



Versatile, top-quality paving of monolithic profiles

Slipform Paver SP 15/SP 15i



Slipform paver for the offset paving of poured-in-place concrete profiles

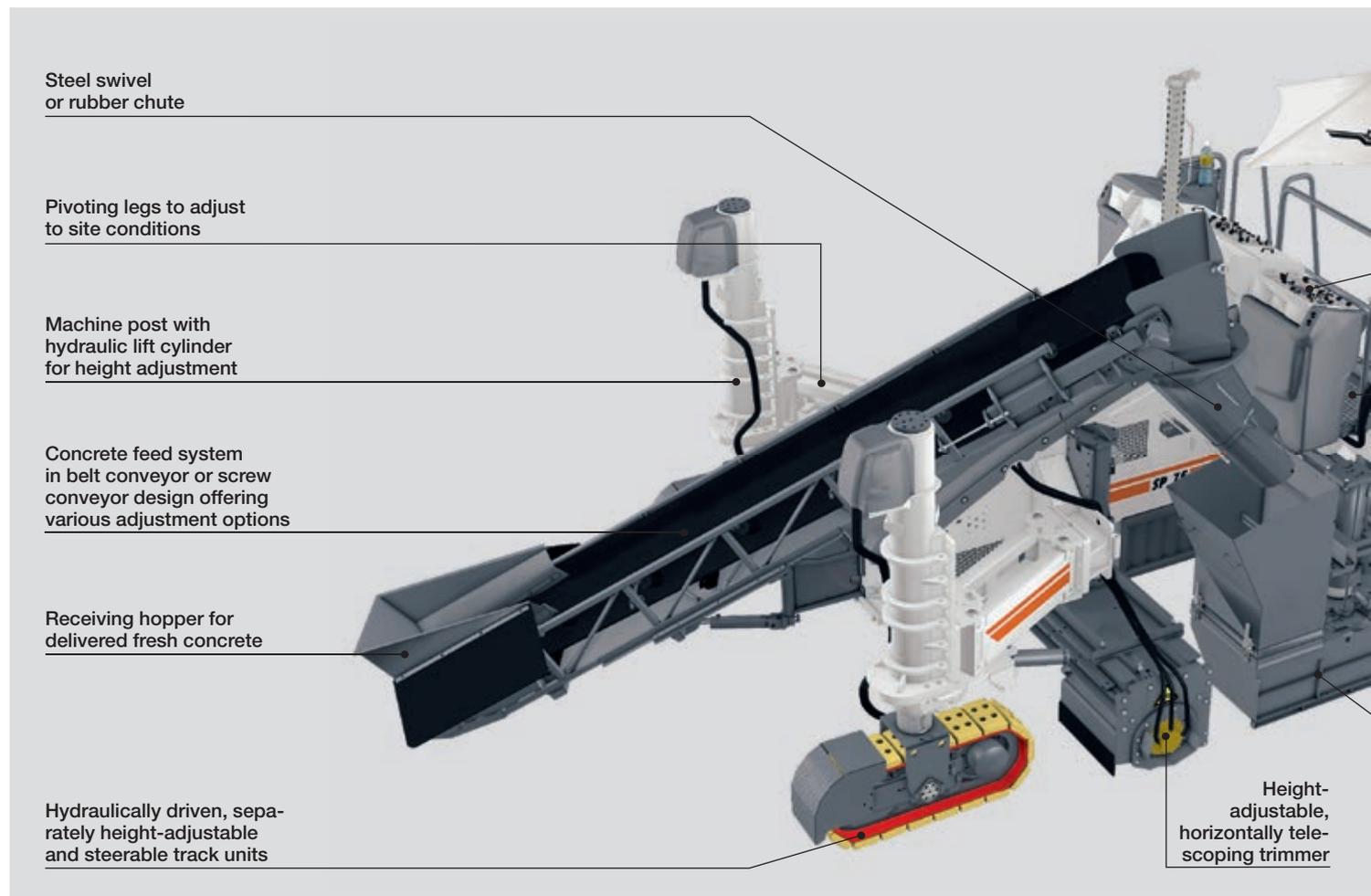




- ① WI-PAVE OFFSET – FULLY MODULAR MOULD SYSTEM
- ② WI-CONTROL – SUPERIOR MACHINE CONTROL SYSTEM
- ③ WI-STEER – STEERING AND DRIVE SYSTEM BUILT TO FIELD REQUIREMENTS
- ④ ECO MODE – ECONOMICAL DIESEL ENGINE CONTROL
- ⑤ AUTOPILOT – LOW-COST 3D MACHINE CONTROL SYSTEM
- ⑥ EASY CONNECT – FUTURE-PROOF 3D INTERFACE
- ⑦ SMOOTH SLOPE – BETTER CROSS SLOPE CONTROL
- ⑧ LIFE-CYCLE DESIGN – LIMITLESS MODULAR ADAPTABILITY
- ⑨ EASY OPERATION – PERFECT ERGONOMIC DESIGN AND HANDLING
- ⑩ FAST & EASY – THE INTELLIGENT TRANSPORT CONCEPT

