And the 2013 winners are...

The *International Mining Technology Hall of Fame* college of voters for 2013 has deliberated over the individuals and teams nominated for the various categories and have made their final decisions. These are the first inductees and their industry contributions will be celebrated at the Gala Dinner in the Grand America Hotel, Salt Lake City on February 22, 2014 – the night before the SME Annual Convention kicks off.

Kicking off with **Exploration**, the winner is *Edmund Longyear*, the founder of what would later become Boart Longyear, was a great pioneer nominated for his influence in contract diamond drilling, geological services and shaft sinking in the early part of the 20th century. In 1890, he drilled the first diamond core hole in the Mesabi

Edmund J Longyear, inducted in the Exploration category

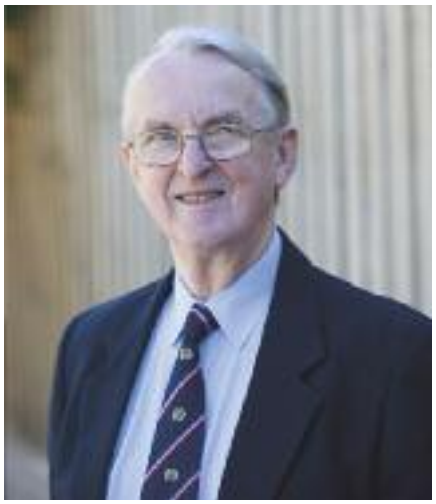
Iron Range in northern Minnesota. Moving on to the **Mining Software** category, *Jeff Whittle*, the founder of Whittle Programming that was later sold to Gemcom Software, is the inductee. He wrote the Whittle software strategic mine planning software and over the next 16 years developed a series of mining optimisation packages, which continue to have a major impact on the vast majority of mining companies and mining professionals involved in the evaluation of mining deposits.

For **Underground Development**, *Gustaf Anderson*, the developer of thelightweight, ratchet-rotating handheld RH drill in the 1930s at Atlas Copco is inducted. The machine came to constitute the most important link in the successful Swedish Method: a lightweight drill on a pusher leg equipped with hardened metal bits.

P&H 1500WL Ward-Leonard with Magnetorque

Moving on to **Underground Production**, inductee *Don Maclean*, founder of MacLean Engineering in 1973, spearheaded the development of innovative drawpoint obstruction clearance machines inclduding blockhole jumbos in the late 1970s, followed by the invention of high reach and medium reach rigs in the 1990s and the Ro-Bust enabling operators to break drawpoint boulders below the brow by utilising high-pressure water impulses, a technique that licensed a technology from South Africa munitions manufacturer Denel.

In **Underground Load and Haul**, Sandvik's Automine development team of *Timo Soikkeli, Riku Pulli, Brett Cook* and *Janne Kallio* are all recognised and inducted. AutoMine is the automated loading and hauling system for underground hard rock mining which has transformed mining practices where it has been implemented. It can successfully be adapted to small scale operations as well as massive block caving applications.



Jeff Whittle, inducted in the Mining Software category

Moving on to **Underground Support**, inductee *James Scott* is the inventor of Split Set stabilisers in the 1970s and 1980s. Split Set stabilisers consist of a slotted high strength steel tube and a face plate and because they are so quick and simple to install, gained massive acceptance by miners throughout the world as during mild rockbursts will slip rather than rupture and when used with mesh, will retain the broken rock generated.

For **Surface Mine Production** the college of voters opted for *Helmut Lerchs* and *Ingo Grossman*, who in 1965 presented to the mining world their algorithm to help find the optimum design for an open pit mine. In their words at the time, "the objective is to design the contour of a pit so as to maximise the difference between total mine value of the ore extracted and the total extraction cost of of ore and waste."

On to **Surface Load and Haul**, and the historic inductees are *Alonzo Pawling* and *Henry Harnishfeger,* the founders of P&H Mining in 1884, now part of Joy Global. The partners were known primarily for their production of bridge cranes; however a crisis in the financial markets convinced them to broaden their offerings to include earth-moving machinery. The first P&H digging machines included ladder-type and wheel-type trenchers but by 1911, the line expanded to include shovels and draglines for which the company is known globally in today's industry.

Into the **Bulk Handling** category and the college of voters selected *De Witt Buchanan Jr*, who succeeded his father as President and CEO of Old Ben Coal Co, now no more but in his era from the 1940s one of America's largest coal producers. DeWitt amongst other achievements introduced the first continuous mining machine at Old Ben, developed in conjunction with Robbins and Goodman Equipment. He also introduced continuous belt haulage and thus made Old Ben

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one of the first mining companies in the country to completely eliminate track haulage for coal and in1960 opened the first large modern mine totally equipped with belt haulage and continuous miners.

On the **Safety** front we have two inductees – *John Ryan* and *George Deike*, founders of Mine Safety Appliances (MSA) in 1914. Ryan was instrumental in developing the Edison Electric Cap Lamp, which eliminated the open-flame lamps that caused methane explosions, and in instituting procedures for the use of rock dust in coal mines to prevent dust explosions; while Deike was the principal influence in guiding MSA to world leadership in the manufacture of mine safety equipment

Into processing, and for **Communition** we have inductee *Prof Alban Lynch*, who made major contributions to both research and education in this field. He founded the Julius Kruttschnitt Mineral Research Centre (JKMRC), which amongst other things, developed models that led to the world's first widely-used PC-based mineral processing simulator, JKSimMet, for the simulation of crushers, grinding mills and hydrocyclones, which continues to be used routinely around the world to-day.

For **Concentration**, *Graeme Jameson* is recognised for being a true pioneer in innovative flotation research, being the inventor of the Jameson Cell which bear his name. This was first introduced 25 years ago and is now installed in over 320 operations worldwide.

The Jameson flotation cell, developed by Graeme Jameson, who is inducted in the Concentration category

The final two inductees are in the categories of **Environmental Management & Stewardship**; and the overall **Outstanding Innovator** award. The former category inductee is *Dr Terry Mudder* for his contribution to cyanide management. He has been instrumental in the development and application of many chemical, physical, and biological treatment processes for cyanide and metals, for which he has already received both national and international awards, including the prestigious Philip Morgan Medal of the Water Environment Federation. He has also obtained several worldwide patents for these processes. Our Outstanding Innovator is *David George*, Rio Tinto Chief Advisor, Processing, Mineral Technology Services, Technology & Innovation (T&I) for his contribution to double-flash copper smelting technology. This technology has revolutionised copper smelting as well as set the standard for sulphur dioxide capturing; and improving safety by eliminating molten matte transfer, and reducing the labour required to produce copper.

As well as mentioning all of these 2013 *IM Hall of Fame* inductees, we also wanted to commend some others who also received a number of votes in some of the categories. These include in underground production Wilhelm Löbbe, who invented and developed the 'fast plow' or 'Loebbe Plow' which was introduced to the market in 1939; and in underground load and haul *Joe Joy*, who developed and patented the Joy Loader. In mining software *Fred Banfield* is also recognised, who started Mintec from his Tucson apartment in 1970; and in concentration *Byron Knelson*, inventor of the Knelson gravity concentrator and founder of Knelson Concentrators, now part of FLSmidth. Finally, coming close in the outstanding innovator category was *Nick Hazen*, President and CEO of Hazen Research, a company that has grown to be the largest private metallurgical and processing R&D facility in the US.

The 2013 inductees will be celebrated at a gala event in the Grand America Hotel, Salt Lake City, February 22, 2014. Contact us for details of event tickets. Please send in your nominations for the 2014 inductees over the coming months – closing date September 15, 2014