

SÜRELİ YAYINLAR

CİM BULLETIN

SEPTEMBER

Monitoring whole body vibration effects on ultra-class haulers

J. Berezan, T.G. Joseph and V. del Valle

The safety imperative—transforming the workplace to protect people

G. Winkel

Monitoring whole body vibration effects on ultra-class haulers

J. Berezan, T.G. Joseph and V. del Valle

The safety imperative—transforming the workplace to protect people

G. Winkel

Corporate commitment and sound engineering practice to ensure safety in the workplace at Quinsam coal mine

K. Galovich and P. Krivokuca

Enhancing the safety of remnant pillar recovery in lignite numerical modelling

CO. Aksoy, H. Kose, E. Yalcin, K. Heasley and C. Mark

Effect of process variables in rotary degassing of aluminum

S.G. Shabestari, P. Mokarian and S. Saeidinia

Block/panel caving pressing final open pit limit

S. Fuentes S. and J. Cáceres S.

Optimization of shovel-truck systems using the queuing theory

D. Komljenovic, J. Paraszczak and K. Fytas

Forecasting copper prices in the short and medium terms using geostatistics

X. Emery and A. Cabanas

NOVEMBER-DECEMBER 2004

Mineral Processing in Canada

Sampling and assaying of coarse gold at La Herradura - Minera Penmont S. de R.L. de C.V., Mexico

S. Cossio, J.-L. Noyola, P. Gonzalez, R. Espinosa

Process design considerations for the fluidized bed technology applications in the nickel industry

K. Adham and C. Lee

Towards AG/SAG/ball mill on-line performance monitoring

P. Radziszewski and S. Caron

Desulphurization of Placer Dome's Musselwhite mine gold cyanidation tailings

T. Yalcin, M. Papadakis, N. Hmidi, B. Hilscher

Borehole seismic survey for mineral exploration: Case histories from Norman West and Halfmile Lake by

G. Bellefleur, C. Miiller, D. Snyder, G. Perron, E. Adam, K. Stevens, L. Matthews

Mine ventilation fan specification and evaluation

Evidence for the occurrence of Gondwana coals in North America as indicated by comparisons of similar deposits in the world

P.A. Hacquebard and M.P. Avery

INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES

September 2004

915 Determination of the main hydraulic and poro-elastic properties of a limestone from Bourgogne, France

M. Lion, F. Skoczylas and B. Ledésert

927 Combined effects of increasing temperature and confining pressure on the fracture toughness of clay bearing

T. Funatsu, M. Seto, H. Shimada, K. Matsui and M. Kuruppu

939 Digital image-based numerical modeling method for prediction of inhomogeneous rock failure

S. Chen, Z. Q. Yue and L. G. Tham

954 Flow analysis of jointed rock masses based on excavation-induced transmissivity change of rough joints

Hyung-Mok Kim, Junya Inoue and Hideyuki Horii

975 A pore crack model for the mechanical behaviour of porous granular rocks in the brittle deformation

E. Klein and T. Reuschlé

987 A methodology for assessing geotechnical hazards for TBM tunnelling—illustrated by the Athens Metro, Greece

A. G. Benardos and D. C. Kaliampakos

1001 Adaptation of a triaxial cell for ultrasonic P-wave attenuation, velocity and acoustic emission measurements

J. A. Donald, S. D. Butt and S. Iakovlev

1013 A new model to estimate rock mass strength accounting for the scale effect

P. K. Rajmeny, U. K. Singh and S. S. Rathore

1023 Mechanical property degradation of ignimbrite subjected to recurrent freeze-thaw cycles

R. Altindag, I. S. Alyildiz and T. Onargan

1029 Shear resistance along rock mass discontinuities: results of large-scale field tests

Yu. A. Fishman

1035 Consideration of fracture growth from an inclined slit and inclined initial fracture at the surface of rock and mortar in

Y. Fujii and Y. Ishijima

1043 Including gravity in the Displacement Discontinuity Method when accounting for contact interaction

J. -Cl. De Bremaecker, M. C. Ferris and A. M. Linkov

1045 Effect of transverse anisotropy on the Hoek-Brown strength parameter σ_3/σ_1 for intact rocks

K. Colak and T. Unlu

1053 Corrigendum to "Rock fracture mean trace length estimation and confidence interval calculation using maximum likelihood methods": [International Journal of Rock Mechanics and Mining sciences 40 (2003) 825-832

G. J. Lyman

OCTOBER 2004

1055 A rock bolt and rock mass interaction model

Yue Cai, Tetsuro Esaki and Yujing Jiang

1069 Estimation of cracking and damage mechanisms in rock under triaxial compression by moment tensor analysis of acoustic emission

