Universal Class

SUPER 1400
TRACKED PAVER

Maximum pave width 7.3 m
Maximum laydown rate 600 tonnes/h
Transport width 2.55 m

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Ready for tomorrow’s infrastructure: SUPER 1400 tracked paver

The new SUPER 1400 points the way toward the future of road construction in India. The machine’s chassis and material handling systems are unrivalled in terms of robustness, as are the innovative high-tech components inside the paver.

The design of the paver pursues a single target: boosting quality and safety at work in road construction. To this end, the Indian/German development team worked to the same high standards that apply in Europe. In this way, they ensured that customers would have a premium machine with first-class technology at their disposal.

A powerful and efficient 6-cylinder diesel engine rated at 112 kW is installed in the SUPER 1400. Supported by a highly effective cooling system, the power unit delivers its full output reliably even in extreme tropical environments.

The ergonomic, practice-oriented ErgoBasic operating system provides for an excellent overview of the machine and ease of operation.

The paver also comes with a high-performance hydraulic system. The hydraulics provide an accurate drive for the material handling systems, thus ensuring an optimal head of mix in front of the screed at all times. Combined with the cutting-edge AB 480 Extending Screed, the SUPER 1400 is capable of building high-quality pavements in varying widths between 2.55 and 4.8 m, and even achieves a maximum pave width of 7.3 m through the addition of bolt-on extensions.
The highlights of the SUPER 1400

**Powerful and economic drive concept** with a modern diesel engine

**Perfect paving quality** due to perfect material management

**Simple operation** with the innovative and easy-to-grasp ErgoBasic operating system

**New and easy-to-use** Niveltronic Basic System for Automated Grade and Slope Control

**Easy service concept**, perfectly geared to the requirements of the workshop and service staff

**Combines** with the AB 480 Extending Screed in the TV version

**Electric screed heating** provided for all compacting and smoothing screed elements

**Perfect paving quality** due to perfect material management
The drive concept – Efficiency, performance and low consumption

VÖGELE’s modern drive concept is perfectly adapted to the large range of different uses of the multifunctional SUPER 1400.

Delivering a powerful drive when maximum performance is called for, this Universal Class paver is exceedingly flexible in everyday operation.

Low input, maximum output – all drive components operate with maximum efficiency, from the diesel engine through to the hydraulic system.
Modern drive technology

A powerful and efficient 6-cylinder diesel engine rated at 112 kW is installed in the SUPER 1400.

The 220-litre fuel tank is amply dimensioned, so that there is no need to refuel, even when the machine is operated for long periods.

A powerful, air-cooled three-phase A.C. generator ensures rapid, uniform heating of the screed.

The large cooler assembly is made up of three parts. It ensures that engine coolant, charge air and hydraulic oil are maintained at the optimum temperature.

A large cooler assembly with innovative air routing is installed for perfect cooling of the engine coolant, hydraulic oil and charge air in all climatic zones. This guarantees the full performance of the engine and a long service life.
Precision on tracks

Even difficult terrain is no problem for the SUPER 1400 thanks to its powerful crawler tracks and accurate steering. In terms of traction, too, the VÖGELE drive concept leaves nothing to be desired.

- **Thanks to powerful separate drives** fitted into the sprockets for crawler tracks, engine output is translated into pave speed with no loss of power.

- **Positive tracking** when moving straight and accurate turning of radii due to the separate drive and electronic control provided for each crawler track.

- **Long crawler tracks** with large ground contact deliver maximum tractive effort, allowing the paver to advance well at a constant speed even when operating on difficult terrain.
Perfect paving quality due to perfect material management

A continuous flow of mix is key to ensuring uninterrupted and high-quality paving. That is why we attach such importance to professional material management when designing our pavers.

The paver comes with a high-performance hydraulic system. The hydraulics provide an accurate drive for the material handling systems, thus ensuring an optimal head of mix in front of the screed at all times.

The large and sturdy material hopper holds 13 t. Thanks to the low and wide hopper sides, feeding the paver with mix is a fast and easy process.

Especially large oscillating push-rollers ensure convenient and shock-free docking of feed vehicles even in curves.
Perfect conveying and spreading of mix, the basis for perfect pavement quality

Thanks to the perfect spreading of mix, the SUPER 1400 provides for an optimal head of material in front of the screed in every paving situation. Powerful, separate hydraulic drives for conveyors and augers are installed and can achieve high laydown rates of up to 600 t/h.