WI-PAVE-OFFSET – Highly flexible offset mould system

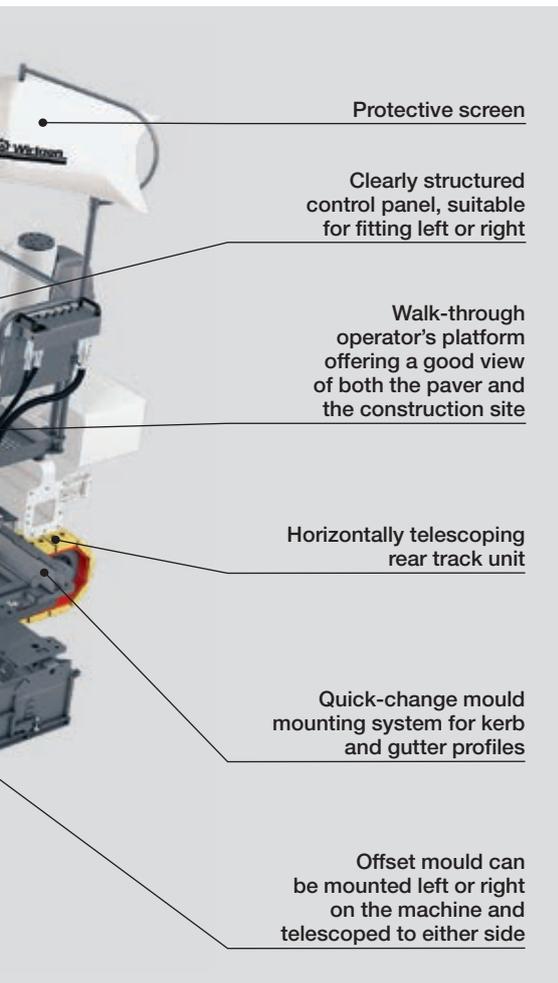
Variable arrangement of components



Broad range of offset applications

/// The SP 15/SP 15i is second to none as a multi-purpose machine for offset concrete paving. It is ideally suited to paving any monolithic profile of up to 1.3 m in height, as well as to placing more extensive pavements at a working width of up to 1.8 m. The slipform paver owes its versatility to the highly flexible arrangement of its mould

and track units. Offset slipforms in a wide variety of profiles can be attached either to the right or to the left side of the machine. This wealth of configuration options makes the SP 15/SP 15i fully adaptable to the specific job conditions and increases productivity significantly.



◀ Main components of the compact slipform paver

▼ No problem: highly accurate paving of radii with the SP 15/SP 15i

A striking array of features



Options such as a trimmer unit, concrete feed via belt or screw conveyor, electric or hydraulic vibrators greatly enhance the machine's flexibility.

Up to five frequency-adjustable vibrators placed in the slipform ensure perfect compaction of the concrete mix.

An advanced electronic steering and control system ensures that profiles are poured with the highest precision.

The compact machine impresses with its heavy-duty design for tough day-to-day operation, exceptional manoeuvrability and ease of operation.

WI-PAVE-OFFSET – Highly flexible offset mould system

High utilization enabled by a wide range of applications



▲ Paving of large and small gutters

Accurate paving of kerb-and-gutter profiles using the AutoPilot system



▲ Special parapet application to ensure superior containment performance: continuously reinforced concrete safety barriers can be installed both on the right ...

◀ ... and left-hand side of the machine

Paving the road to success – on any construction site

/// The SP 15/SP 15i is the perfect choice for paving large, up to 1.3 m high or 1.8 m wide monolithic concrete profiles. Upon request, larger profile dimensions can also be built. Any profile shapes can be poured, including kerbs, gutters, barriers, drains, sewers and narrow lanes. As the SP 15/SP 15i is easy to transport, it can perform

various jobs on several sites on a single day: exchanging moulds or moving them from one side of the machine to the other is a matter of only a few minutes and can be easily completed right on the spot. On sites presenting difficult ground conditions, a trimmer unit can be mounted to create a perfect subgrade level.

