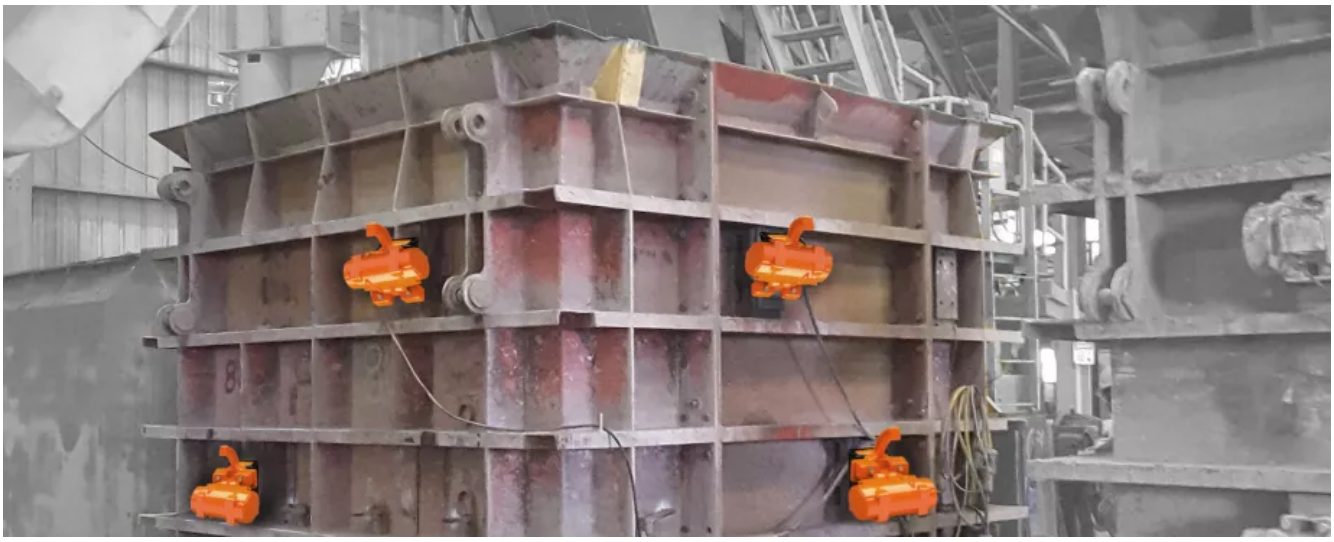

Product News

Martin Engineering: Lightweight Vibrators for Precast Concrete deliver high Performance and extended Life

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Neponset (IL), United States –

Martin Engineering has introduced a lineup of powerful, long lasting vibrators for precast concrete applications. Lighter in weight and easier to transfer from one form to another than comparable vibrators, the Martin® U1-1600 High Frequency Electric Vibrator delivers the force required to minimize voids and provide a smoother surface finish.

With greater equipment reliability and service life, these competitively priced units offer improved quality and durability, reducing the overall cost of ownership.“Surface voids — also known as bug holes — are usually found on vertical casts as a result of entrapped air or water,” explained Larry Horrie, Vibration Product Specialist at Martin Engineering. “Using a powerful high-speed vibrator to expose these bubbles improves material consolidation for exceptional strength and a flawless finish.”

The Martin® U1-1600 High Frequency Electric Vibrator extracts bubbles from the form to reduce finishing labor.

Constructed with durable lightweight materials, the unit weighs only 23 lbs. (10.4 kg), as compared with other precast concrete vibrators on the market that average around 35 lbs. (15.8 kg). Using standard mounting brackets, operators

with several vibrators affixed to a form have found the U1-1600 easily replaces heavier units and offers a longer equipment life with less cumulative weight. The design also makes the unit more portable. Using the easy-grip handle attachment, it can be quickly swapped between multiple forms. With male/female wedge brackets, the vibrator slides snugly into a V-shaped slot that’s specially designed to withstand heavy forces.The U1-1600 provides 1799 lbs (816 kg) of force from a 115 volt (12 amp) electric rotary motor running at 9000 RPM. Triple dipped and shock-resistant class F windings are designed to operate under high internal temperatures for the sustained periods required for these applications. The long 3-prong power cord features a switch box for overload current protection.The oversized ball bearings that carry the high frequency vibration are lubricated for life and protected from abrasion and wear due to the unit’s tight seal construction. Designed with an aluminum housing and durable O-rings between the end caps, the internal workings of the motor are protected from dust and water, even during pressure washing.“Vibration speed is a big factor in precast concrete,” Horrie pointed out. “Without the higher frequency, water and air bubbles aren’t adequately driven to the surface, which can require extra labor to treat and may affect the structural integrity of the cast over the long term.”

The powerful high-speed vibrator improves material consolidation for exceptional strength and finish.

In most cases, after the cast leaves the form there is a need for manual touchup. This is due to the fact that bug holes are generally revealed only once the concrete has set. The more prevalent the small holes on the surface, which are generally less than 1 in. (2.5 cm) in size, the more labor is required to fix them.

By using a high RPM portable vibrator, operators can extract bubbles from anywhere in the form, resulting in considerably less finishing labor.“The U1-1600 is made in America and comparably priced with its foreign competitors, but manufactured with higher quality materials and more rugged construction,” Horrie concluded. “Longer lasting and more reliable products are a cornerstone of Martin Engineering’s manufacturing philosophy, and the U1-1600 is a good example of that concept.”