

The benchmark for 2-track concrete paving up to 40 ft
Slipform Paver SP 102i



US VERSION

At a Glance: Outstanding Features of the SP 102i

02
03

Machine concept

1 | FULLY MODULAR MACHINE LAYOUT

The paver's fully modular design is synonymous with flexible modification, easy retrofitting of optional equipment features and application-specific adjustment to site conditions.

2 | SOPHISTICATED TRANSPORT CONCEPT

Compact dimensions and the two-track design of the SP 102i ensure ease of transport as well as quick setup and operational readiness. Super smoother and concrete spreading equipment can remain mounted on the machine during transport.

- > Economical two-tracked paver for a wide variety of paving applications at working widths of up to 40 ft
- > Covers the common paving sizes for road, airport and residential paving projects
- > Easy modification for transport and quick availability on site
- > Exceptionally low machine ground pressure

Concrete equipment

3 | EXCEPTIONAL VERSATILE CONCRETE PAVING

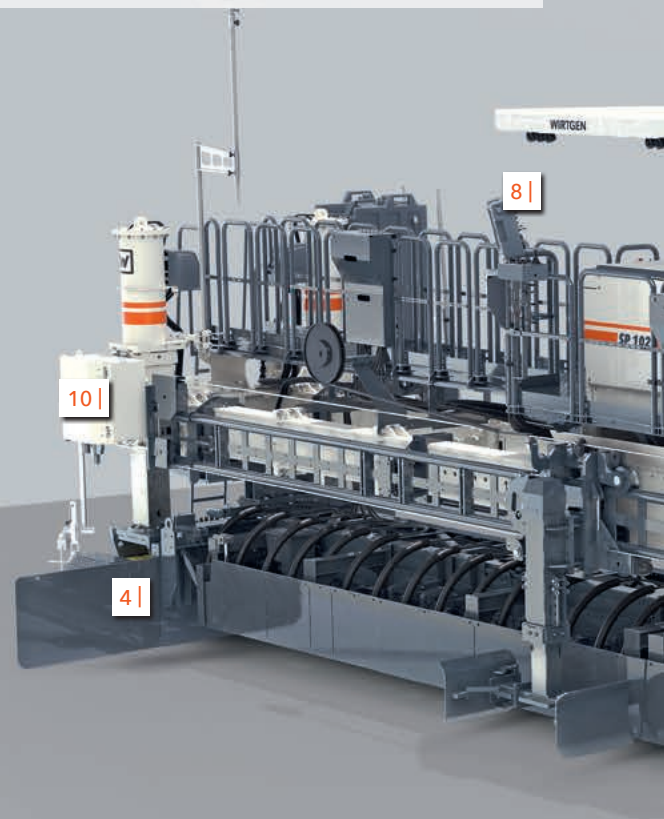
The slipform paver achieves perfection in the highly precise paving of standard concrete slabs at widths ranging from 16 ft to 40 ft and layer thicknesses of up to 18 in.

4 | PROVEN SLAB PAVING MOLD

Customers get the highly accurate and durable 1310 wi series imperial inset slab paving mold with removable wear sole. The mold can be equipped with up to three crown profiles for parabolic crown paving depending on the machine's configuration.

5 | PRECISE COMPACTION TECHNOLOGY

The machine is equipped with an hydraulic vibrator drive to ensure precise compaction in any site condition. It comes with 18 hydraulic connectors in standard design but can optionally be fitted with a vibrator drive for 30 hydraulic vibrators.



Engine technology and operation

6 | EFFICIENT ENGINE MANAGEMENT

The ECO mode feature automatically adjusts the engine speed to the current power requirements, thus ensuring engine efficiency, lower exhaust emissions and low noise emissions.

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See further product
information.