The SP 15/SP 15i in action



◀ Paving of complex
kerb-and-gutter profiles



▲ Placing the concrete for a slot
drain to ensure storm-water
run-off

Pouring of up to 1.8 m wide
pedestrian and cycle paths using
a modular, extendable slipform ▶



- ▶ The flexible positioning of the paving mould, track units and concrete feed system tremendously widens the range of possible applications of the SP 15/SP 15i.
- ▶ The machine's adaptability is enhanced even further by its telescopic mould suspension and modular adaptability by specific additional features.
- ▶ Wirtgen guarantees the fast availability of a comprehensive range of tried-and-tested standardized mould designs.
- ▶ Upon request, we also build moulds of any shape to customer specification.

WI-PAVE-OFFSET – Highly flexible offset mould system

Continuous concrete feed to ensure high daily outputs



Counting on flexibility

/// A reliable, uniform feed of concrete from the truck mixer into the paving mould is one of the key criteria enabling the successful paving of monolithic profiles. To meet this requirement, the SP 15/SP 15i can be equipped with either a screw or a belt conveyor. The belt conveyor is also available in a hydraulically folding design for greater ease of transport. All these equipment options provide utmost flexibility as they can be hydraulically adjusted

to the specific job conditions: in longitudinal direction, in their angle of incline and about a slewing angle to feed a slipform positioned on the right or left side. Compared to the belt, the screw conveyor can be set to much steeper inclines of up to 45 degrees. In addition, the screw can also act as a useful buffer for intermediate storage of large concrete volumes.



Reliable, uniform concrete delivery

Hydraulic cylinders enable the conveyor's slope and longitudinal position to be changed at the push of a button

▲ The SP 15 is optionally equipped with belt or screw conveyor

Concrete discharge: the chute made of solid rubber or steel can be accurately positioned above the hopper of the concrete mould ▶



- ▶ Because the screw holds large quantities of concrete, paving can continue between concrete mixer loads.
- ▶ Marks in favour of the belt conveyor are its high conveying speed, good accessibility and quick and easy cleaning.

- ▶ For all concrete feed options, the feed rate can be continuously adjusted from the operator's cabin.
- ▶ The charge end of the conveyor is capable of accepting large quantities of delivered fresh concrete.

WI-PAVE-OFFSET – Highly flexible offset mould system

Positioning the paving mould exactly as required



Hydraulic height adjustment by up to 1,000 mm (additional mechanical adjustment: 280 mm)

As easy as that:
lower machine, drive forward, secure – and go!



The mould can be mounted either on the right or on the left side of the machine – any required change is just a matter of minutes

The hydraulically operated quick-change system enables ...



The mould can be telescoped hydraulically by up to 700 mm

... kerb/gutter profiles to be changed quickly and effortlessly

Mounted on the right or left side

The SP 15/SP 15i guarantees maximum flexibility whatever the job. To fully respond to the specific site conditions at all times, the mould can be mounted on the right or left side of the machine. This versatility keeps traffic disruptions to a minimum because the SP 15/SP 15i and the truck mixer always “go with the flow”. The mould

can be shifted in horizontal direction by a hydraulically operated telescopic suspension to enable profile paving both within and beyond the dimensions of the machine. The height of the machine is adjusted via its track units, providing a maximum profile paving height of 1,300 mm, which is unrivalled in this machine class.

Perfect preparation of the base using a trimmer

The trimmer offers various adjustment options via hydraulic cylinders ▶



Even base for a perfect paving process



▲ The trimmer ensures perfect preparation of the base ...

