

Water Filling System and Stations

Safe, easy and reliable topping up for Saft Ni-Cd batteries

Saft Water Filling Systems (WFS) are designed specifically to carry out safe and reliable topping up of Saft Ni-Cd batteries accurately and with ease as part of your battery's low maintenance programme.



Specially designed to increase maintenance efficiency

Simple use

Just connect the inlet and the outlet of the battery water filling system and fill all cells in one operation.

Reliable and accurate

The system is based on a filling vent with no moving parts. This protects the WFS from any risk of watering circuit jamming or obstruction which guarantees that no cells can be skipped during the topping up process.

The unique Saft WFS technology is based on low pressure balancing in each cell to ensure a proper and uniform level of electrolyte throughout the battery.

Guarantees security

As cells fill in series, it is impossible for any to be skipped. This prevents the battery from the risk of drying out.

With Saft WFS, operators can work in safety and carry out the filling process at a distance from electrical parts and electrolyte.

Reduces costs

A central water filling system is much faster and less labour intensive than filling each cell manually. It allows a reduction of the maintenance costs, of the Total Cost of Ownership (TCO) or Life Cycle Cost (LCC).

Saft's range of digital and manual equipment is suitable for use in:

- Railway workshops
- Stationary installations in industrial environments

Benefits at a glance

- Safety and reliability
- Simple to use
- Faster watering
- Diminution of the maintenance costs
- Reduction of the Life Cycle Cost (LCC)/Total Cost of Ownership (TCO)

Saft's Water Filling System: a unique concept available for all product ranges

A single central watering point

The Saft central water filling system operates on the principle of a single central watering point to top up all cells hydraulically connected in a battery (up to a maximum of 50 cells per WFS circuit).

A complete topping up in one operation

Each cell is equipped with a water filling plug, of which the nozzle ensures the cell is filled to a precise pre-set level.

Water flows through the filling plug's plunging siphon into the cell, while gas is stored in the exhaust tube. When the specified level is reached, the electrolyte closes the gas exhaust tube and the resulting excess pressure stops the water flow into the cell. The water then flows through to the next cell, and so on, until all cells have been filled.



The Saft Water Filling System is available as an integrated, optional or compatible feature:

Integral to Saft MRX and NCX...

The Saft Water Filling System is integrated with the MRX design as a standard component. It is a significant factor in the overall advantage offered by MRX.

... a simple option for Saft sintered PBE ranges...

The WFS is optional as collateral equipment for use with other mobile rail batteries in the Saft range, including:

- SRM
- SRX
- STH
- SPH

... compatible with pocket plate ranges

The system is adaptable to achieve the best performance and reduced maintenance in an extensive range of Saft battery types, including:

- SUN ⊕
- SBLE/SBL/SBM/SBH
- SCM S/SCH S
- KPL/KPM/KPH



Soft offers 3 solutions of Water Filling Station:

Basic Water Filling Kit

Product highlights

- Simple and affordable
- Totally manual, easy to stock, carry and manipulate
- Perfect for small battery fleets

Specifications

Watering kit including: a 19 litres tank equipped with a quick connect, a tubing kit for 1-2 meters height (insert, coupling + vent tube, flow limiter, outlet tubing, 1 spill water tank and a mesh bag).



Classic Water Filling Station

Product highlights

- Robust and easy to handle
- Great manoeuvrability for industrial and railways environments
- Dedicated to medium to large batteries fleets

Specifications

Trolley including: 60 litres tank, pump, battery, tubing, spill water tank
Semi automated topping up cycle with a manual stop
5 hours autonomy (working time)



Digital Water Filling System

Product highlights

- Handling ability for industrial and railways environments
- Adapted to strict control conditions:
 - water consumption control
 - topping up intervals optimisation
- Digital display provides accurate water usage data
- Operating topping up to under-train (from 1.5 m down) or on the roof (to 6 m high) batteries
- Dedicated to large batteries fleets

Specifications

Trolley including: 60 litres tank, pump, battery, tubing, spill water tank
Fully automated topping up cycle
Display showing volume of water used for topping up
5 hours autonomy (working time)



Saft's Water Filling Station solutions: characteristics

	Main functionalities		
	Basic	Classic	Digital
Digital display of software version, hose length and water volume used			○
Topping up of a battery at 6m height			○
Fully automatic operation			○
Semi-automatic operation		○	
Manual operation	○		
Integral water tank		○	○
Pressure testing kit included*	○	○	○
Compatible with mobile, stationary and pocket plate ranges	○	○	○

Item	Part number		
	Basic	Classic	Digital
Water Filling Station	222049	222101 (230 V) 222051 (120 V)	222099 (230 V) 222100 (120 V)
Pressure testing kit*	222048	222048	222048
Connectors	222052	222052	222052

* The pressure testing kit consists of one manometer, one manual pump and the connecting components. If the operator is unable to check the battery watering circuit by eye, the kit is the ideal tool to check WFS tightness before starting the topping up sequence.

Connectors

Product highlights

Connector kits enable water filling systems equipped with CPC-type connectors to be compatible with older battery watering circuits that include Walther-type connectors.



Doc N° 21796-2-0910
Edition: September 2010

Data in this document is subject to change without notice and becomes contractual only after written confirmation.

Published by the Communications Department.

Photo credit: Saft.

Société anonyme au capital de 31 944 000 €
RCS Bobigny B 383 703 873

Produced in the UK by Arthur Associates Limited.

