SUPER 1600-3 L // The compact powerhouse with impressive performance and manœuvrability
SUPER 800-3 // The Mini Class paver with the maximum range of applications
Paving asphalt in a covered parking area // With a low height of just 1.98m, the SUPER 800-3 shows off its strengths
Top Feature

Quality made for China: SUPER 1880-3 L and SUPER 1880 L
WIRTGEN CHINA introduces two new Universal Class pavers

Interview "The best of two worlds"
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Site Report

60 Asphalt paving under an extremely low ceiling
The SUPER 800-3 is just the ticket with its low height of just 1.98m
The demands of modern road construction are on the rise. An increasing number of motor vehicles are transporting increasing volumes of people and goods, and this development is exerting ever-greater pressure on China’s infrastructure. With its new SUPER 1880-3 L and SUPER 1880 L Universal Class tracked pavers, WIRTGEN CHINA is presenting two new machines that enable construction companies to successfully master a variety of challenges encountered in daily paving practice.

The SUPER 1880-3 L – the high-grade asphalt specialist – and the SUPER 1880 L – the multifunctional paver for cement-treated base and asphalt – are both fabricated at WIRTGEN CHINA’s Langfang plant and were engineered specifically for the Chinese market. With their respective strengths, these two pavers complement one another perfectly in daily paving operation.

Also new in the Universal Class is the SUPER 1600-3 L. The impressive manoeuvrability displayed by this compact powerhouse on confined construction sites is unique on market. Another new product is the SUPER 800-3 Mini Class paver, which can take on almost any job that other pavers are too big, too wide and too high to tackle.

We hope you enjoy reading this issue!

Ulrich Reichert
CEO and Managing Director
WIRTGEN (CHINA) Machinery Co., Ltd.

Roland Schug
Head of Marketing
JOSEPH VÖGELE AG
Germany
The new SUPER 1880-3 L

The pioneering SUPER 1880-3 L high-grade asphalt specialist boasts a maximum pave width of 9.5m and all the innovations typical of the advanced “Dash 3” generation of pavers.
The new SUPER 1880 L

The SUPER 1880 L is a durable, multifunctional paver for cement-treated base with a maximum pave width of 9.5m, Heavy-Duty kit and the practical ErgoBasic operating concept.

WIRTGEN CHINA: Tailored for China, produced in Langfang

The global WIRTGEN GROUP’s base in China is located in Langfang, near Beijing. Spread over 200,000m² of company grounds, the production facility, sales and service centre, workshop and spare parts store complement one another to form a road construction competence centre that is unique in all of China. WIRTGEN cold milling machines, VÖGELE road pavers and HAMM rollers are specially developed, built and marketed here to suit the local demands of road construction. The plant upholds the same, high quality standards as the brand headquarters in Germany.
SUPER 1880-3 L: The high-grade asphalt specialist

With the SUPER 1880-3 L, VÖGELE are presenting a new tracked paver that has been tailored to demands in China. As the successor to the SUPER 1800-2 L, so popular in China, this pioneering machine with its innovative “Dash 3” technology raises the bar even higher when it comes to workplace and operating comfort, energy efficiency and pavement quality. The new SUPER 1880-3 L supports an expanded range of applications. With a maximum pave width of 9.5m, it handles motorways, rural roads and squares just as well as tight roundabouts. The innovative paver is an acknowledged specialist for paving asphalt with premium quality results.
1 ErgoPlus 3 operating concept
Greater pavement quality, control and safety thanks to maximum operating comfort

2 VÖGELE EcoPlus low-emissions package
Lower fuel consumption, emissions and noise

3 Hydraulic height adjustment of the augers
Fast and precise adjustment of the auger system to varying layer thicknesses across the entire pave width

4 Pioneering screed technology with pave widths of up to 9.5m
Electric screed heating prevents mix from sticking, and hydraulic Screed Freeze function temporarily interrupts the float function to avoid irregularities in the pavement when resuming paving

5 Extra-long and particularly low material hopper
For easy feed with mix by all types of lorries common in China
VÖGELE’s new ErgoPlus 3 operating concept centres on people. It’s about greater comfort, ease of operation, visibility and control, because even the best machine with the most advanced technology can only really show its strengths if it can be operated as easily and intuitively as possible.

The highly user-friendly ErgoPlus 3 operating concept includes the operator platform, the paver operator’s console and the two screed operator’s consoles. VÖGELE’s Niveltronic Plus, the System for Automated Grade and Slope Control, is integrated in the ErgoPlus 3 operating concept. Overall, ErgoPlus 3 enables a paving crew to respond more effectively and quickly to workflows and conditions on the job site.
A custom workstation: the operator can shift, swivel and tilt the paver operator’s console as needed.

Totally ergonomic: The paver operator’s ErgoPlus 3 platform

Anyone who takes a seat on the SUPER 1880-3 L for the first time is thrilled from the start. The operator enjoys plenty of legroom and has an exceptionally clear view of all the relevant points on the job site and paver, e.g. material hopper, screed and auger tunnel, meaning he can closely monitor the head of mix in front of the screed.