S. -R Chang and C. -I. Lee

1087 Modeling non-linear displacement time series of geo-materials using evolutionary support vector machines

Xia-Ting Feng, Hongbo Zhao and Shaojun Li

1109 Analysis of a rock slide stabilized with a toe-berm: a case study in British Columbia, Canada

D. Martin

1123 Predicting the sawability of carbonate rocks using multiple curvilinear regression analysis

S. Kahraman, M. Fener and O. Gunaydin

1133 Thermal conductivity of rocks and its variation with uniaxial and triaxial stress

A. Demirci, K. Görgülü and Y. S. Durutürk

1139 Interpreting hanging wall deformation in mines

D. Milne, R. Pakalnis, D. Grant and J. Sharma

1153 Influences of changes in mechanical properties of an overcored sample on the far-field stress calculation

R. Guo and P. Thompson

1167 Determination of three dimensional in situ stress from core discing based on analysis of principal tensile stress

K. Matsuki, N. Kaga, T. Yokoyama and N. Tsuda

1191 Stress-dependent permeability of fractured rock masses: a numerical study

Ki-Bok Min, J. Rutqvist, Chin-Fu Tsang and Lanru Jing

1211 A method for normalization of Schmidt hammer rebound

A. Basu and A. Aydin

1215 Some aspects of loading-rate dependency of Sanjome andésite strengths

K. Fukui, S. Okubo and A. Ogawa

INDUSTRIAL MINERALS

SEPTEMBER 2004

34 Iron oxide

43 Foundry minerals

48 Spanish ceramics and glass

56 Cosmetic minerals

64 Minerals on the Move: Silos and tanks

84 Processing: Classification

OCTOBER 2004

32 Mullite makes good

43 Refractory monolithics

50 Ceramic tiles

54 Silane fillers

70 Break bulk minerals

56 Processing: The final grind

NOVEMBER 2004

28 Iran's industrial minerals

42 Manufactured abrasives

49 Minerals in rubber

54 Special clays

70 Minerals on the Move: Gulf of Kutch

75 Processing: Rutile replacement

MINERALS ENGINEERING

SEPTEMBER-OCTOBER 2004

961 Characterizing and recovering the platinum group minerals—a review

Z. Xiao and A. R. Laplante

981 Modelling of froth transportation in industrial flotation cells: Part I. Development of froth transportation models for attached particles

X. Zheng, J-P. Franzidis and E. Manlapig

989 Modelling of froth transportation in industrial flotation cells: Part II. Modelling of froth transportation in an Outokumpu tank flotation cell at the Anglo Platinum Bafokeng-Rasimone Platinum Mine (BRPM) concentrator

X. Zheng and L. Knopjes

1001 Dextrin as a non-toxic depressant for pyrite in flotation with xanthates as collector

A. López Valdivieso, T. Celedón Cervantes, S. Song, A. Robledo Cabrera and J. S. Laskowski

1007 Recent advances in reverse flotation of diasporic ores—A Chinese experience

Zhenghe Xu, Verne Plitt and Qi Liu

1017 Role of macromolecules in kaolinite flotation

Hu Yuehua, Sun Wei, Li Haipu and Zhenghe Xu

1023 The effect of diethylenetriamine on the formation of Cu^{2+} -, Ni^{2+} -, and Fe^{3+} -amyl xanthate ion complexes

H. A. Joly, R. Majerus and K. C. Westaway

1037 Recovery of rare earth from bastnasite by ammonium chloride roasting with fluorine deactivation

R. Chi, X. Zhang, G. Zhu, Z. Ai Zhou, Y. Wu, C. Wang and F. Yu

1045 Removal of hexavalent chromium by using heat-activated bauxite

M. Erdem, H. S. Altundolan and F. Tümen

1053 Laboratory study: simultaneous leaching silver-bearing low-grade manganese ore and sphalerite concentrate
L. Yaozhong

NOVEMBER-DECEMBER 2004

1063 A multi-objective evolutionary algorithm approach for crusher optimisation and flowsheet design

L. While, L. Barone, P. Hingston, S. Huband, D. Tuppurainen and R. Bearman

1075 Cement grinding optimisation

Alex Jankovic, Walter Valéry and Eugene Davis

1083 Improved gyratory crushing operation by the assessment of liner wear and mantle profile redesign

P.P. Rosario, R.A. Hall and D.M. Maijer

1093 The use of fag and sag batch tests for measurement of abrasion rates of full-size rocks

B.K. Loveday

1099 A three-dimensional analysis of media motion and grinding regions in mills

M.S. Powell and A.T. McBride

1111 A novel approach to evaluating breakage parameters and modelling batch grinding

G.W. Sand and G.K.N. Subasinghe

1117 Using DEM to model ore breakage within a pilot scale SAG mill

R.D. Morrison and P.W. Cleary

1125 Resonance effects, power quality and reliability issues of high-power converters-fed drives employed in modern SAG circuits

J. Pontt, J. Rodriguez, W. Valderrama, G. Sepúlveda and G. Alzamora

1135 Determination of lifter design, speed and filling effects in AG mills by 3D DEM

N. Djordjevic, F.N. Shi and R. Morrison

1143 MONSAG: A new monitoring system for measuring the load filling of a SAG mill

Jorge Pontt

1149 HPGR model verification and scale-up

M.J. Daniel and S. Morrell

1163 High performance attrition in stirred mills

Th. Neesse, F. Schaaff and H. Tiefel

1169 Influence of rheology on the performance of horizontal stirred mills

J. Yue and B. Klein

1179 Measurement of the motion of grinding media in a vertically stirred mill using positron emission p tracking (PEPT) Part II