Machine Control and Steering

9 | HIGH-PRECISION STEERING AND DRIVE SYSTEMS

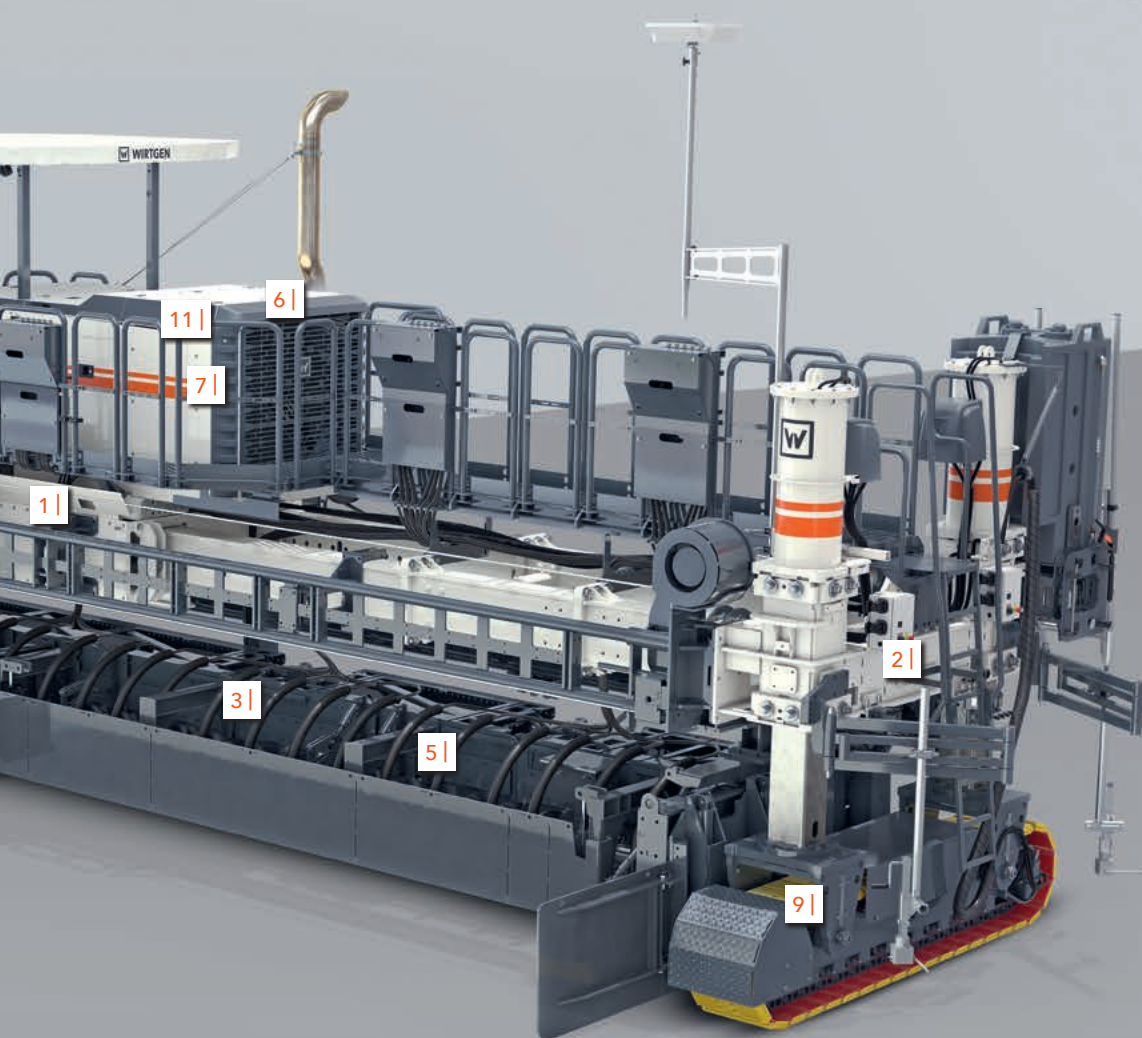
Intelligent control systems for exceptionally smooth operation and the highly responsive skid steering system ensure precision in concrete paving.

10 | MACHINE CONTROL SYSTEMS WITH ADVANCED INTELLIGENCE

The efficient WIRTGEN WITOS FleetView telematics system supports fleet management, machine position and status monitoring, as well as maintenance and diagnostic procedures.

11 | FIELD-PROVEN 3D INTERFACE

The field-proven interface guarantees tested compatibility with the 3D control systems of leading suppliers.



7 | STATE-OF-THE-ART ENGINE TECHNOLOGY

The SP 102i features state-of-the-art, high-performance engine technology (Rated power: 231 kW / 310 HP / 314 PS) complying with exhaust emission standard US EPA Tier 4f.

