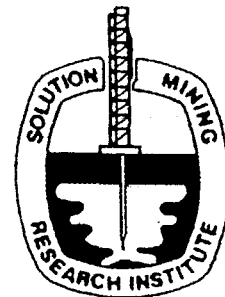


**SOLUTION MINING
RESEARCH INSTITUTE**

1745 Chris Court
Deerfield, Illinois 60015-2079
USA
847-374-0490

**MEETING
PAPER**



**Application Areas of the Blanket
Control System BCS-CW for
Continuous and Exact Depth
Control of the Interface**

**Andreas Reitze
Hartmut von Tryller**

SOCON Sonar Control Kavernenvermessung GmbH
Schachtstr. 3 b
D-31180 Giesen Germany

Presented at the Spring 1997 Meeting
Cracow, Poland
May 11-14, 1997

ABSTRACT

Interface control is particularly important in certain operating situations during the creation and operation of cavities. The techniques that were previously applied could usually determine interface depths solely at positions depending on the installation of the measuring sensors. Using the BCS-CW (Blanket Control System - Capacitive Wire) system developed by SOCON it is now possible to determine the exact depth of the interface over the whole depth range with a high resolution.

The system, which is permanently attached to the casing, operates on a capacitive basis and has a diameter of just 18 mm. The measuring range is variable up to 15 m, although the actual maximum is limited by the length of casing.

System control and data transfer is achieved via 2-conductor cable. Wireless data transfer is also possible for short-term operations as part of integrity tests.

First of all in the paper the system set-up and the way it functions is described. Then a detailed description of an actual installation in a cavity is given as an example. Finally the use of the system for other applications is presented.

©2023 – Solution Mining Research Institute
Full Paper is Available in the SMRI
Library(www.solutionmining.org)