

## Description

The equipment is used to prepare, store and distribute a solution of process developer. It is formed by an assembly of three stand-alone units: a distribution cabinet, an external standstill for a 200-litre barrel and a high-capacity tank for a mixture of the developer of volume equal to 1,200 litres.

As per the adjusted formula, the chemical TMAH is diluted with DI water and with an admixture of a wetting agent in the required ratio in the mixing tank with circulation and stored in the external storage tank. It is then conducted through the distribution loop to the manufacturing equipment.

## Facts and interesting things:

- Skeletons of cabinets are made from chemically resistant PVC and they meet the Standard FM 4910 for the use in the manufacture of semiconductors.
- Bottom parts of cabinets are made as an intercepting trap with an emergency sensor to detect any leak of liquid.
- The chemical TMAH 25 % is replenished from the external distribution system, the initial dose for mixing (dilution) of the mixture is prepared by pumping over into the storage tank to the adjusted volume.
- The wetting agent is dosed from the 200-litre barrel in smaller volumes by means of a precise dosing pump.
- Chemicals are mixed with the DI water in the mixing tank and they are stirred via circulation in a closed loop.
- Conductivity of the developer solution is measured in course of stirring and the results of measurement are used to determine any possible admixtures of the chemical DI water automatically.
- The finished mixture of developer will be pumped over into the external high-capacity storage tank for 1,200 litres.
- The equipment is managed by means of a built-in PLC with control via a touch control HMI panel. The control system is equipped with application software and enables remote administration.
- A self-supporting double-surface structure of the high-capacity storage tank with indication of leak into the outer shell.
- Adjustable circulation in the tank via the distribution cabinet.
- Continuous measurement of the level height by ultrasonic sensor.
- An emergency overfilling indication by means of a float switch.
- Conductivity measurement of the solution at the input into the distribution loop.



## Basic technical data:

|               |                           |
|---------------|---------------------------|
| Length:       | 2,100 mm                  |
| Width:        | 963 mm                    |
| Height:       | 1,930 mm                  |
| Weight:       | 470 kg                    |
| Power supply: | NPE 230 V AC 50 Hz / TN-S |