- **Proportional control and continuous monitoring** of augers guarantee a constant head of mix in front of the screed in line with current requirements.
- **Large diameter of auger blades (400 mm)** for excellent spreading of mix when paving in large widths.

The height of the auger complete with bearing boxes and limiting plates for the auger tunnel can be adjusted by up to 15 cm across the full pave width. This optimizes the head of mix in front of the screed, even when paving thin layers or when layer thickness varies.

Equipped for tough roadbase work

The road pavers made by VÖGELE have been designed for tough road construction operations. All components responsible for moving the material are built from high-quality wear-resistant steel and have been manufactured with precision. This makes the SUPER 1400 a sturdy and reliable partner which can meet all challenges in road construction.

When using the machine primarily for placing Wet Mix Macadam (WMM), a special WMM kit is available.

- **All wearing parts** are made of high-quality wear-resistant material and manufactured with precision.
- **The WMM kit** for placing Wet Mix Macadam provides for an optimum material flow and effectively counteracts the wear caused by this coarse, abrasive material.

The WMM kit includes a wear-resistant rubber conveyor onto which the feeder bars are bolted. Retrofitting the paver with the WMM kit is possible at any time.

The height of the auger complete with bearing boxes and limiting plates for the auger tunnel can be adjusted by up to 15 cm across the full pave width. This optimizes the head of mix in front of the screed, even when paving thin layers or when layer thickness varies.
The new ErgoBasic operating concept was developed on the basis of the proven ErgoPlus operating system, but it was tailored specifically to the needs and requirements of the users of the multifunctional SUPER 1400 paver.

The aim was to develop an operating system that is just as quick, precise and intuitive to operate as the ErgoPlus 3 system for the “Dash 3” machines. That makes VÖGELE the only manufacturer to offer a standardized operating concept for all paver classes.
The paver operator’s ErgoBasic console

“Full control for the machine operator!”
Everything at a glance: the functions are arranged in a clear, logical and practical layout that was heavily inspired by the ErgoPlus operating console.

Given the limited number of functions, there is no need for a display. The status of all settings is indicated as a percentage on LED strips immediately next to the relevant functions. LEDs also indicate the set speeds for the augers and the compacting systems as well as the fill level of the fuel tank.

The machine is steered by means of a rotary controller which enables the paver operator to manoeuvre the machine precisely even in the tightest spots. For long curves with a constant radius, the desired steering angle can be preselected using arrow keys. The paver stays automatically on the set track until the function is deactivated, allowing the paver operator to monitor the paving process undisturbed.

The paver operator’s ErgoBasic console

IDEAL OPERATOR DURING THE NIGHT

Glarefree backlighting comes on automatically as darkness sets in so that the paver operator can also work safely on night-time jobs.

Choice of operating modes for the machine

All the main paving and machine functions can be controlled directly by individual push-buttons on the paver operator’s ErgoBasic console. The machine changes between operating modes at the push of a button in the following order: “Pave”, “Positioning”, “Job Site” and “Neutral”. An LED indicates which mode is selected. On leaving “Pave” mode, the memory function stores all the last settings, which means that the paving parameters last used are retrieved immediately when the machine is repositioned, for instance.

Function and status indicators

The function and status indicators mean that the operator always has full control over his machine. He can, for instance, read the fill level of the fuel tank directly and identify whether there are any functional faults.

Compacting effort

The speeds of the compacting systems can be set directly on the paver operator’s ErgoBasic console. The LED strips from 0 to 100% indicate the set speeds for the tamper and vibrators, allowing them to be adjusted immediately when required.

Choice of steering modes

The paver can be steered with preselected steering angle or using the rotary controller. The rotary controller enables the operator to steer the machine precisely even in tight spots. For long curves with a constant radius, the desired steering angle can be preselected using arrow keys. The paver stays automatically on the set track until the function is deactivated, allowing the paver operator to monitor the paving process undisturbed.

No-load function

The no-load function is provided for the warm-up or cleaning of conveyors, augers and tamper.

Speed of the augers

The speed of the augers can be adjusted on the console. The augers are fitted with a pressure-sensor, which monitors the setting of the engine. When the setting is too high, it is also displayed as a percentage on the LED strip.

