



Accurate Navigation and Control of Continuous Mining Machines for Coal Mining

By Department of Health and Human Services: Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (NIOSH)

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.The results of laboratory, field, and open pit accuracy and performance testing of the Honeywell Ring Laser Gyro Inertial Navigation System (INS), a navigation system designed to provide the heading and location of a remote controlled continuous miner, were presented. The basics of the design and operation of the INS, the basic and an expanded control system, the site of open pit testing, the use of an automated transit as a reference for determination of the position of the continuous miner, the reference coordinate system used, navigational requirements for the open pit test, the field test system, the software used to monitor the position of the robotic transit, the mine plan, the installation of the INS and its alignment to the continuous miner, the operation of the INS, equipment setup procedures, system accuracy, data archiving methodology, and methods used for data analysis were described in detail. The results of open pit testing indicated circular errors probable (CEPs) which ranged from 3.62 to 28.16 centimeters/hour and spherical errors probable (SEP) which ranged from 10.18 to 49.07 centimeters/hour over all..



READ ONLINE
[9.01 MB]

Reviews

The book is fantastic and great. it was writtern really perfectly and useful. I discovered this pdf from my i and dad suggested this book to learn.

-- Dr. Cordie Upton III

The ebook is straightforward in read easier to recognize. It is actually writter in basic phrases and not difficult to understand. You can expect to like just how the author compose this book.

-- Camilla Kub