

HEAVY EQUIPMENT GUIDE

JULY/AUGUST 2016

**FOUR KEY
FACTORS FOR
IMPLEMENTING
TELEMATICS**

p 14

NEW EQUIPMENT KEY TO GROWTH

**Rollers, paver and milling machine
propel expansion p 12**

**COMPACT EXCAVATORS
p 21**

**WORKSITE SOFTWARE
p 28**



NEW EQUIPMENT POSITIONS CONTRACTOR FOR EXPANSION IN ROAD RECONSTRUCTION

Wirtgen W 120 Fi milling machine, Vögele Super 1300-3i asphalt paver, and Hamm HD+ 80i VV-S, HD 12 VV, HD 12 VT and GRW 280i compaction rollers key to growth strategy

Pave-Tar Construction, which employs up to 120 people in the summer and up to 250 in the winter, has been providing a wide range of services for over 40 years, from asphalt milling, paving and road maintenance to grading, curb and sidewalk construction, concrete restoration, sewer and water line construction and snow removal. The Etobicoke, Ontario company recently acquired several new machines to expand their work in pavement reconstruction and position them for continued growth for years to come.

Their new small- to mid-size machines include an asphalt paver, cold mill and compactors from Wirtgen Group and are ideal for Pave-Tar's target market. "The majority of our work is for municipalities, such as Toronto, Mississauga and Brampton," said Jason Amaral, the company's estimator and project manager.

In advance of the paving, Pave-Tar's new W 120 Fi cold mill can effectively prep major thoroughfares, as well as tight parking areas, by removing aged asphalt. They chose the new Vögele Super 1300-3i asphalt paver as it is a high-performance machine at home in streets and roads as well as parking lots and other commercial applica-

tions. The paver is complemented by four new Hamm rollers, each with its own role: the HD+ 80i VV-S split drum roller, HD 12 VV CompactLine roller, HD 12 VT combination roller with smooth drum at one end and rubber tires at the other, and a GRW 280i pneumatic roller.

Moving up in size for milling

Pave-Tar is not new to the Wirtgen line, having purchased a W 50 DC milling machine in 2014 for small jobs that don't require a big machine. The larger milling work was subbed out.

"We started off small and the W 50 DC fit our needs at that time but this year we decided to do more of that milling ourselves," Amaral said. "We acquired the 1.2-m W 120 Fi and after that it made sense to find a paver and rollers.

"We used it to excavate trenches but now that we have the other equipment we've been able to expand, cutting around manholes and grinding catch basins, lap joints between old and new asphalt pavement, and detail work in parking lots."

Some contractors use mill heads attached to skid-steer loaders to do such work, but Pave-Tar was never tempted to go in that direction.

"We've never used a milling attachment on a skid steer," Amaral said. "We've seen contractors do it, but never felt it did a good job. There is a lot of bouncing around, and the cut is very sloppy and not as accurate as with a dedicated machine."

Pave-Tar's mill capabilities were expanded in early spring 2015 when it added the W 120 Fi to its fleet. "We picked up some work that required it, and decided to move ahead with it. We use it for municipal arterial and local roads, grinding down 40 to 50 mil [1.6 to 2.0 inches], depending on what the spec requires for 'grind-and-pave' projects."

It's also used on parking lots, and for pulverization and light excavation. "We've actually rented it to other contractors with larger machines because it's tailored for urban use such as in downtown Toronto. It fits there better, whereas a larger machine might be cumbersome and not as agile as the 120."

The controls are very user-friendly, Amaral added. "The operators found them to be self-explanatory. What you see is what you get. Because it's all on the displays, there is no second-guessing as to what the mill will be doing, or how to control it."

"Wajax gave us a full opportunity to demo equipment and use it as if it were our own. We liked it and we bought it."

The mid-size mill also contributed to the bottom line, Pave-Tar found. Typically milling with a bigger machine is a two- or three-person operation. "You will have the operator on top, and groundmen who are controlling grades," Amaral said. "But



Left: Pave-Tar's Hamm split-drum HD+ 80i VV-S and rubber-tired GRW 280i rollers. **Above:** Voegele Super 1300-3i asphalt paver is well suited for both commercial and government work. **Top right:** HD 12 VT roller features pneumatic and smooth drum compaction.



with the W 120 Fi, it's all controlled from up top. The operator sets all the grades from the top and has one person at the bottom for any ground obstructions."

