter plate for mounting it onto the tank.

Suction line

The tanks are provided with a screw-in sleeve to receive the flexible PVC suction line. The foot valve prevents any liquid drawn in from returning to the tank.

Discharge line

The chemical feed system is supplied with an appropriate discharge line, e.g. 5 m of PVC or PE tubing.

Hand mixer

The standard tank system also includes a PVC hand mixer which allows quick and smooth fluid mixing and resuspending of any settled solids. There are different sizes available depending on the tank size.

Injection nozzle

The injection nozzle is used to inject the chemical delivered by the metering pump into the stream. The standard version offered is PVC with an opening pressure of approximately 1.1 bar. Other materials such as PVDF, PTFE, 1.4571 stainless steel are also available, thread 1/2" or 1/4".

Alternative features

Options are available for the following standard components of the chemical feed system:

· Suction line

We offer a rigid suction line which can be adjusted to the required length. It is supplied with an integrated level control which stops the pump when the chemical level is 50 mm above the lowest suction point. Alarm signaling by means of a special suction line fitted with two float switches is also possible.

· Metering pump

If preferred, use a motor-driven MINIDOS metering pump with a higher flow rate. For metering liquids with entrained gases, we recommend automatic venting of the metering head.

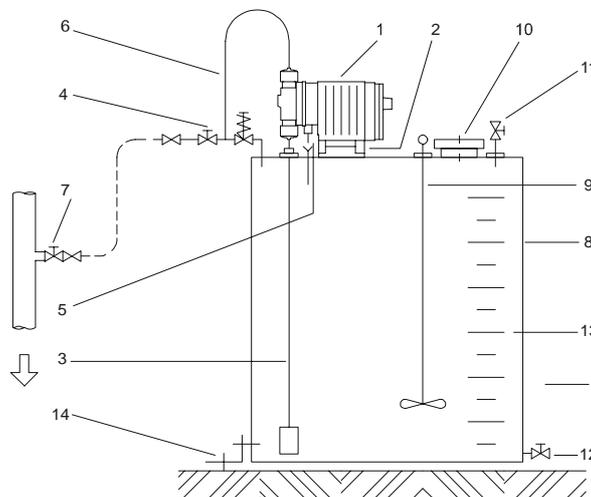
Accessories

- To increase metering accuracy and protect the system against excessive pressure, a valve assembly can be used which is mounted onto the tank. It consists of a relief and backpressure valve.
- If the chemical tank must be hermetically sealed because aggressive, effervescent or toxic agents are used or atmospheric moisture would deteriorate the chemical's character, a moisture cartridge is required. It relieves the pressure and prevents moisture from entering the tank as well as controlling the emission of any chemical odor into the atmosphere. It can be filled either with silicagel (to absorb moisture) or with activated carbon (to absorb odor). The cartridge is also mounted directly onto the tank or fixed to the wall.
- Angle brackets are available to rigidly mount the tank to the floor.

Note:

For further details or technical data about the individual products, please refer to the corresponding MB, ET and BW.

Installation example



1. Solenoid-driven metering pump
2. Adapter plate
3. Suction line with float switch
4. Valve assembly
5. Leakage pipe or probe (in the case of a diaphragm failure)
6. Discharge tubing
7. Injection fitting with non-return valve, shutoff valve and injection pipe
8. Supply tank
9. Hand mixer
10. Inlet
11. Connection for diluting water
12. Outlet water
13. Level gauge (in l)
14. Angle bracket