R.W. Barley, J. Conway-Baker, R.D. Pascoe, J. Kostuch, B McLoughlin and D.J. Parker

1189 Dynamic simulation of grinding circuits

Yi Liu and Steven Spencer

1199 Using the Web to increase the availability of DEM-based mill modelling

D. Morton and S. Dunstall

1209 Simple texture-based liberation modelling of ores

S.L. Gay

1217 Improved flow- and pressure model for cone crushers

M. Lindqvist and C.M. Evertsson

1227 VisioRock, an integrated vision technology for advanced control of comminution circuits

Olivier Guyot, Thierry Monredon, David LaRosa and Alain Broussaud

1237 Hydrocyclone control in grinding circuits

Th. Neesse, V. Golyk, P. Kaniut and V. Reinsch

1241 Liner wear and performance investigation of primary gyratory crushers

P.P. Rosario, R.A. Hall and D.M. Maijer

1255 Determining the steel media abrasive wear as a function of applied force and friction

Tapiwa Chenje and Peter Radziszewski

1259 Comparison of grinding media—Cylpebs versus balls

F. Shi

1269 Methodologies for the evaluation of grinding media consumption rates at full plant scale

Jaime E. Sepulveda

1281 A fundamental study of dry and wet grinding in bending tests on glass—effect of repeated impact on fracture probability

N. Kotake, T. Kawaguchi, H. Koizumi and Y. Kanda

1287 Updated magnetic separation techniques to improve grinding circuit

Daniel Norrgran, Timothy Shuttleworth and Greg Rasmussen

1293 Process efficiency aspects for jet mill plant operation J. Kolacz

MINING ENGINEERING

JUNE 2004

FEATURE ARTICLES

58 Sustainable development keys SME Annual Meeting Steve Krai

68 Members see the latest in technology at the SME Exhibit Steve Krai, William R. Yernberg and Georgene Renner

JULY 2004

19 Geologists add value at Newmont's Nevada mines -part one

Leroy Schutz, Lloyd McEvers, Eric Saderholm, Lori Clarke, Wayne Trudel and Charles Lynn Bolin

27 bauma '04 attracts more than 410,000 visitors

36 National Mining Hall of Fame to honor five mining greats

40 TECHNOLOGY NEWS Inpro bearing isolators improve bearing protection

SEPTEMBER 2004

FEATURE ARTICLES

67 MINExpo International 2004 expects 40000 attendees

70 MINEXPO exhibitor preview

82 Cummins diesel engines ready to meet global clean air regulations

Steve Krai

85 Vernal Mine: 19 years without a lost-time accident

TECHNICAL PAPERS

(peer reviewed and approved)

89 Longwall mining under a mine refuse-disposal facility

Yi Luo, S.S. Peng and M. Mishra

94 Development and demonstration project using fly ash as a road subbase

E. Bane Kroeger and Y.P. Chugh

99 Calibration of online ash analyzers-using neural networks

S. Yu, R. Ganguli, S. Bandopadhyay, S.L. Patil and D.E. Walsh

103 Mine roof truss-support systems technology

R.M. Cox

OCTOBER 2004

FEATURE ARTICLES

12 Greenland: a potential trove of minerals
Louis W. Cope

19 Crisis management: what to do if disaster strikes

Joseph J. Zaluski, Marco M. Rajkovich Jr. and J. Steven Gardner

24 Lubricants cut equipment costs at San Miguel

26 Educate teachers - they educate students
Dan Witkowsky

28 Technology news: Hydraulic lifters aid in dragline maintenance

TECHNICAL PAPERS

(peer reviewed and approved)

29 Coal-based clean energy systems and CO sequestration

T.M. Yegulalp and K.S. Lackner

35 ITmk3 -Application of a new ironmaking technology for the iron ore mining industry
G. Hoffman and O. Tsuge

40 Methodology of incident recreation using virtual reality
S.J. Schafrik, M. Karmis

NOVEMBER 2004

FEATURE ARTICLES

17 Activated and natural sodium bentonites and their markets
Charles R. Landis and Kent von Maubeuge

23 Mining lawyers meet, mark a half century of work
Tim O'Neil

28 Mining Foundation of the Southwest honors its 2004 inductees

31 Technology News: Automated-plow longwall ordered for Chinese coal mine

TECHNICAL PAPERS

(peer reviewed and approved)

33 Comparison of shaft designs for conveyor pulleys and idler rolls
L. J. Laughlin

36 Primer for engineering and technical professionals regarding reclamation and environmental surety bonds
William T. Gorton III

39 Partnering for successful ergonomics: a study of musculoskeletal disorders in mining
L. J. Steiner, P. James and F. Turin

44 Common factors in the lime industry provide obstacles to global market access
S. T. Krukowski