Pave-Tar is also realizing savings in fuel consumption, as reported by its operators who have used comparable equipment. "We're filling it up every other day, but are grinding every day," Amaral said.

Super 1300-3i paver and ErgoPlus 3 operating system make paving easy

The Super 1300-3i provides the maneuverability of a small paver with the stability and capability of a large paver.

"We've tried other pavers but going with this one was a no-brainer," said Amaral. "It's big enough for what we need to do, paving a lane-width one day and putting in a park pathway the next."

When paired with Pave-Tar's AB 340-3V vibrating extending screed from Voegele, its basic paving widths range from 1.8 to 3.4 m. A maximum width of 5 m is possible with installation of 0.8 m extension kits.

Because its screed can go down to 1.8 m, it can do a shoulder, bike or golf cart path, making it the ideal machine for commercial, utility and medium-to light-duty paving. But it can even go narrower; with cut-off shoes, it has a minimum width of 0.75 m.

The V screed provides an exceptionally smooth mat. "It vibrates the mix better and results in a smoother finish," Amaral said. "When it comes out the back, it looks like a sheet of glass, with fewer voids."

The ErgoPlus 3 operating system is standard, and that makes it easier for workers to cross-train. "We put a lot of faith in our operators," Amaral said. "[The] one who operates the milling machine also operates the paver. He was able to jump on it and with representatives from Wirtgen and our distributor, Wajax Equipment, alongside, he picked it up very fast. And we were able to cross-train a second employee right after. That's how easy it is for operators to move from mill to paver."

Four different types of rollers

The selection of Hamm rollers acquired in 2015 was unique and spe-

cially suited for Pave-Tar's needs.

"It made sense for us to buy the four different types of rollers because each one serves a purpose," Amaral noted. "We use the bigger models on municipal roads and parking lots, and the smaller rollers are useful on paths where we don't need the large roller and that degree of compaction. They do a fine job right behind the paver. But we can use the smaller rollers on big jobs as well."

The HD 12 VT combination roller unites classic vibration in a smooth drum with the kneading action of a rubber-tired roller. "Our typical setup is breakdown-intermediate-finish rolling," Amaral said, "but we can use the combi when we have the smaller double-drum up ahead, and the combi comes right behind, doing the intermediate and finish at the same time."

In the meantime, Pave-Tar's HD+ 80i VV-S split drum roller does double-duty as a high-performance breakdown roller, but also compacting on curves – such as cul-de-sacs and around parking lot islands – where the



The Wirtgen W 120 Fi mill is a good choice for road work, as well as parking lots.

tight radii could lead to tearing of the mat. "We wanted the split drum because of its advantages," Amaral said. "Because the drum is split, it is less likely to rip the mat on tight turns. It's a quality issue, and a finish issue, and eliminates having to go back and fix imperfections on the mat."

Dealer, manufacturer and chance to demo equipment influenced decision

Wirtgen's reputation, and that of distributor Wajax, was a major rea-

son Pave-Tar settled on the Wirtgen platform. The firm had seen competitors using Wirtgen mills and decided it was worth taking a look. And when it considered pavers and rollers, it was an easy choice to stay in the family.

"For us it was a convenience to keep everything under one umbrella, a one-stop shop," Amaral said. "Wajax gave us a full opportunity to demo equipment and use it as if it were our own. We liked it and we bought it."

CONSTRUCTION SOLUTIONS
topconpositioning.com

Lose the Mast!

Introducing 3D-MC^{MAX}, Topcon's integrated 3D Dozer System.

- Faster blade position updates than any other after-market dozer system
- No receivers or antennas mounted to masts on the blade
- Unparalleled inertial sensors that are the future of automated dozer performance
- The best available grade control on steep slopes, bar none

Learn how 3D-MC^{MAX} changes everything and download a list of available dozer models by visiting www.topconpositioning.com/MAX

TOPCON
 From start to finish. With you all the way.