Although Pile Driving Solutions is a fairly new company – it was formed in early 2014 – owner Jay Mooncotch has been in the construction industry for more than 25 years.

As a former crane operator and rigger, he is only too familiar with the many challenges the pile driving industry faces – one being the damage that a vibratory hammer can potentially place on a crane.

Looking for a solution to this problem, Mooncotch discovered the vibratory damper through Tunkers, a German manufacturer. He used it on a project and immediately realized its overwhelming benefits. After that, he entered into partnership with Tunkers and became their North American exclusive distributor of vibratory hammers and dampers, and then formed his company Pile Driving Solutions.

“I’ve been around cranes my whole life, and the damper is by far the best,” he said. “This equipment has advanced engineering and has been proven to work above expectations. Anytime a vibratory hammer is on a crane, the potential exists for parts to vibrate off the crane, which could create injury, damage the crane or shut the jobsite down. This damper is designed to take the shock of a vibratory hammer from the crane and the operator during pile driving applications.”

The effective shock isolation is achieved by means of a combination hollow rubber spring specifically modulated and heat resistant with a simple but effective flexible joint.

“By using a damper during sheet piling and case-in jobs, just having a damper reduces pieces from falling off the crane, which is caused by the ongoing vibration,” said Mooncotch. “That, in itself, is a safety hazard and the damper minimizes the risk.”

The damper can be used on all cranes, such as crawlers, all-terrain and rough-terrain cranes and is available in several models, with the most common being the SD130. With the right rigging, it can be hooked to the block in minutes and requires little maintenance.

“And if taken care of properly, it can last a lifetime depending on the amount of hours it is used,” said Mooncotch.

Pile Driving Solutions offers a variety of vibratory hammers and dampers to customers across the U.S. Kiewit recently purchased three dampers: two SD130s and an SD180 for a
bridge in New York. American Bridge also bought an SD130 for a bridge job in Dallas, Texas.

"Manufacturers like Liebherr are requiring dampers or isolators to be used on certain crane models when the machine is fitted with a vibratory hammer," he said.

Many crane companies stay clear of pile driving projects because of the possible damage it can do to an expensive crane, but with the damper it offers a line of revenue without the risk of crane damage or downtime.

"The advantageous part of investing in a damper is that it not only saves wear and tear on your cranes, makes jobs run smoother and safer, but it opens up an entire new line of revenue for crane companies," said Mooncotch.

The damper has also created a new market for Bridgeview, Ill.-based Imperial Crane Company, which on one specific job, generated $100,000 by renting a 300-ton hydraulic crane, and an additional $12,000 in rental revenue.

"Our focus is to create an entire market for crane rental companies that are renting out the crane with the vibratory hammer, and they are able to protect their cranes with the damper," he said.

With three offices in Illinois and more 200 employees – through its affiliation with Imperial Crane Company – Pile Driving Solutions has also received inquiries for the damper from Canada, New Zealand and Saudi Arabia.

Imperial Crane and Pile Driving Solutions introduced the damper at the Specialized Carriers and Rigging Association (SC&RA) Annual Conference in Carlsbad, Calif. this past April.

An international trade association with more than 1,300 members from 43 nations, those attending the conference are in specialized transportation, machinery moving and erecting, industrial maintenance, millwrighting, crane and rigging operations, manufacturing and rental.

"This product took off fairly quickly and we saw the need to expand into the Canadian market," said Mooncotch.

Plans for 2016 include continuing its marketing strategies into Canada through articles, advertising, word of mouth, referrals and trade shows.

For the next one to three years, Mooncotch says Pile Driving Solutions will continue to create ongoing awareness on the benefits of the damper. His company will be at the Pile Driving Contractors Association 20th Annual International Conference & Expo 2016 in May in New Orleans to display the damper.

"This damper has created a new market for the crane market," he said. "It will be a matter of time before additional crane companies stand behind this product and require the damper be used during pile driving jobs. We are going to continue to market this damper and look for new potential customers."