40% Saving the Time of the Restoration of a Cellar Vault Thanks to PFT SWING

For the first time in Germany, a non-destructive method of large-scale masonry desalination with machine-applied spray plaster has been employed. Efficient application has been ensured by the use of the electronically controllable PFT SWING feed pump.

The inventor of this method is Helmut-Friedel Schulze, a 53-year-old master mason from Königs Wusterhausen near Berlin. He has developed a machine-applied plaster which serves as a „compress" and is much quicker and more efficient to spray than to apply by hand. To accelerate the desalination process, a grid electrode, exerting a uniform electrochemical effect on the masonry surface, can be integrated in the plaster.

Masonry desalination with „scarificial plaster". Machine-spraying with a PFT SWING makes this method economical. The applied plaster is knocked off at a later time.

After successful use, the salts will largely have migrated into the compress, and the salt-containing plaster will be knocked off.

The Theodor-Fontane-Gesamtschule, a comprehensive school in Ketzin (Havel) near Berlin, is a brick building erected in 1875. Walls approx. 140 m² in area had to be rehabilitated with the aid of compress material; the grid electrode was to be added to approx. 10 m².

In close contact with Detlef Mittag and Ralf Longardt, representatives of the PFT Sales Territory Northeast, and PFT trader Hans Hartmann from Beeskow, the appropriate machine equipment was combined. According to estimations by Helmut-Friedel Schulze, the use of the PFT SWING resulted in a 40% saving of time.

Soon after the sacrifical plaster has dried, salt crystals are deposited on the surface. Harmful salts, such as chlorides, nitrares and sulphates, which accumulated in the masonry, have been absorbed by the compress.

Ralf Longardt, PFT Northeast, in his element: „enthusing – informing – training".

Technical Data:	**PFT SWING with mortar pressure gauge**
Output:	variable from 0.3 to 7 litres per minute
Aircompressor LK 400	
PFT mortar spraying set with 10.5 mm nozzle	
15 m material hose, ND 19 mm	
15 m air hose, ND 9 x 3 mm	