8 | PERFECTION IN ERGONOMICS AND HANDLING

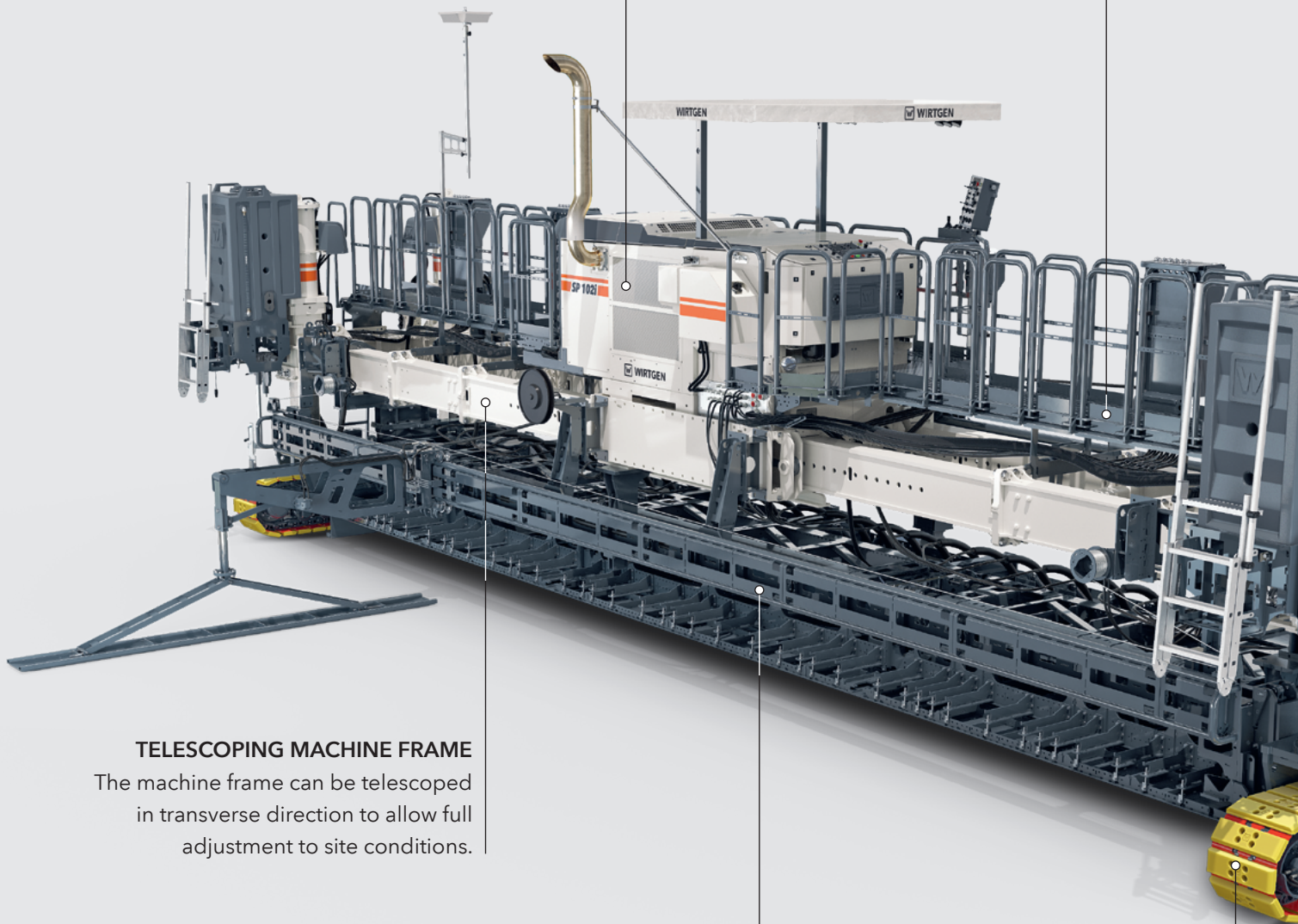
Comfortable working is ensured by the ergonomically designed workplace offering perfect visibility and an intuitive operating concept standardized for all WIRTGEN SP model ranges.

Machine Concept

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RETROFITTING MADE EASY

Standard interfaces allow easy retrofitting of individual customer options.



TELESCOPING MACHINE FRAME

The machine frame can be telescoped in transverse direction to allow full adjustment to site conditions.

