Split-Online Getting Fired Up for Coal!

While all of our installations over the past eight years have been in metal and aggregate mines throughout the world, we had yet to substantially apply our technology to the coal industry.

This all changed during the past four months... This past January Split Engineering installed its first Split-Online system in the coal industry.

In conjunction with the Electric Power Research Institute (EPRI), Split Engineering is testing its Split-Online technology for the coal firing process. This time we are not focusing on the mining and processing of the coal, but are monitoring the feed size of coal to the combustion chambers at a power generation plant. The system will monitor the size distribution of crusher product and cyclone boiler feed to better determine the variance of the crusher performance in an effort to maintain a tighter spec on the boiler feed.

It has been established that on-line monitoring of particle size of the crus- h er product can be used to detect off spec material feeding the cyclone boilers. The goal is to reduce oversize variability and increase production. The material is very fine...much finer than the coarse rock material we typically monitor. However, initial in-house lab tests on small samples showed reasonable correlation with sieve values, so the decision was made to proceed to installing the live system on the process. The system was commissioned in January and future tests will demonstrate its value.

If you are interested in upgrading an existing system installation or would like to purchase a new system with Split-Online Version 3.0, please contact Tom BoBo (tbobo@spliteng.com) for more details. For those customers with an annual service agreement, you can look forward to receiving your upgrade package soon.
Split-FX Development News

In 2006, Split Engineering is on track to be awarded a research grant from the Transportation Research Board under their IDEA Program. The grant titled “Application of Three-Dimensional Laser Scanning for the Identification, Evaluation, and Management of Unstable Highway Slopes” will further the development of the Split-FX software package for Split Engineering and will provide new methodologies and specific tools for the management of unstable highway slopes.

Despite the successful implementation of rockfall management systems, the identification and evaluation of comparatively high risk slopes remains a prohibitive task and one that is complicated by the broad range of geologic conditions that influence rockfall hazards. All Rockfall Hazard Rating Systems require a complete qualitative and quantitative geologic characterization of the individual rock slopes. This information is required in order to assess the stability of the cut and assign it a hazard rating. There is a desire to find new ways of collecting data in order to reduce field time, eliminate errors associated with identification difficulties, eliminate safety constraints, and to remove human bias and subjectivity. Many of these problems may be eliminated through the application of laser based, three-dimensional imaging and advanced 3D image processing algorithms.

The proposed project focuses on the development and application of software that utilizes three-dimensional laser scanning technology for automated geologic characterization and stability assessment of highway rock cuts. With the ability to automatically determine a wide ranging suite of geologic characteristics in a rapid and accurate manner, and provide “as-built” engineering and hazard analyses, the developed software will act as a centralized, digitally based system for the collection, analysis, and dissemination of geologic data and rock cut information. This will increase the efficiency and precision of data compilation, dissemination, and evaluation for rockfall hazard rating and management.

Each state’s Department of Transportation will benefit from this research and Split Engineering will be working closely with the Colorado Department of Transportation and with the University of Utah for field study activities.

Point cloud of scanned roadway cut

Field mapping measurements taken at site (left), Measurements derived automatically from point cloud data (right)

Welcome New Clients

BHP Billiton Tintaya
CRC Mining
Debswana Orapa Mine
Dyno-Nobel Asia
Dyno-Nobel Chile
Newmont Mining Carlin
SC7-Explosivos Industriales, Ltda.

Barrick Alto Chicama
BHP Billiton Diamonds-Ekati
EPRI-Ameren Sioux
Luckstone Corporation

AMEC
Chemical Lime
Quadra Robinson

JK SimMet
Minera Candelaria
Minera Dona Ines de Collahuasi
 Phelps Dodge Candelaria
Universidad de Santiago
TRADE SHOWS

Split Engineering will be attending the following trade shows and seminars:

- SME Annual Meeting & Exhibit - St. Louis, MO - March 27-29 (Booth 205)
- SME Minnesota Section — Duluth, Minnesota — April 11-12 (Booth 10)
- SME Colorado Section MPD — Colorado Springs, Colorado — April 20-22 (Attendance)
- FRAGBLAST — Santiago, Chile — May 7-11 (Paper, Attendance)
- EXPOMIN — Santiago, Chile — May 23-27 (Booth 336-3)
- ARMA Golden Rocks — Golden, Colorado — June 17-21 (Booth, Attendance)
- Exposibram — Belo Horizonte, Brazil — September 13-15 (Booth, Attendance)
- InfoMina — Lima, Peru — September 19-22 (Attendance)

TRAINING NEWS

The fastest and most effective way to be profitable with our products.