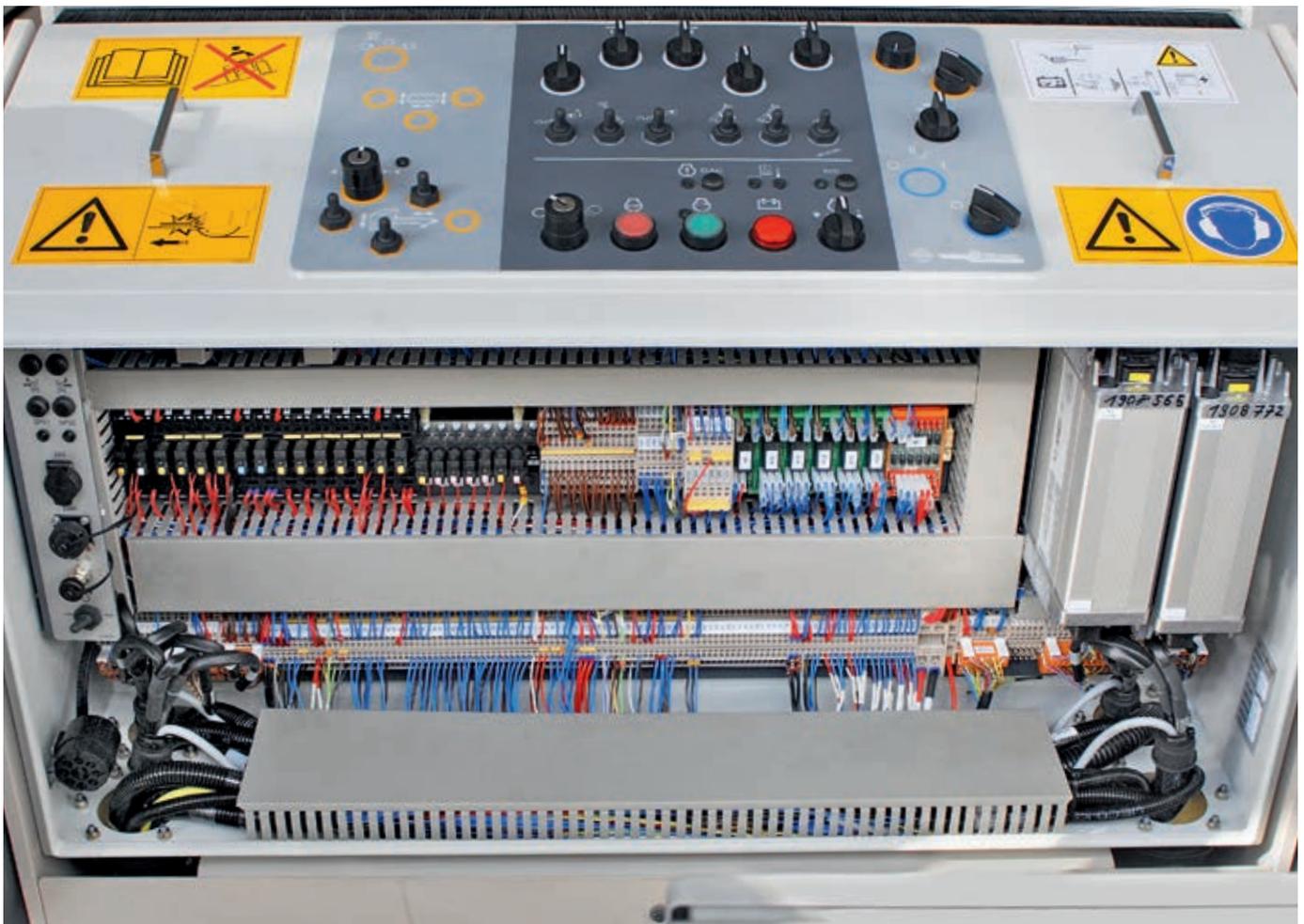
... down to a working depth of up to 150 mm ▶



- ▶ The design of the trimmer unit relies on the unrivalled expertise we gained in several decades of developing and designing milling technology.
- ▶ The trimmer is positioned directly in front of the slipform paver. Its height and cross slope are adjustable, and it can also be telescoped to the side.
- ▶ The trimmer fitted with cutting tools arranged in a helical pattern accurately sets the grade for uniform paving.
- ▶ Starting from a basic width of 600 mm, the unit can be gradually extended to a maximum of 1,600 mm.

WI-CONTROL – Superior machine control system

Faultless operation – whatever the job



Software and hardware

/// The SP 15/SP 15i slipform paver is fitted with an integrated machine management system of the highest quality. The large proportion of software developed in-house plays a key role as we have focused on continuously improving the software, which has the added effect of significantly increasing the operational reliability of the

machine. Our many years of experience in software and hardware development also allow for a higher and more flexible machine functionality in terms of the paver's range of applications and individual customer requirements.

High level of operational reliability



▲ The superior machine control system ensures full straight-ahead stability ...

... as well as precise steering in bends ▶



▲ The track units are fitted with separate valves to ensure highly precise steering movements

- ▶ The machine control comprises a highly efficient engine management system.
- ▶ WIDIAG, the diagnostic system with standardized interface, is used by Wirtgen service technicians for quick, targeted service diagnostics right on the spot.

