

VÖGELE Extending Screeds

AB 500-2 and AB 600-2



AB 500-2/AB 600-2

Basic Width 2.55m / 3m

Maximum Pave Width 8.5m / 9.5m

Screed Versions TV, TP1, TP2, TP2 Plus

VÖGELE Extending Screeds: Range of Applications Almost Unlimited



The VÖGELE AB 500-2 and AB 600-2 Extending Screeds are ideal for all applications requiring variability and adaptability. With the single-tube telescoping system for infinitely variable screed width control, the screeds cover an extensive range of pave widths extending from 2m to 9.5m.

VÖGELE screeds combine with all SUPER pavers featuring basic widths of 2.55m or 3m. Depending on the type of paver and kind of application, they can be equipped with various compacting systems.

The screeds are available in several configurations, from the version with tamper and vibrators (TV) all the way to versions for high compaction with 1 or 2 pressure bars (TP1 and TP2).

VÖGELE also offer the AB 600-2 Extending Screed in TP2 Plus version. It achieves maximum compaction and has been designed for placing thick base courses or paving "hot on hot".

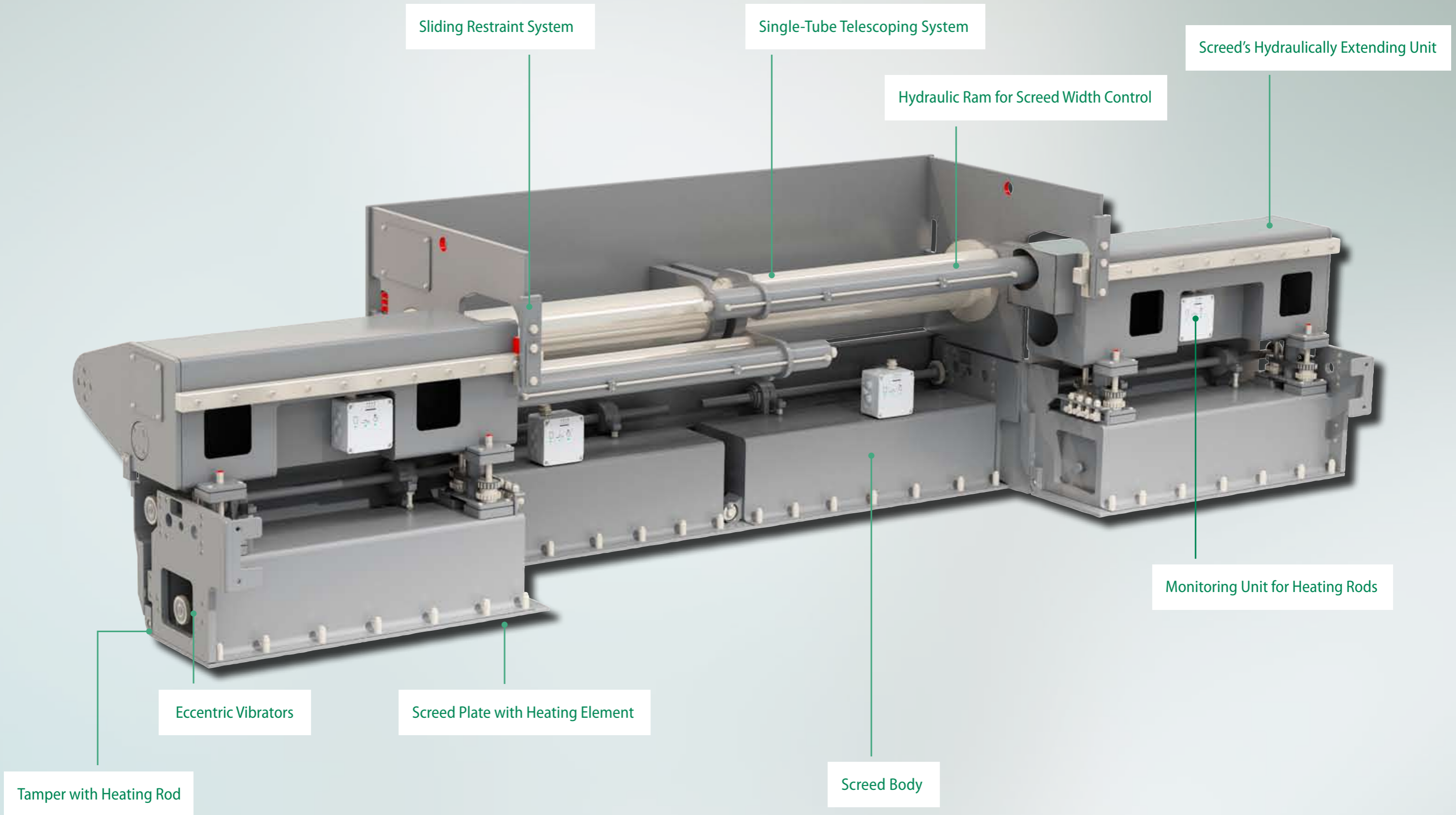
Thanks to the wide range of possible combinations with tractors and the numerous screed versions as far as equipment with compacting systems is concerned, the range of applications for VÖGELE screeds is almost unlimited.

