

# Mid-size paver provides stability of a large machine and maneuverability of a small machine

One paver serves government, commercial and residential projects

by Tom Kuennen

A smaller-size asphalt paver with the right dimensions is giving a Kitchener, Ontario asphalt contractor the ability to profitably place pavements from residential streets to bike paths with a single machine.

Quality Paving does government road construction, in addition to suburban residential work. “We’re 75 percent civic or government work and the rest commercial,” said Dave Tittley, president and owner, Quality Paving 1994 Ltd. “We get the call because we can do the small and the big pavements.”

The Vögele Super 1300-2 helps Tittley serve his market niche. “This smaller paver allows us to go into all kinds of places that the bigger machines can’t get to, yet it’s a big machine,” Tittley said. “It has the power to do roadwork. We can go into a subdivision and do a 23- to 26-foot-wide roadway in two passes. The big machines can do that but we can take that 13-foot screed down to 6.5 feet and do a pathway, such as a bike or golf cart, while none of the big pavers can do it.”



To Dave Tittley, the Super 1300-2 provides the best of both worlds. “The Super 1300-2 gives you the stability of a large machine, and the maneuverability of a small machine at the same time.”

Quality acquired the Super 1300-2 in spring 2013. By late summer 2014, they had about 800 hours on the machine and were working on water and sewer repair at a light manufacturing plant in Mississauga. Quality Paving was placing a final wide patch, 197 feet by 13 feet. Approximately 66 short tons of hot mix asphalt was placed in a morning.

“The plant put in new sewer lines and we are putting in two layers of hot mix asphalt, two inches of HL8 binder course and 1.5 inches of HL3 finish course,” Tittley said. The HL8 lift has a maximum aggregate size of 3/4-inch, while the HL3 uses 3/8- to 1/2-inch maximum aggregate size.

Is the size of machine “overkill” for the parking lot utility patch paving done in southern Ontario? “At the end of the day, when the equipment gives you a good quality job, it’s not overkill,” Tittley said.

## Compacting screed

The highly versatile Super 1300-2 is the perfect machine for commercial, utility and medium- to light-duty paving. Its compact and maneuverable design makes it right for precise and intricate jobs, walking



and biking paths, sidewalks, utility work and shoulder paving. Paving widths range from 2 feet 6 inches to 13 feet 9 inches, making the Super 1300-2 a very versatile machine.

It is driven by a modern Deutz engine rated at 100 hp. By achieving a maximum laydown rate of some 390 tons per hour, the Super 1300-2 also is an excellent performer on major paving jobs.

The Super 1300-2 is paired with a massive AB 340 V screed from Vögele, not commonly seen in North America. “Once we set the screed level, we hardly ever touch it,” he added. “For the size of the machine, it’s a very heavy-duty screed; it’s as heavy as a large highway class machine.”

On the plant parking lot, the vibrating screed was getting about 90 percent compaction ahead of finish rolling by a Hamm HD 12 CompactLine roller. “We don’t always use compaction at the screed, but on roadwork, we will use it, depending on the length of the road,” Tittley said. “It helps us get compaction a little bit faster, so we don’t have to stay as long rolling.”

The Hamm compactor is a fine complement to the Super 1300-2. “It works fantastic,” Tittley said. “Its steering and vibration are great, and the water control system is super. We’ve had great results and productivity with it. By mounting the operator’s seat high, with the seat movable back and forth, the operator can really see what he is doing, he’s right there. And the front of the roller is tapered in, so the operator can see the curb right beside you.”

Like all Vögele screeds, the AB 340 V is electric-heated. “One of the biggest pluses of a smaller machine like the Super 1300-2 is that we have electric heat,” he said. “The screed is constantly heated and we always get a smooth finish, whereas a lot of small machines don’t have that capability, instead using propane burners. It’s one of the few smaller-size pavers that has the technology normally seen in a larger paver.”

The paver incorporates the Vögele

Niveltronic Plus system for automatic grade and slope control to achieve superior paving results. “Because we’ve been doing mostly trenches this season, we haven’t had the need to use it,” Tittley said. “But when we do bridge work we’ll use the Niveltronic. For this trench, we’re just matching to the existing pavement and don’t have it on.”

## Powerful but economical

Quality feeds asphalt to the Super 1300-2 using either a dump truck, or front-end loader. “We can use both, depending on what the project is,” Tittley said. “Most of the time we have our triaxles dump directly in the hopper. The 100-hp engine provides lots of power to push triaxles, tractor-trailer dumps and flow-boys, we have no problem in pushing any of them. But if we’re in a small area that a truck can’t back into, the paver is ready for a large skid steer or even a backhoe to feed with asphalt.”

Despite its ability to place wide street pavements, the Super 1300-2 is very easy to use for parking lot paving. “It’s very maneuverable around small areas such as parking lot curbs,” Tittley said. “It’s still a larger machine in weight and size of engine, but the outside of the track is two metres, a little bit shorter, so we can turn tighter than a larger machine. Smaller machines will turn even easier but they don’t have the versatility of the Super 1300-2. We have no problems going in and out of tight places.”

When you have a limited size fleet of equipment, reliability is paramount to a contractor. “This is a very reliable machine, so long as everyone goes through the sequences of taking care of it,” Tittley said. “If someone leaves the key on overnight, we will arrive in the morning and the batteries are down. But normally the paver is available when we want it and the screed heats up fast. In five minutes we’re ready to go.”

And when in action, Vögele’s ErgoPlus



**Top:** The Vögele Super 1300-2 handles commercial, utility and medium- to light-duty paving.

**Above:** Navitronic Plus system provides automatic grade and slope control.

**Left:** Dave Tittley, owner of Quality Paving 1994 Ltd.

operating concept provides intuitive and easy operation with great visibility.

“The paver is more economical to operate than other pavers we’ve had, because we are able to select between three different operating modes for the engine,” Tittley said. “Most of the time we keep it in Eco mode, which is economical for general use. The only time we change that is when we put the machine into production. For that we have an Idle and also a Super mode, which really brings the engine up when dealing with heavy asphalt loads, for example, to push a truck whose brakes are on. Otherwise we can use Eco in virtually every application.”

The hopper also has an easy-to-use cleanout system. “One of the best things about the Super 1300-2 is that the screed goes down to two metres wide, but the whole machine goes down to two metres as well,” Tittley said.

“You can go through narrow downtown alleyways; the whole machine goes right through. Other machines, you can get the screed down but the paver stays wide. Even if it’s been folded, it will still be eight feet wide.”

Tom Kuennen is a technical writer specializing in paving applications.

Wirtgen