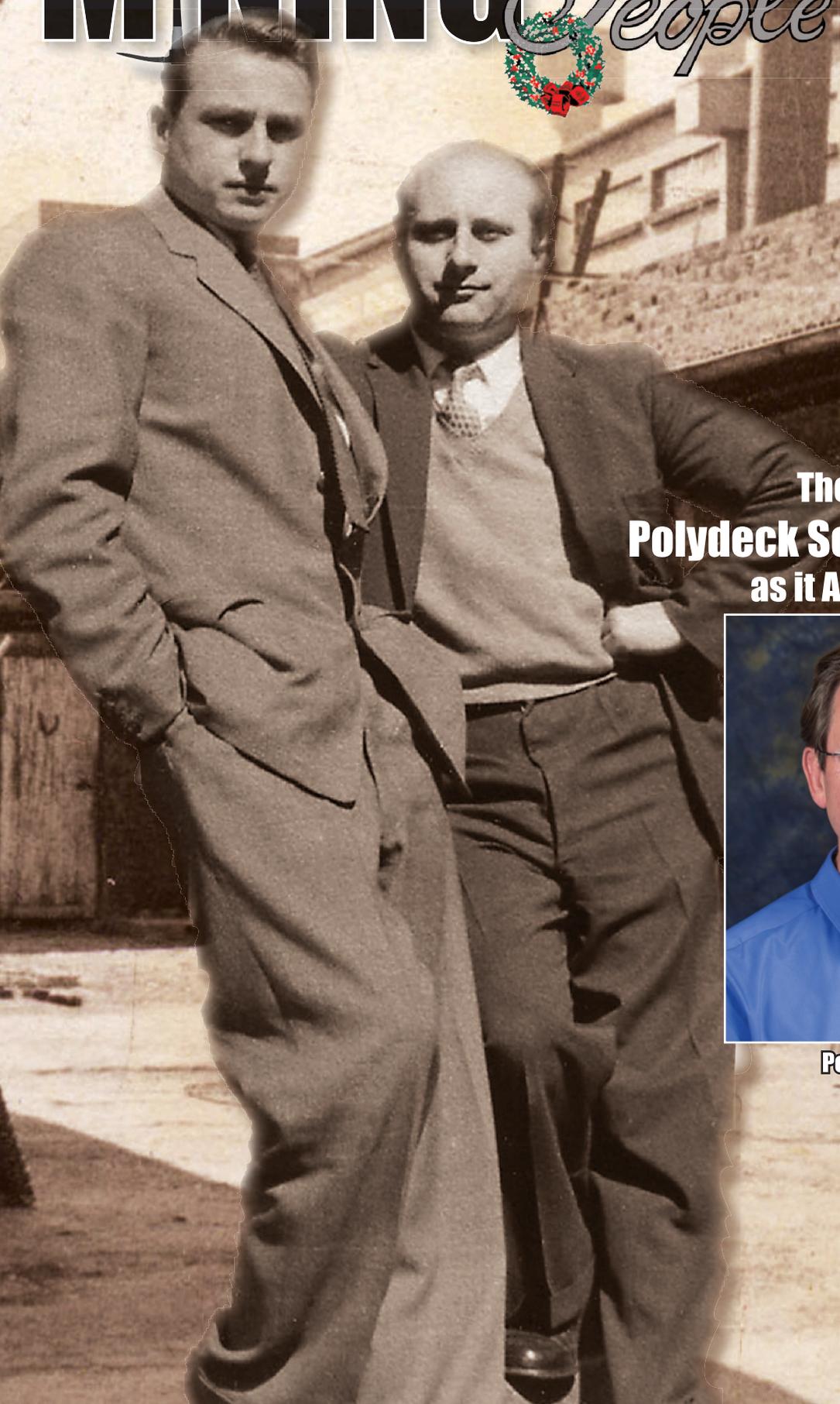


MINING *People*



The history of Polydeck Screen Corporation as it Approaches 40



Peter Freissle, President

High-Efficiency Vibrators for Spreaders, Pumpers & Volumetric Mixer Trucks



Cougar® MDC12-400/700 vibrators improve material flow in pump trucks, spreaders and volumetric mixer trucks.

A global leader in bulk handling technology has introduced a 12 VDC electric vibrator that combines superior performance with long-lasting reliability to improve material flow in specialized hauling and distribution vehicles. Cougar® MDC12-400/700 vibrators from Martin Engineering offer powerful bulk material movement for concrete pump trucks, salt/sand/gravel/fertilizer spreader trucks and volumetric mixer trucks. Able to be retrofitted to most standard brackets, the high-efficiency design uses less current and runs at a lower temperature, while retaining the same power as comparable models. The result is longer equipment life with lower operating expense and maintenance costs by reducing material buildup, slow unloading, clogging and bridging.

The new 12 VDC vibrator delivers superior performance with long-lasting reliability.

