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#### ABSTRACT

It has been recently argued that rock strength has little effect on the final results of pre-split blasting and is of only minor importance when blasting rock in general. However, it can be shown that the maximum borehole separation for optimal perimeter blasting results with constant borehole and loading configuration is strongly dependent on the tensile strength of the rock.

An experimental pre-splitting program was undertaken at the Mining departments of the University of Newcastle-upon-tyne, U.K. between 1979 and 1981 and the University of Missouri-Rolla, U.S.A. from 1983 to 1985. The work demonstrates that for fairly homogeneous rock and similar borehole and loading configurations, the maximum successful pre-split borehole separation is inversely proportional to the Brazilian Disk tensile strength of the rock. It was concluded that the blastability of massive rock is also inversely proportional to this parameter.

Further more it was concluded that the compressive strength of the rock bears no direct relationship to its "blastability".