AB 500-2 AB 600-2 At a Glance

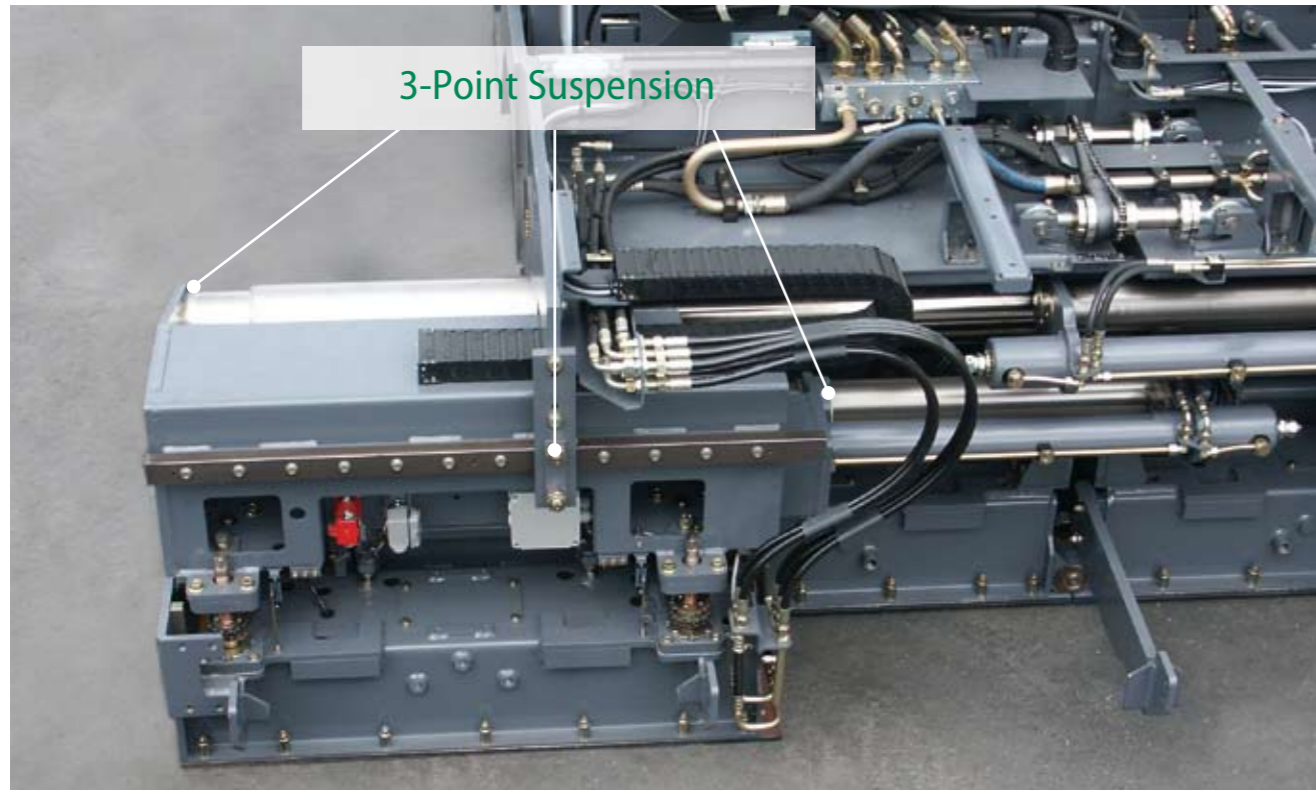


- ▶ Basic width
2.55m (AB 500-2)
3m (AB 600-2)
- ▶ Maximum pave width
8.5m (AB 500-2)
9.5m (AB 600-2)
- ▶ Many screed versions
TV, TP1, TP2 and TP2 Plus (AB 600-2)
- ▶ The screeds combine with all SUPER pavers featuring a basic width of 2.55m or 3m
- ▶ Sturdy telescoping system with 3-point suspension
- ▶ Innovative electric screed heating
- ▶ Easy-to-use ErgoPlus® operating system

