

*Accumulators/Batteries Department***PRODUCTION OF BATTERIES – SULPHURIC ACID**

In plants for the production of batteries and accumulators in general, the chemical-physical analyses carried out by automatic analyzers are aimed at automatic regulation of continuous processes. We have installed an automatic analyzer that concerns a production process in this sector. A plant for the preparation of acid solution for the production of batteries can be represented as shown in the figure below.

PROCESSES INVOLVED:***Dilution of Sulphuric Acid***

The sulphuric acid from storage tanks must be diluted considerably before it can be sent for filling the batteries .

The dilution can be done in batches as well as by continuous mixing. The most important problem lies in the need to cool the product rapidly, since the reaction is exothermal.

The continuous dilution process allows greater efficacy in checking the temperature. But this also requires “safe” measurement of the percentage (or g/l) of acid present in the diluted solution.

For continuous checking of this parameter the **UR20** refractometer is used, having a scale in % or **g/l of sulphuric acid**, mounted directly on the mixing system outlet.

The parts in contact with the acid are made of Hastelloy.