- ▶ WIFMS, the Wirtgen fleet management system, provides a standardized readout of defined machine parameters for integration in customer-specific systems.

WI-STEER – Steering and drive system built to field requirements

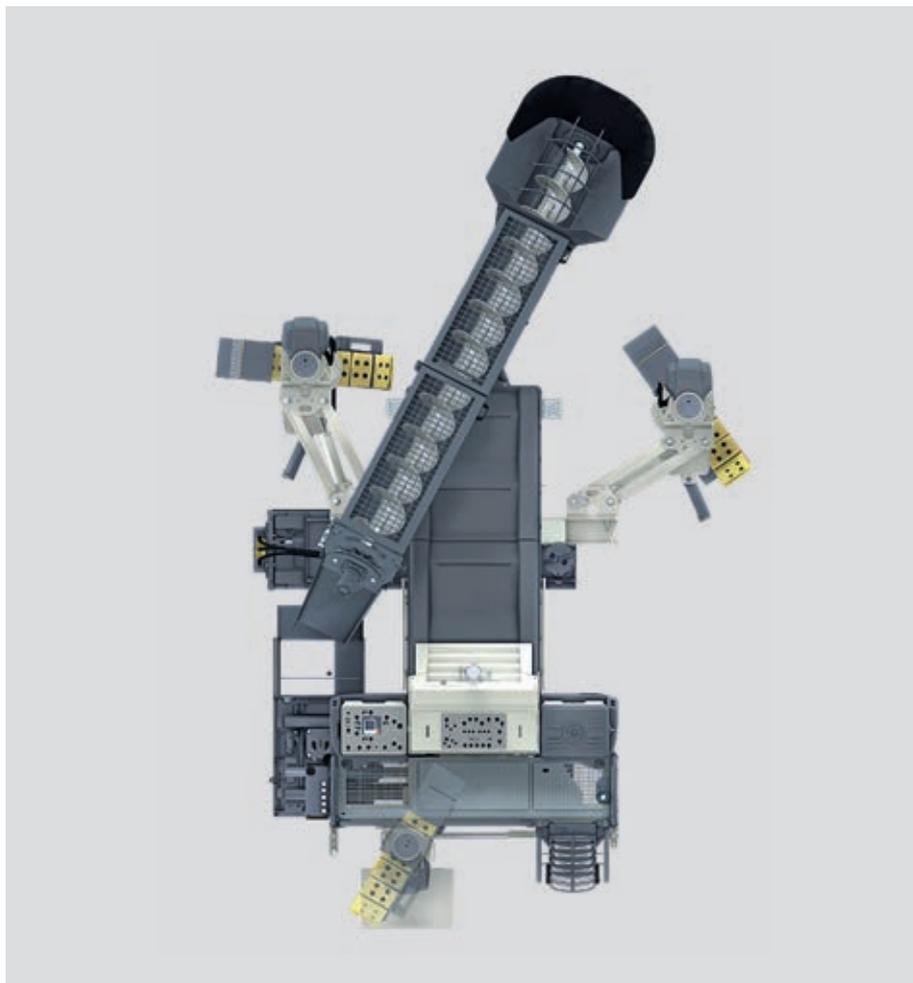
Precise handling – whatever the job



Precision in concrete paving guaranteed

/// The SP 15/SP 15i features an intelligent electronic steering and control system which offers everything it takes for precise handling and thus high-precision concrete paving. The slipform machine plays its trumps in particular when working in bends where the tried-and-tested Ackermann steering system ensures highly precise driving behaviour and highest concrete quality. The com-

puter-controlled steering system varies the speed of the individual track units when driving in bends, thus enabling the SP 15/SP 15i to follow the previously defined references with pinpoint accuracy. In addition, the steering angle of the tracks is adjusted fully automatically in accordance with the radius to be paved and the paver geometry. A second-to-none solution!



Extremely small radius of 580 mm



Control panel with different steering mode settings for manoeuvring ▲

Automatic adjustment of the steering angles and speed of the individual track units to the paver's geometry ◀

- ▶ In bends, the SP 15/SP 15i enables profiles to be produced with a minimum radius of no more than 580 mm.
- ▶ The highly precise drive motor control prevents jerky driving even when working at minimum speed.
- ▶ The control system prevents spinning of the track units when driving in bends, maintaining optimum traction.
- ▶ Repositioning and manoeuvring of the slipform paver is easy thanks to the additional crab and coordinated steering modes.