VÖGELE Extending Screeds



High Precision Across the Full Pave Width



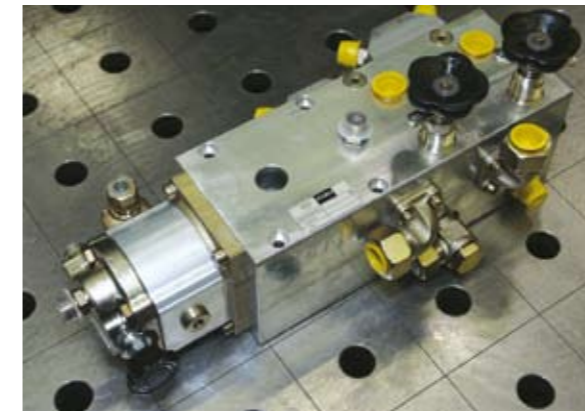
The extending units of the AB 500-2 and AB 600-2 screeds are adjusted in width by means of a single-tube telescoping system. The three-section telescoping tube is amply dimensioned (diameters of 150/170/190mm) and optimally stabilized. Even with the screed set to its maximum pave width, each tube section is extended by no more than half. Low-wear teflon tape inside the telescoping tube provides for jerk-free sliding. Due to 3-point suspension, the screed's extending units slide in and out smoothly, nothing can jam or get stuck.

- ▶ Amply dimensioned, sturdy telescoping tubes featuring high-precision operation. They provide for excellent stability of the screed, a precondition of prime paving results.
- ▶ Telescoping tubes are located in high positions. Any contact with hot mix is positively avoided.
- ▶ Even with the screed set to its maximum width, the telescoping tubes are extended by no more than half, which provides for zero flexing.
- ▶ Positive floating of the screed due to large depth of the screed plate.
- ▶ The attachment of the telescoping tubes, the support of the guide tubes and the torque restraint system make up a sturdy 3-point suspension, absorbing the forces exerted on the screed while paving and guaranteeing smooth width control of the extending units. Nothing can jam or get stuck.

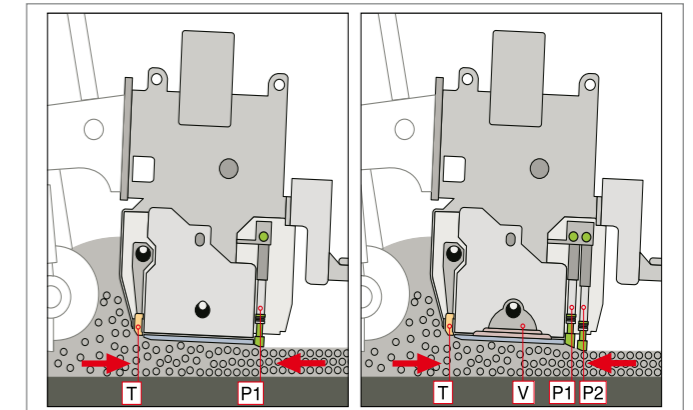
Highest Compaction Values



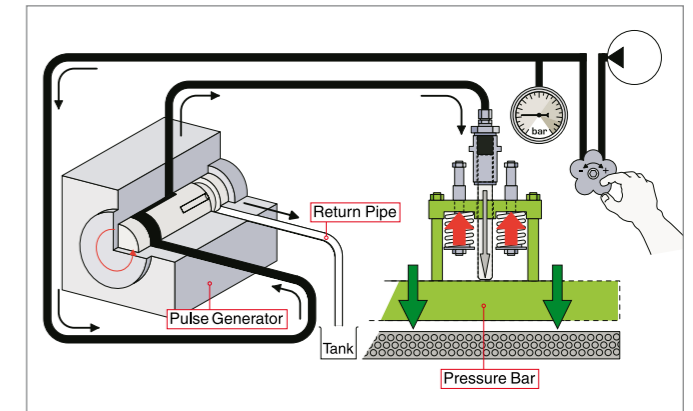
AB 500-2 Extending Screed in TP2 version with 2 pressure bars.