Selected functions

The selected function is provided for the entire area of paving: vibrating augers and tamper.
The ErgoBasic remote control unit for the screed

The safe and easy handling of all screed functions is a key factor in high-quality pavement construction. That is why a remote control unit for the screed was developed specifically for the ErgoBasic operating system of the new SUPER 1400.

The remote control’s keypad is laid out logically according to the functional processes. Designed for robustness, it is well able to withstand tough job-site conditions.

Operation is easy to understand and can be learned intuitively in a very short space of time, not least because the symbols used in the proven ErgoPlus operating system are found here, too.

The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily. That includes direct access to the material handling systems and the sonic sensor for the auger.

All the main paving functions can be controlled via the two handy screed remote control units. Simple, language-neutral symbols allow the machine to be operated intuitively.

1 // Setting: Conveyor (automatic/manual)
2 // Horn
3 // Setting: Auger (automatic/manual)
4 // Screed floating on/off
5 // Screed width control, one side
6 // Adjustment of screed tow point ram
Remote control unit for Niveltronic Basic

In line with the ErgoBasic operating concept, VÖGELE have also developed Niveltronic Basic, a System for Automated Grade and Slope Control. It is completely integrated into the machine control system and therefore perfectly adapted to the paver model concerned.

Another outstanding aspect of Niveltronic Basic is its particularly simple and intuitive handling, a feature which makes it easy even for less experienced operators to learn their way around the system.

This creates ideal conditions for the paver to work true to line and level on any base. Each side of the screed is operated by a separate compact and exceedingly robust Niveltronic Basic remote control unit.

A variety of sensor types is available for Niveltronic Basic, in keeping with the machine’s large and varied range of uses. These sensors extend from a mechanical sensor through to non-contacting sonic sensors.

The System for Automated Grade and Slope Control can be simultaneously connected to two grade sensors and a slope sensor. The type of sensor used is detected automatically.

The kind of reference — ground, tensioned wire or transverse slope — can be easily set on the remote control unit.

The remote control unit comes with all the functions required for high-precision grade and slope control. Clear symbols allow the machine to be operated intuitively.

1 // Deviation from specified values
2 // Niveltronic Basic on/off
3 // Setting: Sensor sensitivity
4 // Selection: Kind of reference (ground, tensioned wire, transverse slope)
5 // Quick set-up
6 // Setting: Specified value
7 // Sensor calibration

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The ErgoBasic operator’s platform

1. The comfortable operator’s platform gives an unobstructed view of all crucial areas on the paver such as material hopper, steering guide or screed. It allows the operator to easily monitor the paver’s feed with mix, for instance, from his seat.

2. Working comfort
Easy displacement of the paver operator’s console across the full width of the platform for convenient working in an ergonomic position on either side of the machine.

3. A place for everything and everything in its place
The operator’s platform, with its streamlined design, is well organized, offering the paver operator a professional workplace. The operator’s console can be protected by a shatter-proof cover to prevent wilful damage.

4. Hardtop gives excellent protection
The modern hardtop made of glass fibre reinforced polymer material shelters the operator. The hardtop folds down with effortless ease, thus getting the paver quickly ready for transport.

5. Economical and service-friendly design
The operator has convenient access to all service points on the machine. All hydraulic pumps attached to the splitter gearbox, their clear arrangement and easy access provide for service-friendliness at the highest level. Sturdy components of highly wear-resistant materials for long service lives minimize downtime.

6. Safe and comfortable ascent
The walkway and comfortable middle ascent on the screed ensure safe and convenient access to the operator’s platform.

7. Safe and easy handling of all screed functions
The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily.

8. Remote control unit for a large range of action
Each side of the screed is operated by a compact and exceedingly robust remote control unit.
VÖGELE extending screeds are the preferred choice on all those jobs where pave width varies and prime pavement quality counts. Thanks to their sturdy single-tube telescoping system, these screeds can be set quickly and accurately to any pave width desired.