› The paver operator’s ErgoPlus 3 console can be displaced across the full width of the platform, swivelled out to the sides and tilted.
› When working with the seat swung out, the paver operator’s console can be also be swivelled out together with the operator’s seat.
› Side panelling affords effective protection from the wind and rain.
› The modern polymer hardtop shelters the operator, come rain or shine.
› Wide, smoothly extending sunshades even shield the operator when his seat is swung out.
Keeping an eye on what’s important: The paver operator’s ErgoPlus 3 console

On the clearly laid out paver operator’s ErgoPlus 3 console, all functions are clustered in four logical groups so that the operator finds the controls where he expects them to be.

- The operating interface functions on the basis of easily comprehensible, language-neutral symbols that support intuitive operation of the paver.
- The push-buttons can be actuated even when the operator is wearing work gloves.
- Operation is based on the “Touch and Work” principle: once a button is pressed, off you go.
- The backlighting switches on automatically at dusk.

- The new colour display is clearly visible in both bright sunshine and low light to minimize the risk of operating errors.
- The colour display shows all important information, e.g. the height of the screed tow point rams, the level of mix on the conveyors, fuel consumption and operating hours.
- The tamper and conveying speeds, as well as the conveying capacity of the augers can be set using the push-buttons on the colour display.

The large, redesigned colour display on the paver operator’s console supports even simpler operation and optimum control of all functions, even in poor light.
The new screed consoles are equipped with a number of innovations that simplify everyday tasks.

Maximum convenience when paving: The new screed console

Ease of operation is likewise critical for the screed operator. The new ErgoPlus 3 Screed Console gives him even better control over the screed. The ergonomic design, new colour display and new SmartWheel control ensure safe and comfortable workflows and maximum quality results.

- The new SmartWheel has two speeds for precision control of the screed width.
- The high-contrast colour display with clearly structured menu and intuitive symbols supports simple and reliable operation.
- To prevent operator errors on night-time jobs, the buttons are automatically backlit when darkness falls.
- The screed consoles are particularly sturdy and totally encapsulated to protect against rainwater and other liquids.
- Both screed consoles can be used to operate the left and/or right side of the screed.
- Crowns can be paved at the push of a button.
- The machine and work area are fully illuminated by high-power LEDs.
Clean performance: VÖGELE EcoPlus low emissions package

With its drive concept, the SUPER 1880-3 L specialist can handle a wide range of applications, from minor roads to motorways, and from base to surface courses.

The SUPER 1880-3 L is a tremendously powerful road paver driven by a modern, liquid-cooled, 158kW, Dongfeng Cummins 6-cylinder diesel engine. The large cooler assembly and innovative air routing support the machine’s full range of performance by effectively cooling the engine coolant, hydraulic fluid and charge air. Separate, electro-hydraulically controlled drives installed directly in the running gears of the crawler tracks efficiently convert engine output into pave speed without loss. The 3.06m-long crawler tracks provide for maximum traction and a constant operating speed.

Up to 24% less fuel

The innovative VÖGELE EcoPlus low-emissions package for the SUPER 1880-3 L comes with a whole series of features to reduce noise levels and slash fuel consumption by up to 24%. The principle is: systems that are not needed are deactivated, and consequently use no fuel.
Increased cost-efficiency thanks to VÖGELE EcoPlus: reduces fuel consumption by up to 24%.

* Actual fuel consumption depends on multiple factors, e.g. machine configuration, type of job site and paving parameters.

1. Thanks to the splitter gearbox, all the hydraulic pumps needed for “traction”, “conveyors and augers” and “compaction” are automatically disengaged if the paver is idle for more than one minute.

2. The energy-optimized tamper drive is driven by a variable displacement pump, which delivers the exact amount of oil needed for the current tamper speed.

3. The controlled hydraulic oil temperature circuit with bypass allows the hydraulic oil to reach its optimum operating temperature very quickly.

4. The speed of the variable-speed fan is adjusted in line with engine load, the ambient temperature, as well as the temperature of the oil and cooling water.
Fast and precise adaptation to layer thickness thanks to hydraulic height adjustment of the augers

The height of the generously dimensioned, 420mm augers can be quickly, infinitely and hydraulically adjusted together with the bearing boxes by up to 15cm across the entire pave width, even during operation. This ensures optimum spreading of the mix during changes in layer thickness within a single work section. Furthermore, the hydraulic height adjustment of the augers eliminates the need for time-consuming and costly conversion when moving the paver to a new work section.
The powerful conveyor system guarantees high productivity.

The conveyors and augers have separate hydraulic drives.
The SUPER 1880-3 L is well-equipped for a variety of paving tasks thanks to its superb adaptability. Be it motorways, rural roads or large squares, this paver is the ideal machine for medium to large construction jobs. Depending on the requirements, the SUPER 1880-3 L is best combined with one of the following screeds.

**VÖGELE AB 600 Extending Screed**

The AB 600 is always the screed of choice for jobs that require both premium paving quality and varying pave widths. With its durable single-tube telescoping system, the extending screed can be adjusted quickly and accurately from 3 to 6m, or even up to 9.5m with the bolt-on extensions. The AB 600 is simply brimming with pioneering innovations, including an optimized tamper geometry with a particularly flat screed planing angle for even better compaction and evenness, hydraulic crown adjustment for positive and negative crowns at the push of a button, and hydraulically adjusted side plates. The centrally positioned screed footstep gives the operator safe access to the platform. Another highlight is the new ErgoPlus 3 Screed Console with colour display and SmartWheel, which enables rapid and precise adjustment of the screed in next to no time.