The pulse generator transforms a constant hydraulic pressure into high-frequency pressure pulses.



The pressure bars located at the rear of the screed achieve maximum compaction as the mix is prevented from yielding.

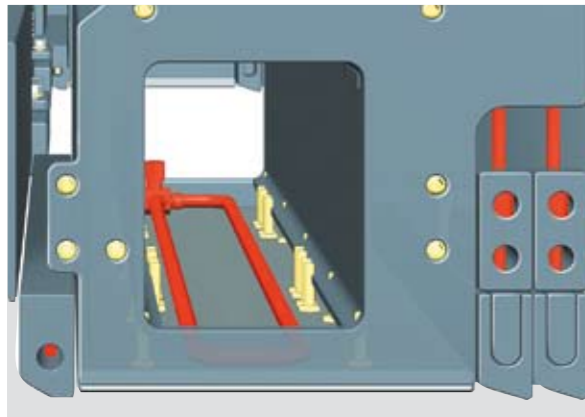
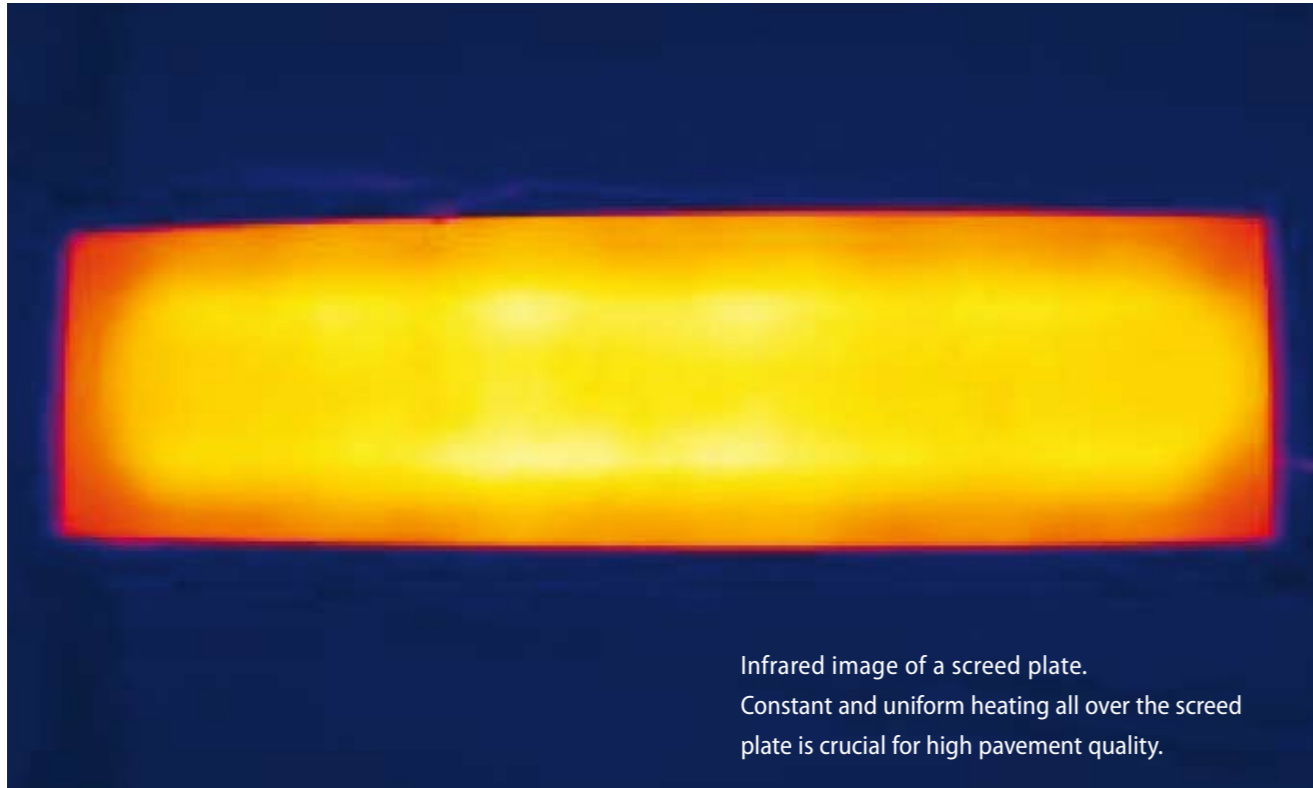


How pulsed-flow hydraulics work: due to the high impulse recurrence frequency, the pressure bars are in permanent contact with the mix. The pressure for pressure bars is infinitely variable.