ECO MODE – Economical diesel engine control

Optimized engine efficiency



Lowest environmental emission levels

// Fuel consumption of the SP 15/SP 15i is reduced to a minimum by the integrated ECO mode diesel engine control. Following activation of the ECO mode, the control system adjusts the engine speed automatically to the paver's performance requirements. The engine speed is low when driving at slow advance speeds, and is increased accordingly if the advance speed is increased.

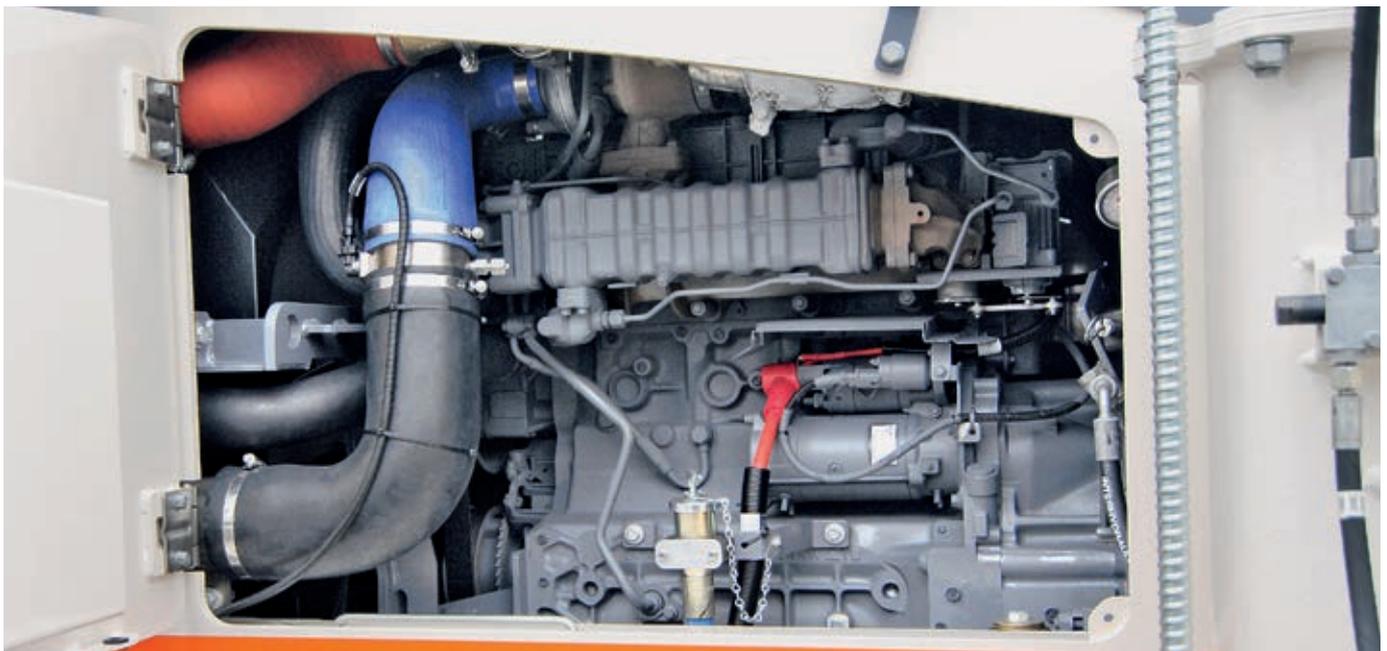
High or maximum engine speeds are only required at fast advance speeds or when operating vibrators or a trimmer. The ECO mode recognizes each working situation without the need for manual operator intervention and optimizes the engine speed in accordance with the required machine functions.

Manual engagement
of the ECO mode ▶

ECO mode engine
control guarantees low
fuel consumption rates ▼



State-of-the-art
engine technology



- ▶ Thanks to the ECO mode engine control, the powerful engine installed in the SP 15/SP 15i always works in the optimum performance and torque ranges.
- ▶ The paver's demand-based engine management ensures low fuel consumption, low noise emission levels and low operating costs.
- ▶ The engine technology installed in the SP 15 complies with the exhaust emission standards of EC Stage 3a / US Tier 3 or lower.
- ▶ The SP 15i features state-of-the-art engine technology for lowest environmental emission levels which comply with the stringent specifications of the EC Stage 3b / US Tier 4i exhaust emission standards.