The mining and mineral processing markets are strong and companies are seeking expansion and investment opportunities. In addition to investing in new projects, mining companies need to re-invest in their human capital through education and training. These investments in human capital are necessary for the future of the industry. Split Engineering Chile is pleased to assist in this calling with following trainings.

Flotation – JKSimFloat

Training will be in Santiago, Chile from May 8th to 12th at Hotel Novotel, located near the Split Engineering Chile office.

This course will be a lecture by Dr. Sarah Schwarz, flotation specialist and consultant and Dr. Dan Alexander, Principal Consultant of JKTech.

Flotation course is not simply a JKSimFloat one. It is designed to give attendees tools and ideas of how to measure and optimize their circuits, bringing all measurements together in the simulator with JKSimFloat. The course goes through flotation basics, as well as sampling and mass balancing, through the various models that are incorporated in JKSimFloat.

JKSimBlast (Advance)

Training will be in Santiago, Chile from May 17th to 19th at Hotel Novotel.

This course will be a lecture by Mr. Mike Higgins, Director of Soft-Blast and the worldwide JKSimBlast expert. In addition, he will present a technical paper at FragBlast 8 (May 7 to 11).

This training is intended for advanced users of the software, which can be explosive consultants or mining company employees. Some of the subjects that will be treated are: blasting design bases, creation and charge a simple blast, selection and loading of delay detonators, import files from text file to 2DBench, blasting improvements, understand how data is created and blasting is executed to improve the performance, prepare reports, integrate JKSimBlast together with own mining system and develop an optimization detailed project.

JKSimMet (Advance)

Training will be in Santiago, Chile from June 5th to 9th at Hotel Novotel.

The course will be a lecture by Mark Richardson, Regional Consultant and Agent for the JKTech in North America.

This course is designed for users with prior experience in using the JKSimMet Mineral Processing Simulator. It consists of a series of “hands-on” workshops designed to focus on improving user’s knowledge and skills for grinding circuit design, model-fitting and optimization with JKSimMet.
**MEET GISLEINE RETAMAL**

Gisleine joined Split Engineering team in August of 2004. She is the executive assistant and is responsible for administration. She studied Bilingual Secretarial Program in Inacap for 3 years. Before Split Engineering, she was working at a Japanese forestry company for almost 10 years.

When Gisleine is not working, she spends time with family and her pets. She is also learning to play guitar. Her hobbies are reading and watching and collecting movies. Her favorite is “Friends”. She loves animals so much, that at one time she wanted to study veterinary medicine. Every Saturday she visits a house for older people to do social work. She likes Japanese food and one of her particular favorites is cooking Sushi.

She is currently preparing herself to be the godmother of her brother, who will marry in October.

**SPLIT ENGINEERING CHILE EVENTS**

**Expomin:** Split Engineering will be present as an exhibitor at the major conference in Latin America: Expomin 2006. Split Engineering Systems, Software and Service had been proven in large base and precious metals around the world. Now, Split Engineering offers all its products Split-Online®, Split-Desktop® and Split-Net™ plus software for modeling and simulation of flotation, mineral processing and blasting of JKTech.

Come by the Split Engineering booth number 336 – 3 from May 23rd to 27th, where you can see the latest innovations and meet with Cristian Rodriguez and the rest of the Split Engineering team.

EXPOMIN is the most important mining exhibition in Latin America and takes place in the world's most important mining region. Over 800 exhibitors took part in the 2004 Exhibition that attracted a larger than ever presence from supplies to the mining sector from the main mining countries of the world. Australia, Austria, Belgium, Brazil, Bolivia, Canada, Japan, Spain Germany, Chile, the United Kingdom and the United States were present with national pavilions. There will be a parallel program of professional seminars.

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