VÖGELE set standards in terms of compaction: perfected technology together with the ultimate in materials for the manufacture of screed components guarantee the outstanding performance and reliability of the VÖGELE high compaction systems. The tamper provides for optimum precompaction of the mix. Tamper speed and stroke length can be set up and adjusted precisely to match the flow of mix, kind of mix and layer thickness. The pressure bars operated by pulsed-flow hydraulics are the core of VÖGELE High Compaction Technology. Thanks to this unique technology, VÖGELE screeds in TP1, TP2 and TP2 Plus versions achieve maximum compaction values

- ▶ In addition to the TV version, VÖGELE screeds are also available in TP1 and TP2 versions with 1 or 2 pressure bars.
- ▶ When highest compaction is required, the AB 600-2 Extending Screed in TP2 Plus version is available. It is a further development of the TP2 version and achieves a density beyond 98%.
- ▶ By simply deactivating the pressure bars, VÖGELE High Compaction Screeds can also be used for standard compaction (T) at any time.
- ▶ The pressure for the pressure bars is infinitely variable, thus allowing all kinds of paving materials to be placed using High Compaction Technology.

Innovative Screed Heating System



Over decades, VÖGELE have gained a wealth of experience in electric screed heating, which has been installed in all screeds since 1952. It is the combination of many years' experience and continuous further development that resulted in the innovative heating system for our "dash 2" generation screeds. Electric heating ensures that all compacting and smoothing screed elements are heated to an ideal temperature for paving. While paving, the heat output is controlled automatically.

- ▶ Advanced screed heating ensures uniform heat distribution all over the screed plates and short times required for heating.
- ▶ A three-phase generator is installed for constant and uniform heating of all compacting and smoothing elements, thus providing the basis for high pavement quality.
- ▶ Excellent thermal insulation of the screed plates minimizes loss of heat. It also ensures that heating the screed to operating temperature takes a short time only, even with the engine running at minimum rpm.
- ▶ The Generator Management activates screed heating in Alternating Mode which cuts the electric power required for heating and reduces fuel consumption.
- ▶ A patented monitoring unit for the screed heating system indicates the operating status of every single heating rod. Immediate detection of any failure helps keep the heating system operational at all times.

Compact Design, Low Noise Emissions

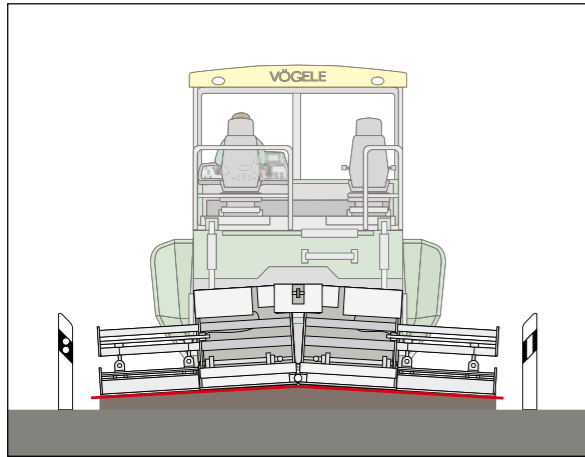


VÖGELE gave high priority to the optimum design of both screeds. Their well-thought-out concept allows an unimpeded view of the auger tunnel on the one hand, and safe and easy access to the operator's platform on the other. It goes without saying that both screeds are provided with effective sound insulation. After all, VÖGELE Screed Technology not only stands for the efficient achievement of highest paving quality. It also stands for ergonomics and greater safety.