AUTOPILOT – Low-cost 3D machine control system

Work more efficiently without stringline



Quick, simple, cost-effective

Conventional, expensive 3D control systems for the production of poured-in-place concrete profiles are often unprofitable and too complicated to handle in particular for small contractors. Wirtgen provides customers with the AutoPilot, an innovative and competitively priced alternative system developed in-house which ensures automatic, precise concrete paving. The GPS-based

system has been customized for use with the Wirtgen SP 15/SP 15i. It assists with the fully automatic paving of most diverse profile configurations, such as motorway safety barriers or kerbs for traffic islands. Operation is extremely easy – and programming the system a matter of mere minutes.



The control screen provides a clear overview of current machine and system parameters ▶



▲ The Field Rover is used to define measuring points and perform final inspection

The Wirtgen AutoPilot ensures utmost precision from the very first metre ▶



▣ The time-consuming surveying, installation and removal of stringlines or the preparation of a geodetic data model is not required.

▣ The operator is always in full control – he can intervene in the automatic paving process whenever necessary.

▣ Parameters are entered via the rotary push-button and the function keys on the separate control screen.

▣ The innovative Field Rover and specially developed software make it possible to calculate a precise virtual stringline right on the site, which is then imported into the control system.

EASY CONNECT – Future-proof 3D interface

Profile paving made to measure

High safety of use

Tried-and-tested,
integrated standard interface
for 3D control systems



Acceptance procedures
specific to Wirtgen guarantee
high safety of use of the individual
3D control systems



Simple, efficient, highly precise

/// Wireless 3D control systems will drive the future of professional concrete paving. In addition to higher paving accuracy, they offer yet another major advantage: establishing the digital terrain model is much more cost-effective than surveying and the installation of stringlines. The SP 15/SP 15i is all set for the job: an integrated standard interface enables it to be fitted with a state-of-

the-art 3D control system quite easily. In thorough acceptance procedures, we have tested the compatibility of the SP 15 / SP 15i with the 3D control systems of leading suppliers, thus ensuring safety of use. In addition, our own experts are working on continuously improving and perfecting 3D systems.

SMOOTH SLOPE – Better cross slope control

Ensuring perfect paving quality



- Perfect paving results are guaranteed thanks to the electronic slope control developed by Wirtgen on the basis of the “Rapid Slope” cross slope sensor.
- Optimized control technology enables the innovative slope control system to achieve as yet unmatched dynamics and precision.
- Significantly shorter machine response times are reflected in the precision and quality of the completed concrete product.
- Vibrations or ground irregularities are balanced out quickly and reliably by the cross slope control system.

LIFE-CYCLE DESIGN – Limitless modular adaptability

Machine frame with modular adaptability



Ensuring machine stability even during the toughest of jobs

Seasoned slipform paver operators know how important the machine's adaptability to difficult job site conditions is. The SP 15/SP 15i has a fully modular machine design. For instance, the arrangement of its track units is extremely flexible to always ensure perfectly stable operation of the small machine. Both the slipform and the concrete feed system can be adjusted to the specific site

conditions if and when required. Also, the SP 15/SP 15i is very easy to convert, and complementary components can be attached to cater to complex customer-specific applications. In addition, customer options can be retrofitted at any time using the standard interfaces incorporated in the machine.



▲ Swift turning manoeuvres of the machine about its own centre enabled by the three steerable track units

... to proceed as close as possible to the paving profile whilst ensuring utmost machine stability ▼

▲ At the flick of a switch, the width of the two front track units can be adjusted via two telescopic pivoting legs

▶ The rear track unit can be telescoped in horizontal direction ...



▮ The two front track units feature a swivel design and can be hydraulically moved about wide angles to fully respond to the specific job needs.

▮ Even more on-site flexibility is provided by the rear track unit, which can be shifted either mechanically or hydraulically.

▮ The offset paving mould can be mounted on the left or right side of the machine, adjusted in height hydraulically and telescoped to either side.

▮ The individual feed systems include a wide range of adjustment options to ensure flexible concrete delivery.

EASY OPERATION – Perfect ergonomic design and handling

Ease of operation enhances productivity



Get familiar with the machine in no time

/// The operator's comfort and high performance is enabled by the ergonomic design of the spacious walk-through platform: depending on the specific job requirements, the control panel of the SP 15/SP 15i can be positioned either on the left or on the right side, thus offering perfect visibility of the machine, paving process and surroundings – on both sides. The graphic display on the

control panel informs the operator of all relevant operating parameters on an event-driven basis. Clear, language-neutral symbols ensure intuitive operation of the slipform paver. As a result, operators will be in full control of the SP 15/SP 15i and work very effectively after a very short familiarization period.



