

Rock Fragmentation, Cutterhead Design and Excavator Mechanical Requirements

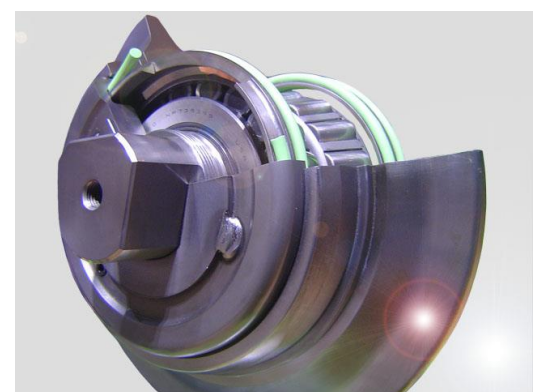
Brian Asbury, Manager at the Earth Mechanics Institute

WEDNESDAY, February 4th at NOON in BB W280

- Lunch Provided -



The design of tunnel boring machines (TBMs) is influenced by many variables that are susceptible to a high degree of change, even within a given project. To advance the tunnel face, a TBM must scrape and crush the formation in front of it at large pressures, regularly up to 6 bar. A great deal of uncertainty lies within their design and they must be versatile to handle extreme conditions. This seminar will discuss the effects of rock fragmentation and cutterhead design on excavator mechanical requirements and performance.



Brian Asbury is the manager of the Earth Mechanics Institute (EMI), a long standing research center focused on mechanical excavation. Over the last 25 years, Mr. Asbury has participated in and overseen a wide variety of projects at EMI in the fields of mechanical excavation, tunneling, rock mechanics and waterjet technology. This has developed his expertise in test design, implementation, data acquisition, and analysis to simulate real world conditions. Brian Asbury has authored and co-authored over 30 publications for various private companies and public agencies related to his research in these topics.

Questions? Dig in with us at uct.mines.edu or contact us uct@mines.edu