**VÖGELE SB 300 Fixed-Width Screed**

The SB 300 Fixed-Width Screed covers a remarkably wide range of pave widths, starting with 3m and expanding to a maximum of 9.5m in conjunction with the SUPER 1880-3 L. The team of SUPER 1880-3 L and SB 300 is therefore tailor-made for large projects, such as constructing new roads or rehabilitating motorways. The basic screed can be equipped with bolt-on extensions of different lengths and electric heating.
The VÖGELE AB 600 Extending Screed has a basic width of 3m, but is infinitely variable up to 6m. With bolt-on extensions, it can even achieve pave widths of up to 9.5m.
Higher paving quality with hydraulic Screed Freeze function

When paving resumes after a brief interruption, mix located directly in front of the screed may cool somewhat so that it cannot be compacted as easily. When re-starting the paver, the operator must make sure the screed does not rise up as it would if set in “Screed Float” mode. The automatic Screed Freeze function suspends the “Screed Float” mode for a defined period of time and pressure is applied to the screed. Screed Freeze pressure prevents the screed from floating up and humps from forming when paving resumes.
Optimum compaction with electric screed heating

To optimally support compaction and produce a smooth surface texture, the screed plates and all compacting elements in VÖGELE screeds are heated across the full screed width. As a standard feature, the screed plates are heated to the right temperature by heating elements that warm the entire surface. The screed plates are insulated on top, so that all the heat is directed where it is needed most: to areas of contact between the screed plates and the mix.

The tamper bar is likewise fitted with heating rods for quick and uniform heating from the inside. Sophisticated control technology allows the overall heating capacity to be automatically controlled.
The “L” in the name of the new SUPER 1880-3 L stands for the 242cm-long but only 55cm-high material hopper, which enables the paver to be fed with material by all lorries typically used in China. The wide, oscillating push-roller can be shifted forward by 75mm or 150mm for convenient, jolt-free material transfer by the feed vehicle, even in bends. The 15t capacity of the receiving hopper not only supports rapid material transfer, but also ensures that enough mix is available for paving even in difficult feed situations, such as under bridges.
SUPER 1880 L: Multifunctional paver for cement-treated base and asphalt

Takes a lot, gives a lot – the SUPER 1880 L. Cement-treated base (CTB) has become the established standard in China for road construction projects. Paving base courses up to 50cm thick requires extremely powerful and durable pavers. VÖGELE’s new SUPER 1880 L is a cost-efficient, heavy-duty tracked paver designed for paving both water-bound materials and asphalt. Moreover, with a maximum pave width of 9.5m, the SUPER 1880 L is exactly the right paver for use on motorway projects and rural roads. When it comes to power, the Dongfeng Cummins 6-cylinder diesel engine with 158kW has what it takes to achieve pave speeds of up to 24m/min.
1. **ErgoBasic operating concept**

   Super-easy paver and screed operation and excellent view of the entire machine and job site.

2. **Heavy-Duty kit**

   Reinforced guards for the conveyor tunnel and chassis, as well as modified auger blades counteract abrasive wear.

3. **SB 300 HDT Fixed-Width Screed**

   With Heavy-Duty kit and Heavy-Duty tamper – ideal for paving CTB – as well as electric, dual-circuit screed heating for rapid warming of the screed plates when paving hot mix asphalt.

4. **Extra-long and particularly low material hopper**

   For easy feed with mix by all types of lorries common in China.
The goal in developing the SUPER 1880 L was to offer leading technology for a reasonable price. One feature that helped achieve it is the new ErgoBasic system. It is based on the pioneering ErgoPlus 3 operating system in terms of functionality, ergonomics and design, but somewhat more simply designed. However, for the typical applications of this base course specialist, the range of functions is right on target. What’s more, with ErgoBasic, the SUPER 1880 L can be operated smoothly and precisely.
1. **Function and status indicators**

Function and status indicators ensure that the operator always has complete control of the machine, even without a display. The filling level of the fuel tank, for instance, is visible at all times and faults are immediately detectable.

2. **Choice of operating modes**

All the main paving and paver functions can be selected via individual buttons. The paver switches from one operating mode to the next at the push of a button: “Pave”, “Positioning”, “Relocate”, “Neutral”. LEDs indicate which mode has been selected. When leaving “Pave” mode, a memory function saves all the most recent settings.

3. **Auger output**

In automatic mode, the plus/minus buttons are used to adjust the maximum auger speed separately for the right and left sides to take account of the pave width. This value, which is set in percent, is indicated via the LEDs.
4. **Diesel engine with different speed ranges**

MIN, ECO and MAX speeds can be selected for the diesel engine. The required speed range is set via the arrow keys. Working in ECO mode significantly lowers noise levels and saves fuel.

5. **Compacting effort**

The output of the compacting systems is also set on the control console. An LED scale from 0 to 100% shows the set speeds for the tamper and vibrators, so that they can be adjusted immediately if necessary.