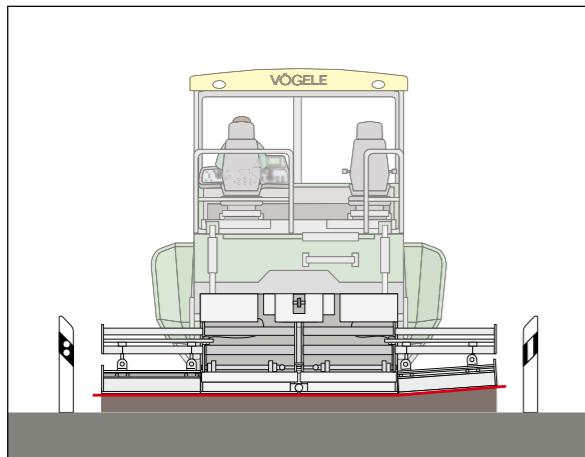


- ▶ The compact design gives an unimpeded view of the auger tunnel and easy access to the operator's platform.
- ▶ The two-piece footboard can be easily folded up for transport.
- ▶ Effective sound insulation reduces noise emissions on the job site. Combined with the low noise levels of the tractor, the screed is also ideal for use in noise-sensitive environments.

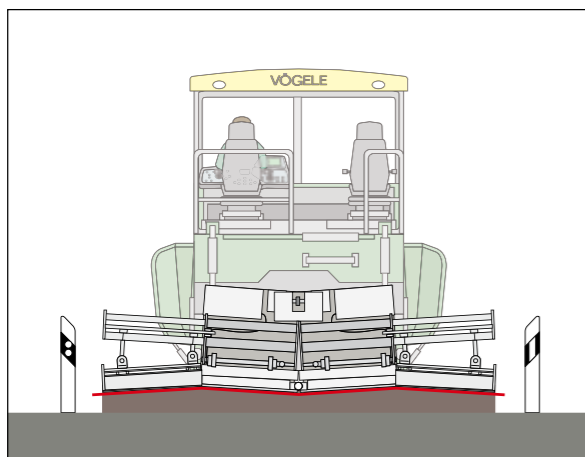
Transverse Profiles and Side Plate Skis or Bevel Irons



Positive or negative crown.



Extending unit sloped above horizontal on one side.



M or W profile.



VÖGELE screeds build excellent pavements right up to the edges. Side plate skis or bevel irons available for the AB 500-2 and AB 600-2 Extending Screeds provide for perfect and solid edges along the sides of a roadway, vertical or sloped.

- ▶ Easy crown adjustment by spindles (mechanical or electro-hydraulic).
- ▶ Allows paving of positive crown up to +5% and negative crown up to -2.5%.
- ▶ When height adjustment of the extending units is combined with a crown of the screed's basic unit, then VÖGELE Extending Screeds are capable of even handling positive or negative gull wing profiles (M or W profiles).
- ▶ Perfect edges, vertical or sloped.
- ▶ Side plate skis or bevel irons can be quickly installed on Extending Screeds thanks to quick-fitting device.

Very Easy: Service and Maintenance



- ▶ All important service points on the screeds are easily and quickly accessible.
- ▶ Easy replacement of screed plates due to vibrators suspended in the screed frame.
- ▶ Easy and quick replacement of heating rods for screed plates, tamper bars and pressure bars.
- ▶ Central lubrication points for all bearings of tamper and vibrators.
- ▶ A strike-off plate provided for the tamper prevents bitumen from getting inside the tamper area.
- ▶ Easy demounting and remounting of the tamper shield for cleaning and maintenance work.

THE ErgoPlus® SCREED CONSOLE

Easy Operation Guaranteed

Crucial for pavement quality is the screed. Therefore, easy and positive handling of all screed functions is of utmost importance for high-quality road construction.

With ErgoPlus®, the screed operator has the process of paving at his fingertips. All functions are easily comprehensible and all controls are clearly arranged.



The Screed Console

The screed console is designed in keeping with the conditions prevailing on the job site. For the frequently used functions operated from the screed console, push-buttons are provided. These are watertight and enclosed in perceptibly raised rings, so that they are identifiable blindfold simply by touch even when wearing work gloves. Important paver and screed data can be called up and adjusted from the screed console, too.



The Display of the Screed Console

The display of his console allows the screed operator to control and monitor both the left and the right side of the screed. Machine-related parameters such as tamper speed or conveyor speed can be adjusted conveniently via the display panel of the screed console. The clear menu structure, combined with easily understandable, self-explanatory symbols neutral in language, makes operating the display panel both simple and safe.



NIVELTRONIC Plus® (Option)

NIVELTRONIC Plus®, the cutting-edge VÖGELE System for Automated Grade and Slope Control, is very easy to learn and achieves outstanding paving results. All important functions of NIVELTRONIC Plus® can be accessed directly on menu level 1. The operator is provided with a variety of information, such as the sensor currently selected or the specified and actual values for layer thickness.