Electric screed heating is provided for all compacting and smoothing screed elements. The electric heating warms the screed up to its operating temperature in next to no time.
The screed for the SUPER 1400

**AB 480 TV**

**Pave widths**
- Infinitely variable range from 2.55 m to 4.8 m
- Maximum pave width using bolt-on extensions:
  - 6 m (2 x 60 cm)
  - 7.3 m (2 x 125 cm)

**Compacting systems**
- AB 480 TV with tamper and vibrators

**AB 480 TV**

Built up to maximum pave width

- 2,550 mm
- 4,800 mm
- 7,300 mm
All the facts at a glance

Dimensions in mm

**Power unit**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>6-cylinder diesel engine, liquid-cooled</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Cummins</td>
</tr>
<tr>
<td>Type</td>
<td>6BTAA5.9</td>
</tr>
<tr>
<td>Output Nominal</td>
<td>112 kW at 2,200 rpm (according to DIN)</td>
</tr>
<tr>
<td>Exhaust emissions standard</td>
<td>Bharat Stage III</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>220 litres</td>
</tr>
</tbody>
</table>

**Undercarriage**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyer tracks</td>
<td>provided with rubber pads</td>
</tr>
<tr>
<td>Ground contact</td>
<td>2,831 x 305 mm</td>
</tr>
<tr>
<td>Truck tension adjuster</td>
<td>spring assembly</td>
</tr>
<tr>
<td>Track roller lubrication</td>
<td>lifetime</td>
</tr>
<tr>
<td>Traction drive</td>
<td>separate hydraulic drive and electronic control provided for each conveyer track</td>
</tr>
<tr>
<td>Speeds</td>
<td>up to 24 m/min., infinitely variable</td>
</tr>
<tr>
<td>Travel</td>
<td>up to 6.5 km/h, infinitely variable</td>
</tr>
</tbody>
</table>

**Material hopper**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopper capacity</td>
<td>13 t</td>
</tr>
<tr>
<td>Width</td>
<td>3,267 mm</td>
</tr>
<tr>
<td>Feed height</td>
<td>540 mm</td>
</tr>
<tr>
<td>Push rollers</td>
<td>oscillating, can be displaced forwards by 150 mm</td>
</tr>
</tbody>
</table>

**Conveyors and augers**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyors</td>
<td>2, with replaceable feeder bars, conveyor movement reversible for a short time</td>
</tr>
<tr>
<td>Drive</td>
<td>separate hydraulic drive provided for each conveyer</td>
</tr>
<tr>
<td>Speed</td>
<td>25 m/min.</td>
</tr>
<tr>
<td>Augers</td>
<td>2, with replaceable auger blades, auger rotation reversible</td>
</tr>
<tr>
<td>Diameter</td>
<td>400 mm</td>
</tr>
<tr>
<td>Drive</td>
<td>separate hydraulic drive provided for each auger</td>
</tr>
<tr>
<td>Speed</td>
<td>up to 65 rpm, infinitely variable (manual or automatic)</td>
</tr>
<tr>
<td>Height</td>
<td>infinitely variable by 15 cm, mechanical</td>
</tr>
<tr>
<td>Lubrication</td>
<td>centralized lubrication points</td>
</tr>
</tbody>
</table>

**Screed**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 480</td>
<td>basic width</td>
</tr>
<tr>
<td></td>
<td>infinitely variable range</td>
</tr>
<tr>
<td></td>
<td>maximum width</td>
</tr>
<tr>
<td></td>
<td>compacting system</td>
</tr>
<tr>
<td></td>
<td>TV</td>
</tr>
<tr>
<td>Traction drive</td>
<td>separate hydraulic drive and electronic control</td>
</tr>
<tr>
<td>Speeds</td>
<td>up to 24 m/min.</td>
</tr>
<tr>
<td>Travel</td>
<td>up to 4.5 km/h, infinitely variable</td>
</tr>
<tr>
<td>Material hopper</td>
<td>infinitely variable by 15 cm, mechanical</td>
</tr>
<tr>
<td>Lubrication</td>
<td>centralized lubrication points</td>
</tr>
</tbody>
</table>

**Dimensions (Transport) and weights**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>AR-480 TV</td>
</tr>
<tr>
<td></td>
<td>6.04 m</td>
</tr>
<tr>
<td>Weights</td>
<td>AR-480 TV</td>
</tr>
<tr>
<td></td>
<td>tractor unit with turned</td>
</tr>
<tr>
<td></td>
<td>pave widths up to 4.8 m</td>
</tr>
<tr>
<td></td>
<td>16,500 kg</td>
</tr>
<tr>
<td></td>
<td>pave widths up to 7.3 m</td>
</tr>
<tr>
<td></td>
<td>18,000 kg</td>
</tr>
</tbody>
</table>

**Key:**

- AS = Extending Screed
- TV = with tamper and vibrators

Technical alterations reserved.

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