6. **Steering at a pre-set angle**

Using the rotary controller, the machine can be manoeuvred simply and precisely into the tightest corners. When negotiating longer bends with constant radii, the desired steering angle can be selected via arrow keys. The paver then automatically follows the set path until the function is deactivated.
ErgoBasic

The paver operator’s ErgoBasic console

The functions are in line with practical requirements and logically arranged; its similarity with the paver operator’s ErgoPlus 3 console is clearly evident, since the switches and symbols are all the same, but tuned to the functions of the SUPER 1880 L. LED strips directly alongside the respective functions show the status of all settings in percent. Other LEDs show the set speed of the augers and the compacting system as well as the filling level of the diesel tank. ▶️
A particularly interesting aspect of ErgoBasic is that in addition to the paver operator’s console, it has additional remote control units that give the screed operator total control over all screed and grade and slope control functions during the paving process. With the ErgoBasic remote control unit for the screed, the operator can quickly set and control all critical paving functions, and directly access the conveyor systems and sonic auger sensor. There is one remote control unit for each side of the screed. The operator can either hold it in his hand or stow it away on the magnetic brackets provided on the right and left of the screed.
Niveltronic Basic is a System for Automated Grade and Slope Control that is fully integrated in the machine control system and very easy to operate, with a remote control unit for each side of the screed. Mechanical sensors, sonic sensors, a slope sensor and even a laser receiver can be connected to this system. The sensors are detected automatically.

**ErgoBasic remote control unit for the screed**
1. Conveyor, automatic/manual
2. Horn
3. Three auger modes (automatic, manual, reverse)
4. Screed floating on/off
5. Extend/retract screed side
6. Adjustment of screed tow point ram

**Remote control unit for Niveltronic Basic**
1. Deviation from specified values
2. Niveltronic Basic on/off
3. Setting: Sensor sensitivity
4. Sensor selection
5. Quick set-up
6. Setting: Specified value
7. Sensor calibration
All VÖGELE pavers are extremely durable. Parts that come into contact with paving material are fabricated from highly robust steel. The bottom plates of the conveyors and the return pulleys for the conveyor chains are of highly wear-resistant design. All these features are standard at VÖGELE.

But even so, a paver designed for high-volume construction projects with non-bituminous mixes requires special equipment. The new SUPER 1880 L is equipped with a Heavy-Duty kit for this purpose, which gets the paver into excellent shape for road base applications. Reinforced guards on the conveyor tunnel and chassis, as well as modified auger blades counteract abrasive wear.

The Heavy-Duty kit in detail

1. Reinforced return pulleys for conveyors
2. Reinforced lateral guards
3. Wear-resistant bottom plates
4. Centre guard with optimized geometry
5. Modified auger blades
6. Armoured material tunnel
7. Reinforced material hopper
Thanks to the electric, dual-circuit screed heating system, the SUPER 1880 L can also process hot mix without it sticking to the screed plate. The heating system is simply switched on as needed, to quickly warm the screed plates to a uniform temperature across the entire width of the screed. This feature also enables the SB 300 HDT to place asphalt layers with good surface properties.

Electric screed heating makes it possible: Paving hot mix with the SB 300 HDT

Thanks to the electric, dual-circuit screed heating system, the SUPER 1880 L can also process hot mix without it sticking to the screed plate. The heating system is simply switched on as needed, to quickly warm the screed plates to a uniform temperature across the entire width of the screed. This feature also enables the SB 300 HDT to place asphalt layers with good surface properties.

For hard work and hot jobs:
SB 300 HDT Fixed-Width Screed

The extremely durable SB 300 HDT with Heavy-Duty kit is designed specifically for paving CTB and other non-bituminous mixes. The screed plates are extra deep to ensure outstanding floating behaviour. The tamper geometry, with a significantly smaller angle of just 30°, is optimally adapted to the demands of CTB paving. With these features, the SB 300 HDT achieves higher compaction values. Tamper speed and stroke can be precisely adjusted and adapted to the volume of material, the type of mix and the layer thickness. The infinitely variable tamper speed can be regulated from the SUPER paver’s controls. A 2, 4 or 7mm stroke is ideal, depending on the layer thickness. The basic width is 3m, but can be expanded to 9.5m with extensions.

Electric screed heating makes it possible: Paving hot mix with the SB 300 HDT

Thanks to the electric, dual-circuit screed heating system, the SUPER 1880 L can also process hot mix without it sticking to the screed plate. The heating system is simply switched on as needed, to quickly warm the screed plates to a uniform temperature across the entire width of the screed. This feature also enables the SB 300 HDT to place asphalt layers with good surface properties.

Made for China: L version with extra-long receiving hopper

Like the SUPER 1880-3 L, the SUPER 1880 L also boasts a material hopper designed specifically for China. It has a capacity of 15t, enabling the paver to be fed with material by all lorries typically used in China. Its advantages include wide, oscillating push-rollars that can be shifted forward by 75mm or 150mm for jolt-free material transfer, even in bends.
“The best of two worlds”

Interview with research and development engineers Chen Zhi and Wolfgang Müller (Dipl.-Ing.), the two project managers in charge of developing the SUPER 1880-3 L and SUPER 1880 L, on their German-Chinese collaboration
WIRTGEN CHINA is launching two new VÖGELE pavers on the Chinese market: the SUPER 1880-3 L and SUPER 1880 L. What are the highlights of these two machines?

They are designed for paving work requiring both large widths and layer thicknesses. For example, the SUPER 1880 L is capable of paving water-bound base courses with a layer thickness of 50cm. Both machines have perfect command of the all-important 9.5m class. What’s more, they really stand out when it comes to reliability and maintenance friendliness. We also took into account that many job sites in China are enormous, by integrating high-performance components, such as the extra-large material hopper, denoted by the ‘L’ in the name.

From the viewpoint of your engineering professionals, what are the main advantages of offering two machines in a single product class?