FULLY MODULAR MACHINE LAYOUT

The paver's fully modular design provides a wide variety of inset paving applications.

LARGE SIZED TRACK UNITS

The two track concept and track units with a large contact area distribute the machine weight evenly and lead to an exceptionally low machine ground pressure.

EASE OF MODIFICATION

Ease of modification and the effortless addition of complementary features enable for complex customer-specific applications.



HEAVY-DUTY DESIGN

The paver's main frame, track units and height columns are exceptionally robust in design to allow precise paving results at high daily performance rates throughout the entire service life.

HIGH MACHINE WEIGHT

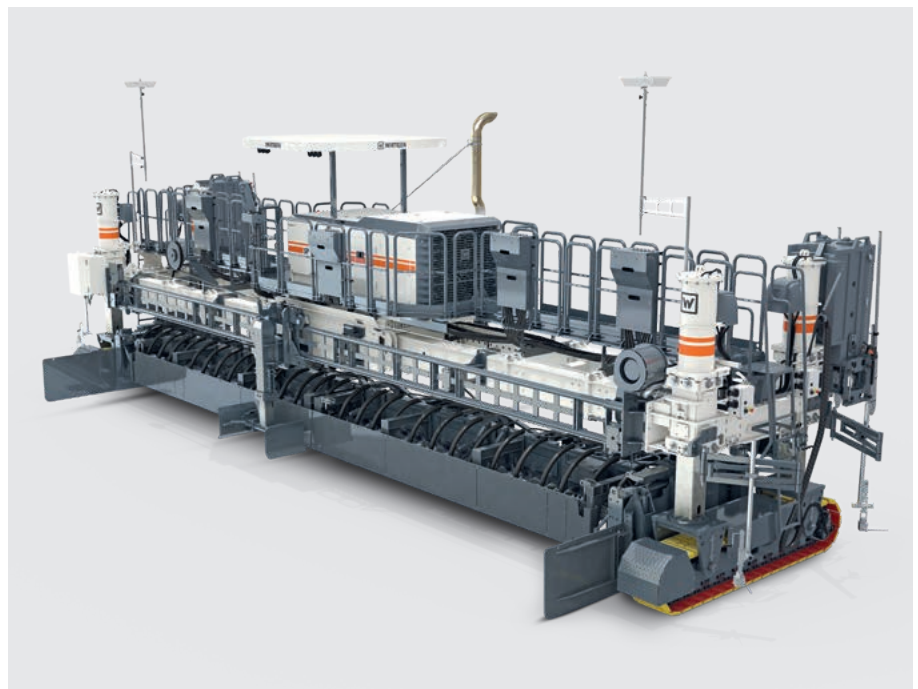
The machine's high weight optimizes the paving process especially when operating at larger paving widths.

EASE OF TRANSPORT

The minimum effort required to modify the machine for transport shortens setup times, reduces operating costs and optimizes the machine availability.

ADAPTABLE TO SITE CONDITIONS

The machine has been engineered to ensure reliable adaptability to site conditions, thus increasing both productivity and the range of applications.



SP 102i front view

Concrete Equipment

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SUPER SMOOTHER

The oscillating super smoother manufactured from high-quality material ensures a perfect surface finish.