An electronic system installed in the screed tow point rams picks up the tow points' positions. Display of the current tow point positions and of the transverse slope on the screed console greatly facilitates set-up of the screed. All sensors connected are recognized automatically by NIVELTRONIC Plus® and can be monitored and controlled from either screed console. An open interface is provided for connection of a GPS system, thus permitting 3D paving.



Automatic Mode for Augers, Reversing Auger Rotation

Just like the paver operator, the screed operator, too, can select Manual Mode or Automatic Mode for conveyors and augers. Very useful and comfortable in practice is the function of "Reversing Auger Rotation".



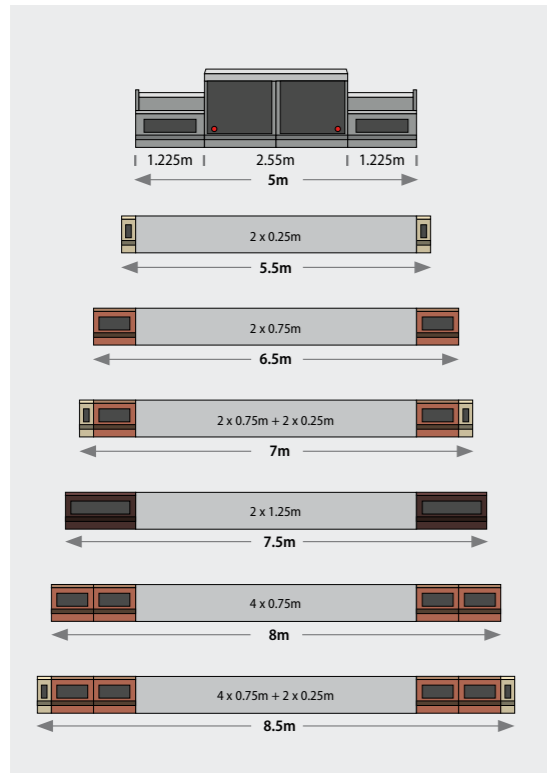
Specifications

The AB 500-2 Extending Screed combines with all VÖGELE tractor units featuring a basic width of 2.5m. Thanks to its unique single-tube telescoping system for infinite variation of pave width, it is ideal for a wide field of applications. The screed extends hydraulically from 2.55m to 5m and builds

up with bolt-on extensions to a maximum width of 8.5m. Addition of cut-off shoes allows the pave width to be reduced to a minimum of 2m. The AB 500-2 is available with tamper and vibrators as well as in two versions for high compaction (with tamper and 1 or 2 pressure bars) (with tamper and 1 or 2 pressure bars).

The AB 600-2 Extending Screed has a basic width of 3m. Equipped with the VÖGELE single-tube telescoping system, its pave width is infinitely variable up to 6m. With the addition of bolt-on extensions, the screed builds up for joint-free paving to a maximum width of 9.5m. As a result, the screed is ideal for suited to combining with the VÖGELE

pavers of the upper mid range through to the large SUPER 3000-2. For minor jobs, cut-off shoes are available allowing the pave width to be reduced to a minimum of 2.45m. AB 600-2 is offered in four different versions for compaction. It comes in TV version (with tamper and vibrators) or in TP1, TP2 or TP2 Plus versions for high compaction (with 1 or 2 pressure bars).