We give our customers a choice between a high-grade paver – the SUPER 1880-3 L – and a multifunctional paver – the SUPER 1880 L.

The two Universal Class pavers are tailor-made for China. They were developed by a team of engineers from VÖGELE’s brand headquarters in Ludwigshafen and WIRTGEN CHINA. What are the advantages of such an international collaboration?

It demonstrates the strengths of our global organization, the WIRTGEN GROUP. At our brand headquarters in Ludwigshafen, Germany, we are supported by a large development department and the know-how that VÖGELE have amassed since 1836. And our VÖGELE colleagues at WIRTGEN CHINA in Langfang have a profound knowledge of both our machine technologies and the market conditions prevailing in their country. They know just what is essential to China’s road builders, and indeed, they know it much better than we could ever do from our location in Germany. So the results of our work are closely tailored to China.

The ErgoPlus 3 operating concept raises the bar. Anyone who has worked with it will never willingly part with their paver again!

Chen Zhi
Our intercultural collaboration fully exploits the strengths of our international organization: years of engineering competence from Germany, combined with the thorough market knowledge of our Chinese colleagues.

Wolfgang Müller
How exactly did the development teams work together? Did you also meet in person to exchange ideas?

Communication is the most important factor on such a major project. There was a vast amount of material samples, drawings, quality checks and more. Every day we communicated with our colleagues in Ludwigshafen to make decisions. And with such a complex product development process, you naturally can’t rely solely on collaboration in virtual environments. We attended numerous workshops and meetings both in Langfang and Ludwigshafen. During the intense testing phase, a team from Ludwigshafen was on-site in China the whole time.

For me, the intercultural aspect was a big personal highlight. We often went out to restaurants and celebrated together, which is something I will never forget. Experiencing Chinese hospitality was a very special thing for me and my team. I would say that we came as colleagues, and left as friends.

Let’s get back to the machines. The SUPER 1880 L is a certified CTB specialist. Isn’t the wear caused by this abrasive material too aggressive for modern machine technology?

Not with our Heavy-Duty kit! All parts that come into contact with this coarse material are made of a highly wear-resistant steel. We also designed the pavers such that all wear parts can be replaced easily and quickly.

Customers who buy the SUPER 1880-3 L are buying leading-edge VÖGELE technology. What, in your view, are the most relevant highlights for job site practice?

The overall advantage of this paver is that it combines all the latest paving technologies. The pavers in the “Dash 3” generation further set standards in ergonomics and ease of operation. One key contribution in this regard is the intuitive ErgoPlus 3 operating concept. Anyone who has worked with it will never willingly part with their paver again!

And don’t forget VÖGELE EcoPlus. This low-emissions package significantly reduces fuel consumption, exhaust emissions and noise levels, meaning that it helps to improve cost-efficiency.

How are customers receiving the operating systems and the two pavers overall?

The launch was very promising. We have been manufacturing the machines since April and have received exclusively positive feedback from customers.

And the orders coming in for both machines indicate that the SUPER 1880-3 L and SUPER 1880 L will be a complete success. WIRTGEN CHINA are also doing a brilliant job with the sales.

Mr Müller, Mr Zhi, thank you for taking the time to talk with us!
Successful premiere in Sichuan

Strong performance: The new VÖGELE SUPER 1880-3 L was a sensation on the job site in Sichuan, China
Successful premiere in Sichuan

Strong performance: The new VÖGELE SUPER 1880-3 L was a sensation on the job site in Sichuan, China.

The outcome of a German-Chinese development project: the advanced “Dash 3” paver SUPER 1880-3 L is ready for action.

Sichuan
VÖGELE’s product offensive has begun to make its mark on China’s infrastructure: the strengths of the new SUPER 1880-3 L tracked paver were very much in evidence when it was used to construct a new road to the tourist resort Ba’er Tan in Nanchong, Sichuan province. From its very first deployment, it was immediately clear that the new machine technology enhances paving quality, operating comfort and energy efficiency. The paver primarily owes its greater energy efficiency to VÖGELE EcoPlus, an innovation introduced in the “Dash 3” paver generation. The low-emissions package reduces fuel consumption while significantly lowering emissions and noise levels.

“The SUPER 1880-3 L soon proved to be an excellent choice in our daily operations. Our experiences with the machine were wholly positive and we are thrilled with the package as a whole.”

He Lijn, General Manager
Nanchong Hengjin Construction Machinery Co., Ltd.
Built in China, first used in Sichuan: the SUPER 1880-3 L is a prime example of VÖGELE’s innovative drive.

**Job site details**
Construction of a new road to the tourist resort Ba’er Tan in Nanchong, Sichuan province

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**Equipment**
SUPER 1880-3 L with AB 600 TV Extending Screed
A successful job-site debut

The new SUPER 1880-3 L tracked paver certainly proved its prowess on the construction of a new 12km road to the tourist resort Ba'er Tan in Nanchong, Sichuan province. Paving the local roads with widths ranging between 6 and 9m was a breeze for the paver, with its maximum pave width of 9.5m. Ten days had been scheduled for the entire asphalt work, including the paving of the 5cm-thick binder and the 4cm-thick surface course. This was easily achieved, thanks

“"We really scoured the market before deciding on the SUPER 1880-3 L. The paving results are clearly superior and we are overjoyed with the investment. We’re all set for the future!"

