Digital Imaging Systems for Process Analysis

SPLIT-SHOVELCAM
**Take Control of Your Process…**
_Increase Throughput While Reducing Operations Costs_

**Why Split-ShovelCam?**

Split-ShovelCam works. Since 1997, hundreds of systems and camera monitoring locations have been installed around the world by Split Engineering… on shovels, conveyor belts and at truck tips into the primary crusher. Advanced software processing algorithms are adaptable to a variety of applications and the information is easy to connect and integrate into your control systems.

Technical decisions; operational efficiency and productivity; equipment performance – all these can be related to optimum conditions of the rock fragmentation size. Profitability can be improved by optimizing the downstream processes to maximize throughput and performance in the blasting, crushing, milling and mineral recovery circuits.

In the past, the lack of an easy, non-disruptive, economical measurement technique has meant that, in most cases, the process has not been defined in quantitative terms. Now, Split-ShovelCam provides an economical alternative to manual sampling and an objective measure rather than subjective qualitative estimates.

**Why Split Engineering?**

Split Engineering can provide experienced engineers who come to your site to design and commission a system in a short amount of time and will train your people how to use and maintain the system.

*Experience counts. We know:*
- Where to measure.
- How to install the system so it works properly and effectively.
- How to set-up the image analysis and calibrate the system using your current lab sieve settings with familiar parameters.
- How to train your personnel to utilize and maintain the system.

*Technical Support:*
- Proactive development of the Split software. This ensures that the system maintains state of the art technology.
- Experience with system information integration to other expert control and process control systems.
- Maintenance options for on-site service, software upgrades and remote tech support with VPN.

**Benefits of Split-ShovelCam**

Split-ShovelCam provides the key metric of particle size, quantifying post-blast fragmentation. If you can’t measure it, you can’t improve it.

Continuous, automatic, in-pit, non-invasive monitoring and particle size measurement of muckpile fragmentation tied to shovel location.

*Optimize and Analyze Blasting:*
- Relate ore type variation feeding the comminution circuit to help forecast crusher throughput. Measurement of primary crusher feed provides feedback to the blast plan, allowing engineers/software to correlate other blasting parameters that may affect fragmentation.

*Fragmentation Profile:*
- Size at the muckpile influences dig rates, machine wear, shovel maintenance and overall production in many different ways. Get on the path to understanding what is happening with your post blast fragmentation at the muckpile.

*Run of Mine Measurement:*
- Perhaps the best and only feasible place to measure the blast post-blast fragmentation before it hits the leach pad.

*Safe & Economical Data Acquisition:*
- Safe, objective, rapid, continuous and less labor intensive than manual methods with a higher statistically significant sampling rate.

**Mission Statement**

Split Engineering creates customer value through facilitating optimal and efficient mine operations by custom developing and implementing the most technologically advanced techniques of image analysis. Split Engineering will maintain its reputation in the mining industry for exceeding customer expectations through exemplary customer service.

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