## AquaGen® premium.top

# **Recombination system** for stationary batteries









Motive Power Systems

#### **Reserve Power Systems**

Special Power Systems Service

### Your benefits with HOPPECKE AquaGen® premium.top

- Reduced maintenance costs and ventilation requirements integral catalyst for extremely extended water refill intervals (virtually maintenance-free)
- Optimum recombination efficiency (similar to sealed batteries) bi-directional valve avoids loss of gases and aerosols
- Maximum safety integrated flame barrier
- Minimum cost single investment. No need to replace during whole battery lifetime



## Typical applications of HOPPECKE AquaGen® premium.top

■ For all flooded lead acid and NiCd batteries



# <u>AquaGen®</u>

### AquaGen® premium.top

The unique recombination system

### **Functional description**

When the AquaGen® premium.top recombination system is used, the hydrogen and oxygen gases which evolve during water decomposition are fed into the AquaGen® recombiner.

By means of an integral catalyst, these gases are recombined to form water vapour. This water vapour condenses on the sides of the AquaGen® premium.top vent recombiner. The resultant drops of water flow downwards and are returned to the cell.

### The efficiency of this recombination is up to 99%.

Because of this level of efficiency, water refilling is drastically reduced, with even total freedom from maintenance being possible.





New patented technology

Another benefit from the use of AguaGen® premium.top recombination recombiner is a considerable reduction in ventilation requirements according to EN 50272-2/DIN VDE 0510 Part 2 (European standards).

## Freedom from maintenance with no restric-

The recombination of hydrogen and oxygen is an exothermal process in which heat is released.

With sealed batteries, this recombination takes place internally at the negative plates. The increased temperature in the interior of sealed batteries leads to life-reducing effects, especially at the electrodes. To minimise these negative side effects, the operation of sealed batteries is subject to various limitations.

When AquaGen® premium.top is used, the recombination does not take place at the active components (electrodes) and not within the battery.

The AquaGen® premium.top recombinator is fitted to the battery as an external component. This avoids any temperature rise inside the battery. The separation of the recombination process from the cells' active components allows maximisation of freedom from maintenance, as for sealed batteries, without reducing life expectancy and with no restrictions on operation of the battery.

The AquaGen® premium.top H version is available for



capacities up to 340 Ah and for applications with restrictions due to dimensions (e.g. height with reference to battery erection, and depth with reference to cell size).