

ECO AUTOMATIC ACID LEVELLING MACHINE

Technology
[made in Germany]

Acid levelling of automotive car and truck batteries with automated process and semiautomated handling, including CMWTEC technology



The Advantage:

- Automatic filling process
- Adjustment by toggle bolt
- Exact levelling accuracy sensor monitoring in each cell, individually.
- 100% acid resistance

Basic machine

The basic unit has been designed for housing the individual assemblies and contains the Pneumatic and electrical machine controls. The base frame houses the working console that is Vertically adjustable. The filling unit is mounted onto the working console and the various battery heights are adjusted via the vertical spindle movement. Acid proof stainless steel material is used for both the base frame and the working console.

Filling unit

The filling unit houses the individual heads (according to the application). The heads are lowered into the filling holes of the battery covers. The heads can be adjusted according to the distance of the Battery cover holes and are monitoring and controlling the levelling process. In addition, manual or test Functions can be triggered at the control panel. The unit control is also integrated into a main system using program pre-selection.

Acid supply unit

The supply unit consist of elements to connect the machine to the acid supply system of the factory.

Battery positioning unit

The batteries are positioned exactly underneath the levelling unit, by a fixed stopper system.

Lateral guide unit

The lateral guide including the battery separation and the exit monitoring device is designed for laterally adjusting the battery below the levelling unit. A clamping mechanism ensures the adjustment to be executed exactly and fast.

Battery conveyor unit

A PP chain in a PP body transports the batteries through the machine and, at the same time, ensures them to be adjusted smoothly and exactly at the levelling position.

Description of function

The machine is designed for final levelling of sulphuric acid into automotive batteries. The individual batteries supplied through the conveyor of the finishing line are positioned exactly. The fill stroke move down and the individual levelling heads are lowered into the filling holes of the battery. The level controlling by sensors in each head, facilitates a quick and exactly level achievement. Whenever the level is reached the fill stroke raised up and the battery is feed out of the machine and the next batteries are feed into the exact levelling position under the fill stroke.

Technical specifications

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|----------------------|---|--|
| Battery type | : | automotive car and truck batteries |
| Capacity | : | up to 6 batteries/min (depending on level volume) |
| Level accuracy | : | +/- 2 mm of the final level |
| Weight of batteries | : | 20 – 70 kg |
| Dimension of machine | : | L = 2500 mm W = 1500 mm H = 2200 mm |
| Construction | : | Full acid proof Material, Stainless steel 316Ti Plastic PP and PVC Pieces not acid resistant with special protection |
| Electric | : | 230/400V, 3-Phase, 50/60 Hz, 4 Wire |
| Control voltage | : | 24 DC |
| Power consumption | : | 4,5 kW |
| Operating pressure | : | 6 bar (90 psi) |