Control panel suitable for mounting on the left or right side for perfect visibility ▲

Quick maintenance and readily accessible components ▼

▲ The graphic display is incorporated in the centre of the clearly structured control panel

The height of the convenient access ladder can be adjusted manually ▶



- ▶ The standardized, intuitive operating concept of Wirtgen's small paver range comprising the SP 15/ SP 15i, SP 25/SP 25i and SP 80/SP 80i yields additional synergies.
- ▶ Its comprehensive lighting package makes the SP 15/ SP 15i a top performer even after the sun has set.

- ▶ Ample storage space is available for tools, sensors, the hydraulically operated high-pressure cleaner or other items needed on site.
- ▶ The effective engine soundproofing and anti-vibration mounted treads reduce strain on both the operator and the environment.

FAST & EASY – The intelligent transport concept

Optimized machine dimensions

Quick loading

Compact dimensions: in retracted position, the slender paving mould remains in place during transport



▲ In folding design, the belt conveyor can be folded hydraulically for transport

Transport on a flatbed truck –
tailored to fit! ▶



Minimum effort required

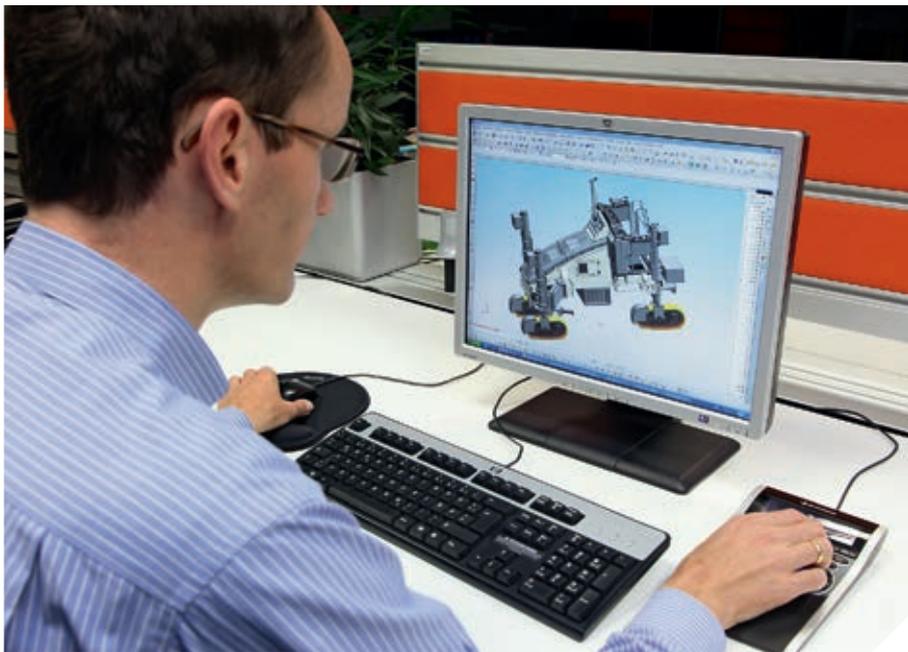
/// Its manoeuvrability and exceedingly compact dimensions enable quick loading and easy transport of the SP 15/SP 15i. Converting the machine to transport mode requires only minimum effort. Paving moulds with small profile widths need not be removed in a time-consuming

process. With the mould in retracted position, the slipform paver complies with the maximum width permissible under applicable legislation. When equipped with a folding conveyor, the SP 15/SP 15i can easily be loaded onto small transport vehicles.

Unrivalled expertise in engineering and manufacturing

Quality is our best selling proposition

Made in Germany –
precision and
attention to detail



Experience gained over several
decades in the production of
several hundred slipform pavers

▲ Special software and state-of-the-art hardware are the “tools of the trade” of our design engineers

Specialists are performing
high-quality welding work
on a paving mould ▶



/// The Wirtgen SP 15/SP 15i slipform paver carries the “Made in Germany” label – and quite rightly so! It all starts with the sophisticated design and engineering process applied at the company’s headquarters in Windhagen, which lays the foundation for a successful service life of the machine. Top-quality materials, state-of-the-art production methods, sophisticated manufacturing workflows and experienced people: these are the key ingredi-

ents that make all the difference in the process of manufacturing the SP 15/SP 15i, ensuring a long service life, safety in use and high degree of robustness. Our ambitious approach is underpinned by the seamless quality control system we have put in place, which begins as early as at the market intelligence stage and covers the entire field of manufacturing.



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