He Lijn, General Manager
Nanchong Hengjin Construction Machinery Co., Ltd.
to reliable machine technology from the VÖGELE brand. The paving speed of 11m/min was one contributing factor here. “We worked much faster than usual. But the quality was still better,” beams He Lijn, General General Manager of Nanchong Hengjin Construction Machinery Co., Ltd. “We are excellently positioned for the future with the SUPER 1880-3 L!”

“
I feel proud when I can do a fantastic paving job. So I would never want to relinquish the VÖGELE paver.

He Zhiqiang, Operator
Nanchong Hengjin Construction Machinery Co., Ltd.
New SUPER 1600-3 L: The compact powerhouse

Universal Class paver with impressive performance and manoeuvrability

1. **VÖGELE EcoPlus low-emissions package**
   Reduces fuel consumption, noise and emission levels

2. **New ErgoPlus 3 operating concept**
   The added plus when it comes to ease of operation and workplace comfort

3. **Extra long, particularly low material hopper**
   For hitch-free feeding with all models of lorries currently used in China

4. **116kW Cummins diesel engine of the latest generation**
   16% more power than the preceding model SUPER 1600-2

5. **VÖGELE AB 480 TV Extending Screed with electric screed heating**
   For an infinitely variable pave width from 2.55m to 7.8m
Despite its diminutive size, VÖGELE's new SUPER 1600-3 L is positively brimming with innovations. The new tracked paver is not only more compact and hence considerably more manœuvrable, it also delivers 16% more power and features the revolutionary innovations of the “Dash 3” paver generation. In combination with the particularly robust AB 480 TV Extending Screed with a maximum pave width of 7.8m, this paver – the most compact in the Universal Class – efficiently masters any application that calls for outstanding manœuvrability, from urban roads and roundabouts to complex, confined job sites with obstacles and bends.
The machine concept of the new SUPER 1600-3 L not only delivers more power, but also cuts costs and reduces pollutant levels. To this end, the VÖGELE EcoPlus low-emissions package incorporates a number of features which work together to lower the noise levels, fuel consumption and hence also the fuel costs associated with operation of this “Dash 3” paver. Fuel consumption, noise levels and, of course, \( \text{CO}_2 \) emissions are reduced by up to 24%* through the combination of a splitter gearbox, variable-speed fan and controlled hydraulic oil temperature circuit. This is good news for both the environment and the entire paving team.

* Actual fuel consumption depends on multiple factors, e.g. machine configuration, type of job site and paving parameters.

The new “Dash 3” generation from VÖGELE stands for maximum ease of operation and an ergonomically designed workplace. In a nutshell: ErgoPlus 3. The paver operator’s console with completely redesigned colour display is one of the features at the heart of the innovative operating concept. Even in poor lighting conditions, its user interface ensures a brilliant overview of all key paver settings. All screed settings, including the tamper and vibration speed, height of the augers, pressure for Screed Assist and pave speed, are simple to adjust on the high-contrast colour display. The set crown, screed temperature and other values are also displayed. What’s more, the paver operator’s ErgoPlus 3 console is backlit, creating ideal conditions for faultless operation and perfect results, even when working on night-time jobs.

A comfortable workplace begins with a comfortable seat. With this in mind, the seat and operator’s console are designed to be positionable on the paver operator’s ErgoPlus 3 platform according to the individual needs of the operator. A few swift moves and the job is done. The new protective panelling against wind and rain at the sides of the paver operator’s platform maximize comfort.
With its 242cm-long and just 55cm-high material hopper (capacity 15t), the new SUPER 1600-3 L can easily be supplied with mix by all standard lorry types used in China. The wide, oscillating push-roller can be moved forwards by 150mm. This ensures jerk-free feeding, even in bends.
A modern liquid-cooled Cummins engine of the latest generation with a rated output of 116kW ensures that the SUPER 1600-3 L can deliver perfection while paving roads at precisely the defined paving speed. The SUPER 1600-3 L boasts 16% more power and a distinctly lower fuel consumption than its predecessor. Crawler tracks with powerful, electronically controlled separate drives integrated into the sprockets translate this extra power into pave speed without losses. Even on difficult terrain, the SUPER 1600-3 L combines superb manœuvrability with constant tracking and accurate cornering.
VÖGELE AB 480 TV Extending Screed with electric screed heating

The robust AB 480 TV Extending Screed was specially developed for use with the SUPER 1600-3 L. The single-tube telescoping system can be infinitely and hydraulically adjusted with millimetre accuracy for pave widths ranging from 2.55m to 4.8m. In fact, the pave width can be mechanically increased up to 7.8m with the aid of bolt-on extensions. This makes the AB 480 TV an ideal partner for the SUPER 1600-3 L, as well as for all projects in which variability is required.