CONCRETE SLABS WITH CROWN

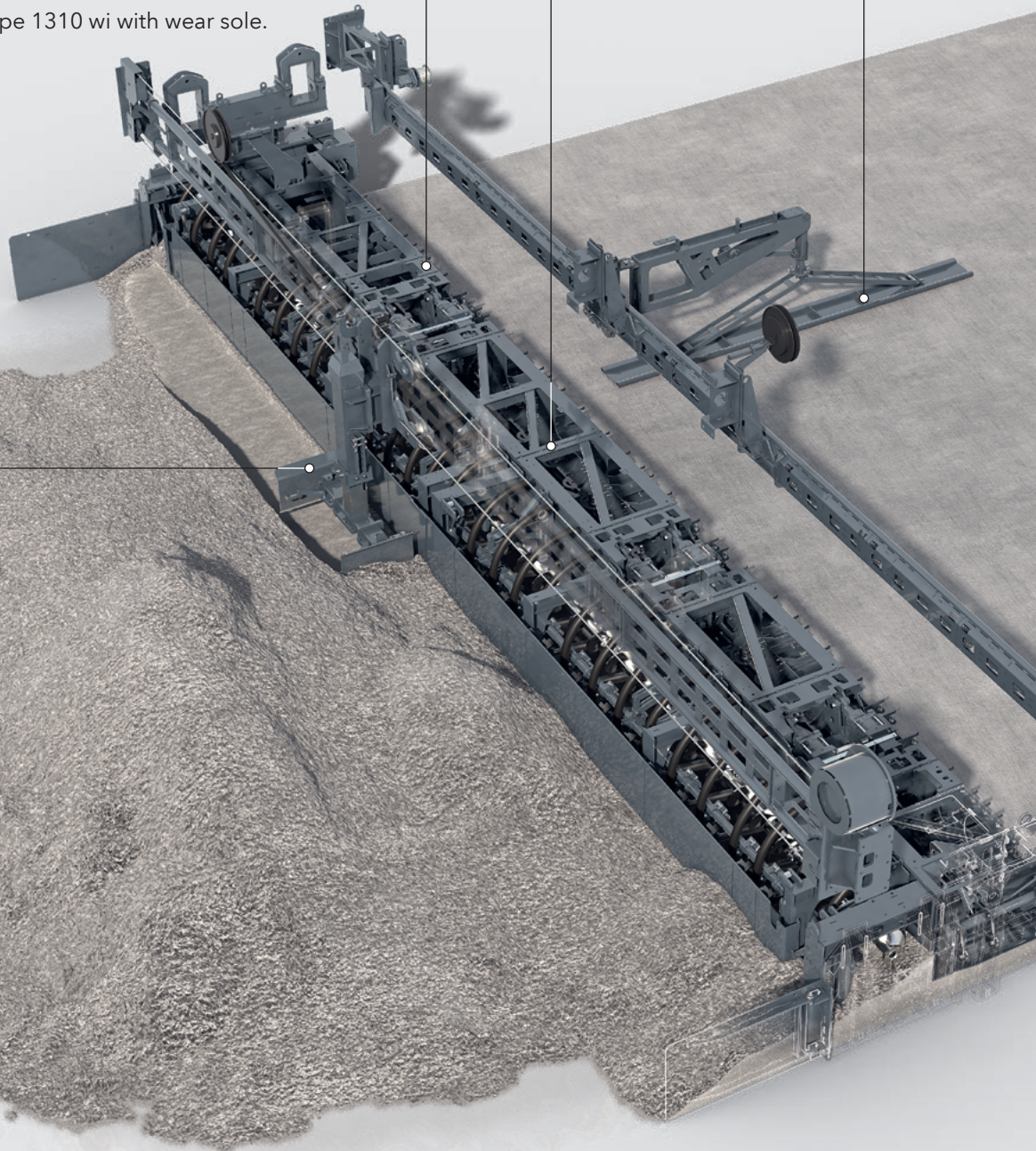
Concrete pavements with a crown of up to 3% can be produced.

IMPERIAL SLAB PAVING MOLD

The concrete can be paved to precision using imperial inset slab paving molds of type 1310 wi with wear sole.

SPREADING PLOUGH

Even spreading of the concrete deposited in front of the paving mold is achieved by means of a spreading plough.



CONCRETE SLABS FROM 16 FT TO 40 FT WIDE

High-precision, high-quality paving of concrete slabs at widths ranging from 16 ft to 40 ft.

LAYER THICKNESS OF UP TO 18 IN

Standard paving at layer thicknesses of up to 18 in. Higher thicknesses can be realized in accordance with customer requirements.

HYDRAULIC VIBRATORS

The paver comes with 18 hydraulic connectors for hydraulic vibrator drive in the standard equipment package (optional up to 30).

SEPARATE SIDE TIE BAR INSERTERS

Side tie bars are inserted to allow the paving of adjacent concrete slabs.

EDGE SLUMP CONTROL

Hydraulic ESC “Edge Slump Control” inserts for the outer edges of the mold contribute to achieving high-quality paving results. Optionally the ESC inserts can be exchanged with curb inserts to create curb profiles simultaneously.



Separate side tie bar inserter



Edge Slump Control

Engine Technology and Operation

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ERGONOMIC DESIGN

The ergonomically designed operator's platform improves operator performance and therefore increases the machine's overall productivity.

