RESULTS OF CAVITY ULTRASONIC MONITORING SYSTEM

by
Andrzej Maciejewski, Bartłomiej Rałowicz
CHEMKOP

Introduction.

First uses of ultrasonic probe in polish salt mines were conducted by CHEMKOP in 1969. Various prototypes of ultrasonic equipment have been tested during five years of experimental works. The result of those works was original version of ultrasonic probe, which is in using by CHEMKOP to-day. This probe designed for measurement of excavation accessible by borehole is well-know as ECHOSONDA in Poland.

Development and Research Centre CHEMKOP in Cracow is not only designer and producer of ECHOSONDA but its prime user as well.

Current ECHOSONDA is the result of twenty years of development and has been field tested on CHEMKOP service logging contracts (a few thousand measurements in a few hundred cavities) not only in Poland but also in Czechoslovakia, Romania, Yugoslavia, German Democratic Republic and in Brazil as well.

Measurement of the shape and size of solution cavities is the basic appropriation of ECHOSONDA. However, based on growing practical experience with new generation of ultrasonic equipment (now is the fourth generation in use) and progress in interpretation method we are able to provide much more data of solution cavities.