Highlights of the AB 480 TV Extending Screed at a glance:

- Ergonomically designed screed console with colour display for brilliant readability and SmartWheel for precise adjustment of the pave width at two speeds.
- The safe and comfortable screed footstep provides quick and safe access to the paver operator’s platform.
- The optimized geometry of the tamper bar and screed plates makes for a flatter screed planing angle and even better floating behaviour.
- Highly efficient electric screed heating ensures that the screed plates and compacting systems are heated quickly and uniformly.
- Hydraulic crown adjustment allows positive and negative crowns to be produced at the push of a button.
- Tamper and vibrator ensure excellent precompaction.
- The basic width of 2.55m can be hydraulically extended to a maximum pave width of 4.8m. A maximum pave width of 7.8m can also be achieved mechanically with the aid of bolt-on extensions.
The Little Giant

The new SUPER 800-3 can be used for a large range of applications

1. Large range of applications
   From narrow trenches to industrial halls

2. ErgoBasic operating concept
   Perfect all-round visibility and extremely simple paver and screed operation

3. Traction drives in closed loops
   Positive tracking and precise steering
AB 220 TV Extending Screed with tamper and vibrators
Pave widths from 0.5 to 3.2m and high precompaction

Deutz diesel engine
Rated at 55.4kW and with ECO mode

Asymmetrical material hopper (option)
Flexible feeding with mix, even in extremely confined conditions
Minimum size – maximum use

With an outer track gauge of just 1.14m, a gauge between track centres of 96cm as well as a clearance width of 1.4m and a height of 1.98m, the new SUPER 800-3 has access to areas for which other pavers are too big, too wide or too tall. Cycle paths and footpaths, public parks, farm tracks, central reservations on motorways, spaces between tramway tracks, small squares, industrial halls, multi-storey and underground car parks, as well as low canopy roofs are consequently its domain. But that is not all: with a maximum pave width of 3.2m and a maximum pave speed of 30m/min, it is also ideal for repair jobs or rehabilitating the binder and surface courses of minor roads. These are the highlights of the new SUPER 800-3 at a glance: >>>

Superb: the new SUPER 800-3 is ideal for pave widths ranging from 50cm to 3.2m.
Typical of VÖGELE’s Mini Class: the new SUPER 800-3 is at home wherever confined conditions call for an extremely compact and manoeuvrable paver. Like its predecessor, the SUPER 800, the new SUPER 800-3 can squeeze into the tightest spaces with its small track gauge and clearance width. It can be supplied with material from excavators or lorries. Moreover, the machine can be transported cost-efficiently on account of its low overall weight.

### Large range of uses

- Construction of footpaths and cycle paths
- Surfacing large areas
- Paving work in sports facilities
- Surfacing paths in public parks
- Paving asphalt in halls with low ceiling
- Paving central reservations on motorways
- Backfilling trenches
- Paving asphalt on dams
- Building the base for paving setts
Good things come in threes! The ErgoBasic operating concept of the new SUPER 800-3 includes the paver operator’s console, the remote control unit for the screed and the remote control unit for the automated grade and slope control system. All three operating elements are based on the principle of “the simpler, the better”. The more easily and intuitively a machine can be operated, the better the paving process can be controlled. And excellent all-round visibility at all times is just one more key factor. An extra upper footstep also gives the operator an excellent view over and beyond the paver. For more on ErgoBasic, read the article starting on page 24.

**ErgoBasic operating concept**

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**Paver operator’s ErgoBasic console**

The paver operator’s ErgoBasic console is very clearly laid out. All functions are arranged in keeping with practical requirements. The switch types and symbols have been consistently adopted from ErgoPlus 3 and applied to the functions of the Mini Class paver. LED strips directly alongside the respective functions show the status of all settings. In addition, the LEDs show the set speed of the augers and compacting systems and the filling level of the fuel tank. The waterproof function keys can be identified by touch, even when wearing work gloves. Backlighting ensures that the work proceeds safely, even in darkness.

**ErgoBasic remote control unit for the screed**

The ErgoBasic remote control unit has been specially developed for the screed of the SUPER 800-3. The waterproof keypad is logically arranged in accordance with the function sequences and the push-buttons feature the same symbols as the paver operator’s console. Intuitive use of all screed functions is assured from the outset, including direct access to the material handling systems and the sonic sensor for the auger. The remote control unit can be parked in magnetic holders on the right and left when it is not actually being held.

**Remote control unit for Niveltronic Basic**

Niveltronic Basic, the System for Automated Grade and Slope control, is completely integrated into the machine’s control system. The remote control unit makes for particularly simple handling. The handy device includes an automatic sensor detection function and indicates both the specified and the actual values. Sensors are easily changed at the push of a button. The large multi-segment display ensures that the measured values can be clearly read in all lighting conditions. Each side of the screed has its own separate remote control unit.
3 Traction drives in closed loops

The hydraulic traction drive with separate pumps operating in closed loops permits exceedingly precise steering, repositioning and manoeuvring – an absolute must when working in confined areas. Smooth running is maximized by optimized crawler tracks with additional support rollers.

4 Asymmetrical material hopper (option)

The large material hopper can hold 5.8t of mix. The special feature is that it is also available with asymmetrical geometry on request, in the form of a hydraulically folding upper section of the left-hand hopper side. This means that material can be supplied even when the feed vehicle is unable to dock centrally in front of the paver, such as when paving along walls and other obstacles.

5 Deutz diesel engine

The modern and powerful Deutz diesel engine rated at 55.4kW ensures optimum efficiency and lets the SUPER 800-3 run at a maximum pave speed of 30m/min. A variable-speed fan ensures that the engine is cooled as required. This has the advantage of reducing the engine load as well as noise levels and ensures a longer engine life.
The new AB 220 TV Extending Screed has been specially designed for use with the SUPER 800-3. It comes with a basic width of 1.2m and extends hydraulically up to 2.2m. Additional bolt-on extensions increase the screed’s pave width to a maximum of 3.2m. This variability allows the SUPER 800-3 with AB 220 TV screed to handle minor paving jobs as well as the rehabilitation or even building of small roadways. A special system for pave width reduction is available for jobs smaller than the screed’s basic width of 1.2m. Once fitted, the pave width can be infinitely reduced from 1.2m to just 0.5m. With tamper and vibrators, the AB 220 TV achieves optimum precompaction with outstanding values for a paver of this class. The speed of the eccentric vibrators is variable between 800rpm and 3,300rpm. Tamper speed can be set to a maximum of 1,800rpm.
Asphalt paving in a parking area with extremely low ceiling

The SUPER 800-3i is just the ticket with its low height of 1.98m
Asphalt paving in a parking area with extremely low ceiling.