STATE-OF-THE-ART CONTROL PANEL

The control panel with state-of-the-art control elements and clear, language-independent labelling promotes productive operation.



PERFORMANCE-OPTIMIZED ECO MODE ENGINE MANAGEMENT

Automatic adjustment of the engine speed according to the current power requirements, thus ensuring highest engine efficiency, fuel economy and low exhaust and noise emission levels. The ECO mode feature detects the current paving situation without the need for manual intervention, thus relieving the operator of a part of his workload.

STANDARDIZED OPERATING CONCEPT

The standardized, self-explanatory operating concept fits seamlessly into the operating concept of the current range of WIRTGEN slipform pavers, leading to synergy effects.

ENGINE TECHNOLOGY COMPLYING WITH US EPA TIER 4f

The powerful diesel engine installed in the SP 102i complies with the strict specifications of exhaust emission standards US EPA Tier 4f.

HIGH ENGINE POWER

The high-powered engine ensures effective concrete paving in the optimum performance and torque ranges.

PERFECT VISIBILITY

The spacious operator's platform provides a perfect view of the paving process.

TELESCOPING WEATHER CANOPY

The weather canopy can be telescoped electrohydraulically even with the engine switched off and allows paving to continue regardless of weather conditions.

EASE OF MAINTENANCE

Ready access to all maintenance and inspection points minimizes maintenance requirements.



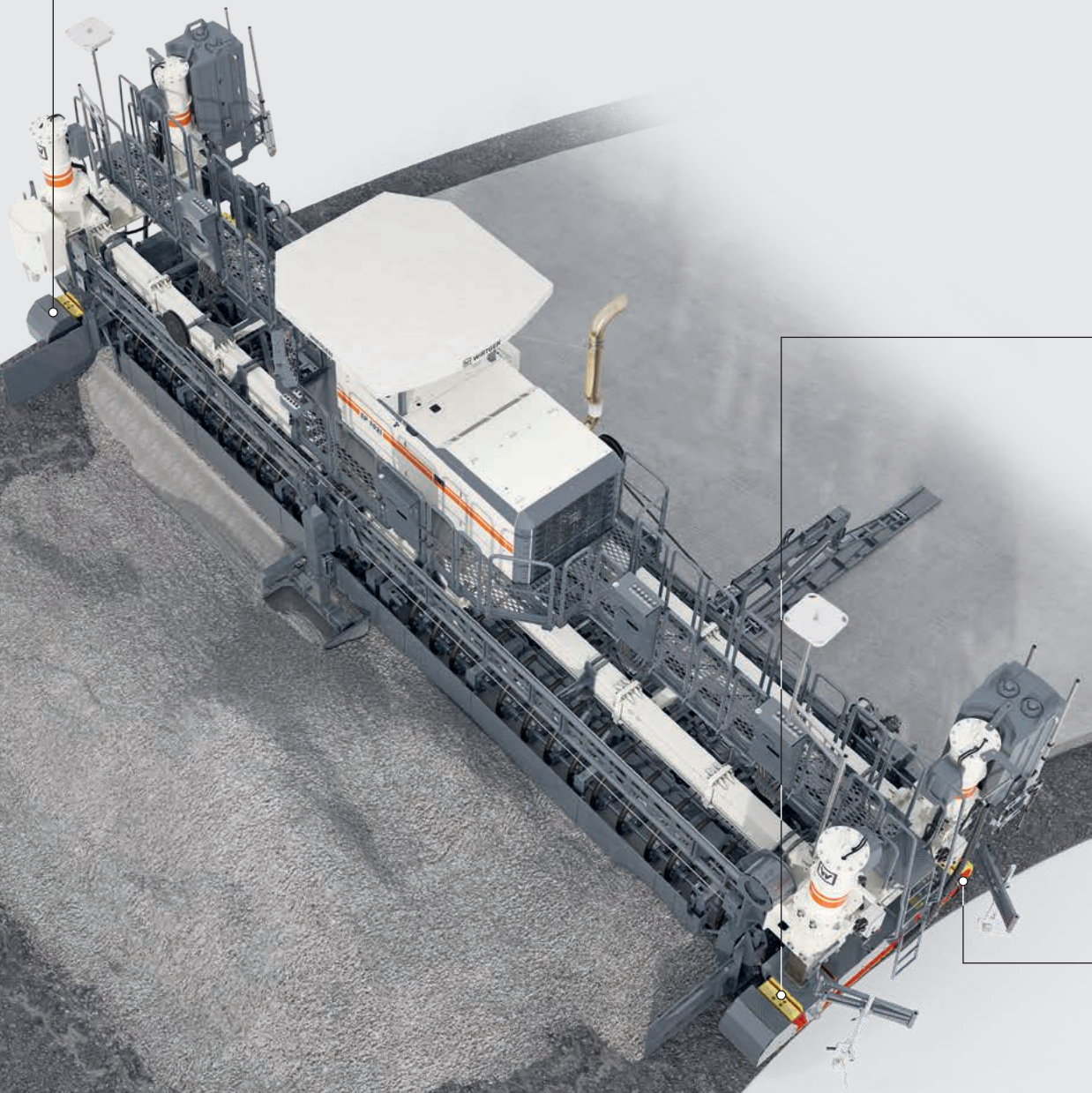
Ergonomically optimized, clearly structured operating concept

