

BRIEF OVERVIEW OF THE VARIOUS
FAMILIES OF GROUTS AND THEIR APPLICATIONS

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1.0 INTRODUCTION

It is difficult to maintain an up-to-date overview of all the grouts presently used on the international market. Better grouts are continuously developed and more formulators are making their appearance. Consequently, it is difficult to clearly define all of the products in the industry.

Major chemical corporations are beginning to licence approved formulators, who in turn, will strive for recognition on the market. These forces will create a bigger market and further diversification into other industries. This implies that the industry will require a classification of the various families of grouts in order to better determine the suitability of a particular product for specific application. We should be ready for fascinating evolutions, more competitive prices, and hopefully, less "black magic".

This topic has been the subject of numerous papers and textbooks. Karol (New Orleans 1982), Caron (Paris 1982), and a number of German, French and American authors have made valuable contributions to shed light on this issue.

Most authors, however, only focus on their fields of interest: applications in geotechnical, or rehabilitation, or seepage control in civil engineering, oil or mining industry. There has been a limited transfer of technology from one field to the other because of the enormous differences in magnitude, site conditions and consequently the application techniques.

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As one can imagine it requires a slightly different approach to seal cracks in concrete as compared to the control of a 12,000 gpm inflow in a deep mine. The installation of a grout curtain in geotechnical applications applies different technology compared to the sealing of the formation above and below the pay zone in an oil well, or jacking up a tunnel.

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