

**Abstract****Gastightly sealed alkaline storage battery
in the form of a button cell**

In an Ni/Cd or Ni/hydride storage battery of the button-cell type, the positive electrode tablet is based on a nickel hydroxide powder of spherical particles and of high pycnometric density ($d > 3.5 \text{ g/cm}^3$) as active material. In contrast to a conventional nickel hydroxide powder having irregular particles (Figure 2a), a better space utilization during dry pressing is achieved with the spherical nickel hydroxide (Figure 2b) owing to a narrow particle-size distribution having a maximum in the range 5 to 20 μm and owing to the rounded particle surfaces. The specific volumetric capacity of the button-cell electrode based on the spherical nickel hydroxide is consequently approximately 25% higher than that of a conventional positive button-cell electrode. A microporous separator having pore sizes which are smaller than the mean diameter of the spherical particles prevents the danger of short circuits.