“Slow discharge or blockage occurs for several reasons -- humidity, material consistency, etc., but out in the field, the most aggravating reason is when vibration equipment fails,” said Allen Twidell, Mobile Market Manager for Vibration at Martin Engineering. “When that happens, everything stops and operators need to take steps to manually dislodge material using shovels or rods to poke at the clog, or mallets to bang on the side of equipment. These actions can result in equipment damage or sudden discharge, which can be dangerous. The extra time and labor also raises operating costs and reduces productivity.”



Powered by a high efficiency 12-volt DC motor with a maximum draw of 13 amps, the oversized permanent magnet design of the MDC12 Vibrators reduces demand on the vehicle's electrical system. Drip-impregnated armature windings carry the current, and sealed, oversized bearings eliminate lubrication requirements, keep contaminants out and ensure ongoing performance with minimal maintenance. A more sustainable operating temperature coupled with high-temperature Class F insulation puts less stress on internal components, leading to better efficiency and greater durability.

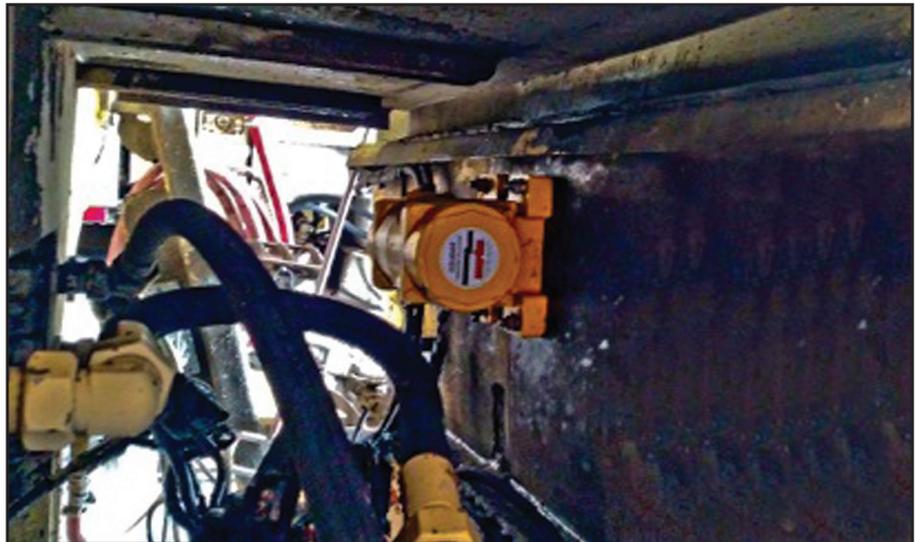
Delivering a centrifugal force output of 400 lbf (90 N) for the pumper/spreader model or 700 lbf (160 N) for larger spreader applications, the internal components are housed in a heavy-duty aluminum alloy case. Weighing only 18 lbs (8 kg), the unit features a more compact design than comparable vibrators on the market. To eliminate moisture penetration, Martin Engineering designers placed the terminal box underneath the vibrator to better secure the electrical wiring, then filled the box with silicone rubber for added protection against moisture and other contaminants.



Compatible with most standard brackets, the units deliver long life and low cost of ownership.

Featuring machined surfaces and sealed with O-rings to create dust-tight and water-tight protection, the vibrator carries an IP-66 rating, ensuring that it can withstand punishing winter and summer environments. The external surfaces are smoothed and painted to eliminate build-up of fugitive material.

Designed and manufactured in America, the MDC12-400/700 is intended to replace less reliable, foreign-made models at a competitive cost to the customer. Able to fit most existing brackets, the unit has a specially designed mounting base with three holes on each of the four legs, which permits selection of four different mounting patterns. With a 10 in. (254 mm) pigtail cord ending in a two-prong plug, the unit fits most truck electrical systems.



The MDC12 can be specified with a force output of 400 lbf (90 N) or 700 lbf (160 N) for larger applications.

“Even before this vibrator went into full production, it was adopted by a specialty snow removal equipment manufacturer as their standard unit for the hoppers of their salt spreaders,” Twidell pointed out. “With the more efficient compact design and Martin’s performance guarantee, this vibrator has received a positive reception from the industry for its superior construction and lower cost of ownership.”

One of the first 12 volt DC truck vibrators for these applications was a Cougar® branded model that was patented in 1964. Martin Engineering -- the world’s largest supplier of industrial vibrators -- acquired Cougar Vibration in 2010 and has been one of the vibration industry’s most prolific innovators since the company’s inception in 1944.

Martin Engineering is a global innovator in the bulk material handling industry, developing new solutions to common problems and participating in industry organizations to improve safety and productivity. The company’s series of Foundations books is an internationally-recognized resource for safety, maintenance and operations training -- with an estimated 10,000 copies in circulation around the world -- and employees take an active part in ASME, SME, VDI, CMA and CEMA. The firm also played a pivotal role in writing and producing the 7th edition of the CEMA reference book, Belt Conveyors for Bulk Materials. Martin Engineering products, sales, service and training are available from factory-owned business units in Australia, Brazil, China, France, Germany, India, Indonesia, Italy, Mexico, Peru, Russia, Spain, South Africa, Turkey and the UK. For more information, contact us at info@martin-eng.com or visit www.martin-eng.com, or call (800) 544-2947.