The SUPER 800-3i is just the ticket with its low height of 1.98m.
Paving asphalt in covered parking areas has always been a challenge: many pavers are quite simply too high for extremely low ceilings. The new SUPER 800-3 which was used to build a parking area near Würzburg in Germany proves that such problems are now a thing of the past. Its extremely low overall height of less than 2m allows the Mini Class paver to manoeuvre without difficulty, even in halls with low ceilings, and with the paver operator standing upright. Paving work can be done efficiently even on large areas thanks to the AB 220 TV Extending Screed with a maximum pave width of 3.2m.

The SUPER 800-3 was made-to-measure for this job site. The paver operator’s ErgoBasic platform proved to be another great boon, in addition to the machine’s low height of just 1.98m. The paver operator’s stand is high enough for a perfect all-round view. But it is also low enough to let the driver stand upright and control the paving process in low halls. What’s more, the machine’s sophisticated design allows it to pave up to within 5cm of lateral boundaries. The rear step on the screed simply folds up when reversing up to walls. Manual work is effectively dispensed with. Helge Kubsky, paver operator for Konrad Bau, Lauda-Königshofen, was also full of praise for another detail:

“Lighting conditions are often poor when paving under a roof. VÖGELE have provided a perfect solution here in the form of integrated backlighting of the ErgoBasic operating console.”

A highlight! The paver operator’s ErgoBasic console with backlighting.
### Job site details
Asphalt paving on a parking area with low ceiling near Würzburg, Germany

<table>
<thead>
<tr>
<th>Paving details</th>
<th>Machine settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pave width:</strong> 3.2m</td>
<td><strong>Tamper speed:</strong> 100%</td>
</tr>
<tr>
<td><strong>Layer thickness:</strong> base course 10cm</td>
<td><strong>Vibrator speed:</strong> 40%</td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td><strong>Speed of the conveyors:</strong> 100%</td>
</tr>
<tr>
<td><strong>Base course:</strong> TS 0/32 50/70</td>
<td><strong>Speed of the auger:</strong> 70%</td>
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<tr>
<td><strong>Equipment</strong></td>
<td><strong>Auger height:</strong> 15cm</td>
</tr>
<tr>
<td>VÖGELE SUPER 800-3 with AB 220 TV Extending Screed</td>
<td></td>
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</tbody>
</table>

The SUPER 800-3 can negotiate all passages with its small track gauge and clearance width.
From 50cm to 3.2m

A screed with a large pave width is needed to pave asphalt efficiently on parking areas. The new AB 220 TV Extending Screed has been specially designed for use with the SUPER 800-3. The special feature of this team is that together they cover pave widths ranging from 50cm to 3.2m – making the SUPER 800-3 a super versatile machine.

“The AB 220 comes with a basic width of 1.2m and extends hydraulically to a width of 2.2m. In addition, VÖGELE supply bolt-on extensions for pave widths up to 3.2m. That a paver with an outer track gauge of just 1.14m and a gauge between track centres of 96cm can cover so many pave widths is sensational,” explains Helge Kubsky, paver operator for Konrad Bau, Lauda-Königshofen.

The bolt-on extensions can be fitted without undue effort. In Würzburg, Helge Kubsky and applications engineer Dietmar Thimm from VÖGELE did not take long to fit the bolt-on extensions and work was quickly resumed with a pave width of 3.2m. >>>

Comfortable working position, even in low halls.
Pave widths of less than 1.2m can be achieved just as easily. The system for pave width reduction is fitted with the same ease as the bolt-on extensions. Once this system has been fitted, the pave width can be infinitely reduced from 1.2m to just 0.5m. With the system for pave width reduction fitted, the screed floats in the same way as when paving across a non-reduced width. As a result, the layer thickness can be adjusted via the screed tow point rams or even controlled via Niveltronic Basic, the System for Automated Grade and Slope Control.

Super compaction values thanks to tamper and vibrators

The floating screed not only provides for precise paving results, but also achieves excellent pre-compaction – thanks to the compacting systems of tamper and vibrators. The frequency of the eccentric vibrators is variable between 800rpm and 3,300rpm. The tamper speed can be set to a maximum of 1,800rpm. Helge Kubsky confirmed:

“For the 10cm base course, good precompaction was important. With the AB 220 TV Extending Screed, the SUPER 800-3 achieves exceptional precompaction results for a paver of this class.”

The bolt-on extensions are quickly fitted.
AB 220 TV Extending Screed

Pave widths

› Basic screed infinitely variable from 1.2m to 2.2m
› Can be built up to 3.2m by fitting 50cm bolt-on extensions

Compacting systems

› Tamper and vibrators

Screed with 50cm bolt-on extensions
Wresting away centimetre for centimetre from the mountain: mountain road through Tiger Leaping Gorge, China.