Machine Control and Steering

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HIGH-PRECISION DRIVE MOTOR CONTROL

High-precision drive motor control guarantees smooth machine travel even when operating at extremely low speeds.



HIGH-QUALITY MACHINE CONTROL SYSTEM

The high-quality machine control system includes software developed in-house and increases the slipform paver's operational reliability and range of applications.

SERVICE DIAGNOSTIC SYSTEM

The WIDIAG service diagnostic system with standardized interface ensures quick, specific diagnostics right on site.

EXPANDABLE CAN-BUS SYSTEM

The existing CAN-bus system can be expanded for easy retrofitting of customer-specific options.

EFFICIENT WITOS TELEMATICS SYSTEM

The WIRTGEN WITOS FleetView telematics system supports fleet management, machine position and status monitoring, as well as maintenance and diagnostic procedures.

STANDARDIZED OPTIONAL INTERFACE FOR 3D CONTROL SYSTEMS

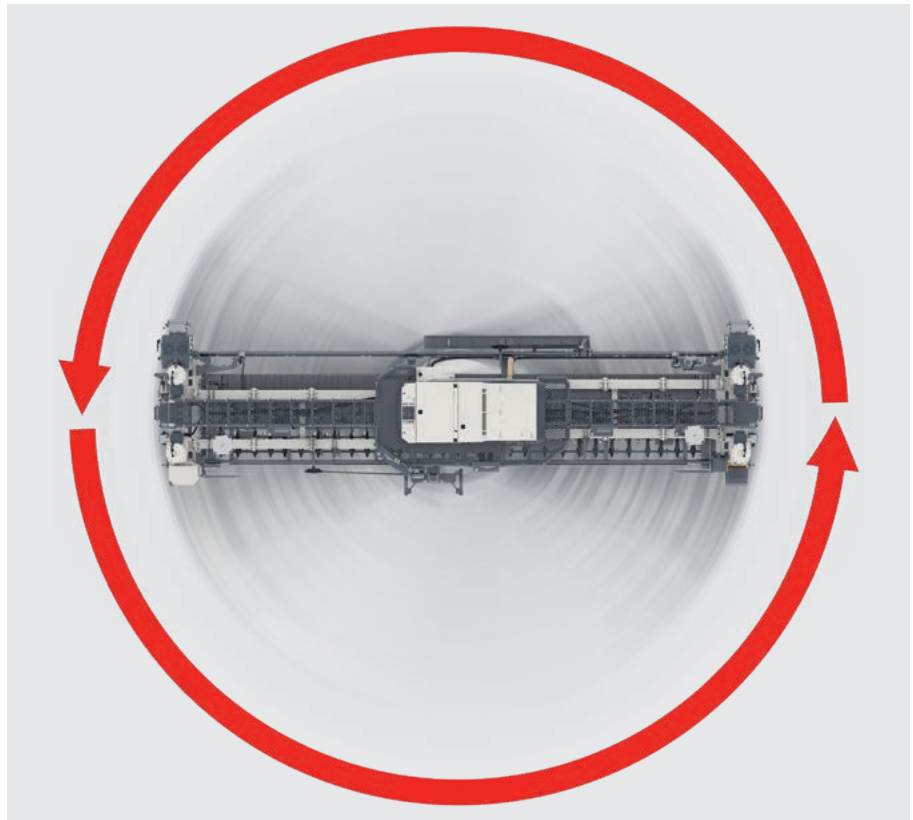
The integrated standard interface creates ideal conditions for the use of state-of-the-art 3D systems in concrete paving. Thorough acceptance procedures verifying compatibility with the 3D control systems of leading suppliers ensure safety of use.