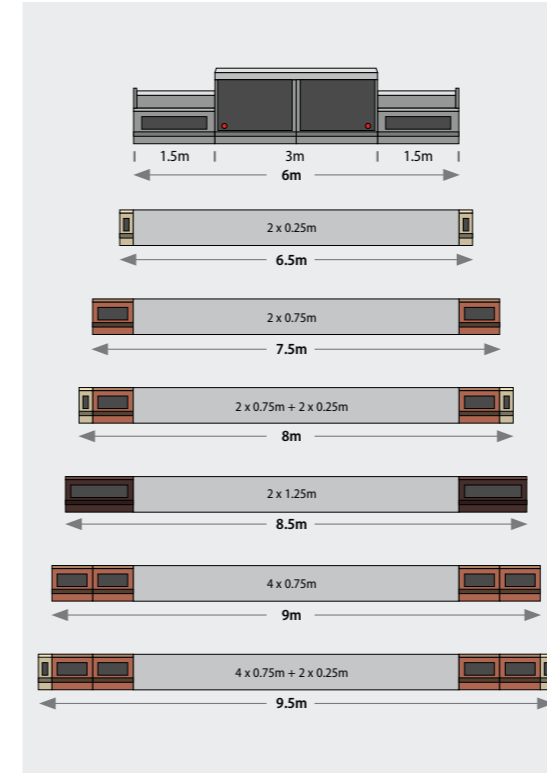


AB 500-2

Screed Widths	
Pave Widths:	2m to 8.5m (dependent on type of tractor unit)
Basic Width:	2.55m
Infinitely Variable Range:	2.55m to 5m
Dimensions and Weights (Basic Screed)	
Width:	2.55m
Depth:	1.24m (TV) 1.37m (TP1/TP2)
Weights:	3.2 tonnes (TV) 3.45 tonnes (TP1) 3.8 tonnes (TP2)
Larger Widths	
Set of Bolt-on Extensions:	25cm, 75cm, 125cm
Reduction in Width	
Set of Cut-Off Shoes:	27.5cm
Crown Adjustment	
Mechanical / Hydraulic (Option):	-2.5% to +5% (dependent on type of tractor unit) M, W or parabolic profiles possible
Height Adjustment of Extending Units	
Mechanical by Spindles:	-20mm to +25mm (TV) -20mm to +35mm (TP1/TP2)
Compacting Systems	
Screed Versions:	TV, TP1, TP2
Tamper (T):	tamper speed up to 1,800 rpm, infinitely variable tamper stroke adjustable (TP1/TP2) to 2, 4 or 7mm
Vibrators (V):	eccentric vibrators, frequency up to 50 Hz attached to screed frame
Pressure Bar(s) (P):	driven by pulsed-flow hydraulics impulse recurrence frequency 68 Hz hydraulic oil pressure 50 to 120 bar infinitely variable
Screed Heating:	screed plates, tamper bar and pressure bar(s) heated electrically by heating rods
Options	
Sensors in the Screed:	for display of tamper speed, vibrator speed and screed plate temperature
Side Plate Ski or Bevel Iron:	vertical or bevelled edges for various layer thicknesses heating rods available



Key: T = equipped with Tamper V = equipped with Vibrators P1 = equipped with 1 Pressure Bar P2 = equipped with 2 Pressure Bars AB = Extending Screed Subject to technical alterations.



AB 600-2

Screed Widths	
Pave Widths:	2.45m to 9.5m (dependent on type of tractor unit)
Basic Width:	3m
Infinitely Variable Range:	3m to 6m
Dimensions and Weights (Basic Screed)	
Width:	3m
Depth:	1.24m (TV) 1.37m (TP1/TP2)
Weights:	3.65 tonnes (TV) 3.95 tonnes (TP1) 4.3 tonnes (TP2) 4.75 tonnes (TP2 Plus)
Larger Widths	
Set of Bolt-on Extensions:	25cm, 75cm, 125cm
Reduction in Width	
Set of Cut-Off Shoes:	27.5cm
Crown Adjustment	
Mechanical / Hydraulic (Option):	-2.5% to +5% (dependent on type of tractor unit) M, W or parabolic profiles possible
Height Adjustment of Extending Units	
Mechanical by Spindles:	-20mm to +25mm (TV) -20mm to +35mm (TP1/TP2)
Compacting Systems	
Screed Versions:	TV, TP1, TP2, TP2 Plus
Tamper (T):	tamper speed up to 1,800 rpm, infinitely variable tamper stroke adjustable (TP1/TP2) to 2, 4 or 7mm tamper stroke adjustable (TP2 Plus) to 4, 7 or 9mm
Vibrators (V):	eccentric vibrators, frequency up to 50 Hz attached to screed frame
Pressure Bar(s) (P):	driven by pulsed-flow hydraulics impulse recurrence frequency 68 Hz hydraulic oil pressure 50 to 120 bar, infinitely variable
Screed Heating:	screed plates, tamper bar and pressure bar(s) heated electrically by heating rods
Options	
Sensors in the Screed:	for display of tamper speed, vibrator speed and screed plate temperature
Side Plate Ski or Bevel Iron:	vertical or bevelled edges for various layer thicknesses heating rods available



Key: T = equipped with Tamper V = equipped with Vibrators P1 = equipped with 1 Pressure Bar P2 = equipped with 2 Pressure Bars AB = Extending Screed Subject to technical alterations.



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