

## PACKAGING



A pallet load of carbon steel, Schedule 40 pipe is raised on a forklift and ready for wrapping.



# STRONG HOLD

## Contractor eliminates manual pallet wrapping to secure metal parts, protect workers

Steve Robinson, while attending Fabtech, paused to watch a packaging machine automatically apply stretch wrap 360 degrees around a pallet of metal parts. As he observed the orbital wrapper in action, he knew it could help his company streamline its packaging process.

Robinson is president of family owned Pitt Meadows Plumbing and Mechanical Systems Ltd., Maple Ridge, British Columbia. The leadership of this mechanical construction contractor has embraced technology with automated measurement tools, 3D pipe drawing software and augmented reality, yet the packaging department continued to prepare pallet loads of metal pipe and fittings by hand.

### INEFFICIENT AND COSTLY

When wrapping, a Pitt Meadows worker typically raised a pallet load by forklift while two others applied plastic stretch wrap, passing the roll back and forth to one another. Since it was difficult to achieve a tight wrap with this method, workers added metal banding and/or strapping and protective dunnage to help keep the parts in place. Sometimes, a pallet with questionable wrapping would be flagged

at the last minute and rewrapped or bolstered with extra stretch wrap.

Every once in a while, a delivery would be rejected upon arrival due to damage incurred from shifting in transit. With more than 1,500 stretch-wrapped pallet loads delivered per year at a value of up to \$2,000 each, the time and materials required to redo a rejected job, plus the risk of delays in construction, escalate costs quickly.

The manual hand-wrapping process not only put the custom metal products at risk but also put a strain on the packaging department staff. Though no serious injuries occurred, workers occasionally felt minor back discomfort from bending underneath the raised load. They also dealt with minor cuts and scrapes and suffered minor burns to the hands if gloves weren't worn.

"Nobody was thrilled to stretch wrap the pallet loads for delivery," says Andrea Wilson, inventory control manager for Pitt Meadows.

### PATENTED TECHNOLOGY

Designed and manufactured by TAB Industries LLC at its Reading, Pennsylvania facility, the TAB Wrapper Tornado line of orbital stretch-wrap machines features patented wrapping

technology to automatically wrap stretch film around and under the pallet and load while it is raised on a forklift to create a stable, secure, unitized load that resists shifting in transit. It fully wraps pallet loads in 30 seconds or less; eliminates the need for boxes, crates, banding and strapping; and enables the entire packaging process to be safely performed by a single worker.

To operate the orbital stretch wrapper, a forklift driver raises the pallet load, drives it into the center of the wrapping ring, and presses "start" on the remote control while sitting inside the safety of the forklift cab. The TAB Wrapper Tornado automatically encircles the pallet load in layers of plastic stretch film as the driver gradually moves forward or back. When complete, the driver presses "stop" on the remote control, the built-in automated cut and wrap device automatically cuts the end of the plastic, and the driver moves the wrapped pallet on to its next destination.

### FAST, EFFICIENT

Robinson purchased two of the 80-in.-diameter orbital wrapping machines, one for wrapping sensitive stainless steel and copper and the other for wrapping carbon steel, cast iron and other materials. Because the TAB Wrapper Tornado applies the stretch wrap around a horizontal access, it can wrap long products up to any length, either by forklift or by continuous feeding from a conveyor.

Both machines feature the wireless remote, automated cut and wrap device and



At Pitt Meadows Plumbing and Mechanical Systems Ltd., Simon Robinson wraps a pallet load of Schedule 40 pipe using the TAB Wrapper Tornado.



Pipe products are tightly wrapped and ready for shipment.

Smart Controls operation, a configuration that sparked a 180 percent increase in unit sales in 2023.

“We liked how the driver could operate the machine without getting on and off the forklift,” says Wilson. “This is a much faster, more efficient way to wrap our pallets.”

Since installing the orbital wrapping machines, the company has not had a single delivery rejected, has eliminated worker complaints about safety and has been able to accommodate increasing volume in the packaging department. “We’re sending out secure loads every time,” says Wilson. “Now, we’re always on time and on schedule without scrambling to meet deadlines, and we have the capacity to handle our growth without needing to hire.”

### SMOOTHER WORKDAY

Training the packaging team to become comfortable with the stretch wrappers, including replacing the rolls of stretch wrap, took 30 minutes, according to Wilson. “Everybody loves the TAB Wrapper Tornado. We’ve taken a dirty job that nobody wanted to do and turned it into a job that everyone wants to do.”

The automated orbital wrapper also has impacted operations at the job site, where covered areas are often limited and palletized metal parts and materials are outside and exposed to the elements. The tight stretch wrapping provides a degree of weather resistance that safeguards against rust and other damage. Further, without the need for boxes, banding and strapping, viewing the pallet’s contents through the clear stretch wrap and accessing them when needed is faster, safer and easier.

“The TAB Wrapper Tornado has helped us apply the high level of automation and technology that we use daily throughout the organization to improve the packaging and shipping operations,” says Wilson. “We’re getting more pallet loads wrapped faster and stronger than ever, and our people are happier to show up to work.” **FFJ**

Pitt Meadows Plumbing, 604/465-8622, pittmeadows.net.

TAB Industries LLC, 610/921-0012, www.tabwrapper.com.

“This is a much faster, more efficient way to wrap our pallets.”

Andrea Wilson, Pitt Meadows Plumbing and Mechanical Systems Ltd.

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