TRIED-AND-TESTED SKID STEERING SYSTEM

The highly responsive skid steering system installed in the SP 102i ensures precise handling and highest concrete quality when paving in curves.

SPEED ADJUSTMENT

Computer-controlled speed adjustment of each track unit allows pinpoint adherence to specifications even when paving in bends.



Turning on its own axis: The two track units of the SP 102i rotate in opposite direction at the push of a button, enabling the slipform paver to turn on its own axis for maximum manoeuvrability.

Technical Specification

SP 102i

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Area of Application	
Inset application without crown profile	Paving width: 16 ft to 40 ft* ¹ Paving height: up to 18 in (450 mm)* ¹
Inset application with crown profile	Paving width: 16 ft to 40 ft* ¹ Paving height: up to 18 in (450 mm)* ¹
Concrete Spreading	
Spreader plow	Modularly extendable up to 40 ft
Paving Equipment	
Type 1310 wi paving mold (Removable wear sole, without crown profile function)	Modularly extendable up to 40 ft
Type 1310 wi paving mold (Removable wear sole, with or without crown profile function)	Modularly extendable up to 40 ft
Super smoother	Modularly extendable up to 40 ft
Vibrators and Circuits	
Hydraulic vibration	18 connectors (optional: 24 or 30)
Hydraulically powered vibrators	Bent / straight (D66)
Engine	
Engine manufacturer	Cummins
Type	L9 C-310
Cooling	Water
Number of cylinders	6
Rated power at 2,100 rpm	231 kW / 310 HP / 314 PS
Displacement	8.9 l (8,900 cm ³)
Fuel consumption, full load fuel consumption ² / ₃ load	16.5 gal / h (62.5 l / h) 11.0 gal / h (41.7 l / h)
Sound power level in accordance with EN 500-2, engine operator's platform	≤ 101 dB(A) ≥ 82 dB(A)
Emissions standards	US EPA Tier 4f
Electrical System	
Power supply	24 V DC

Tank Capacities	
Fuel	132 gal (500 l)
AdBlue® / DEF* ²	15 gal (57 l)
Hydraulic oil, hydraulic vibration	100 gal (380 l)
Water	145 gal + 145 gal (550 l + 550 l)
Driving Performance	
Advance speed while paving	0 to 16 ft / min (0 to 5 m / min)
Speed in driving gear	0 to 65 ft / min (0 to 20 m / min)
Crawler Units	
Number	2
Type B4: Dimensions (L x W x H)	11 ft 1 in x 20 in x 2 ft 5 in (3,380 x 500 x 748 mm)
Height Adjustment	
Hydraulic	3 ft 3 in (1,000 mm)
Crown Profile	
Variable adjustment range	At paving widths of 16 ft to 28 ft: max. 3% * ³ At paving widths of 28 ft to 40 ft: max. 2 % * ³
Transport dimensions (L x W x H)	
Paving width 16 ft: Machine including type 1310 wi paving mold, with spreader plow and super smoother	23 ft x 11 ft 10 in x 10 ft 6 in (7,000 x 3,600 x 3,200 mm)
Paving width 40 ft: Machine including type 1310 wi paving mold, with spreader plow and super smoother	46 ft 11 in x 11 ft 10 in x 10 ft 6 in (14,300 x 3,600 x 3,200 mm)
Weight Specifications	
Operating weight CE * ⁴ (with type 1310 wi paving mold), 16 ft	86,000 lbs (39,000 kg)
Machine weight * ⁵	55,000 lbs to 110,000 lbs (25,000 kg to 50,000 kg)

*¹ = Special paving widths, paving heights, and options available on request

*² = AdBlue® is a registered trademark of the German Association of the Automotive Industry (VDA)

*³ = Values within standard transport height; special dimensions on request

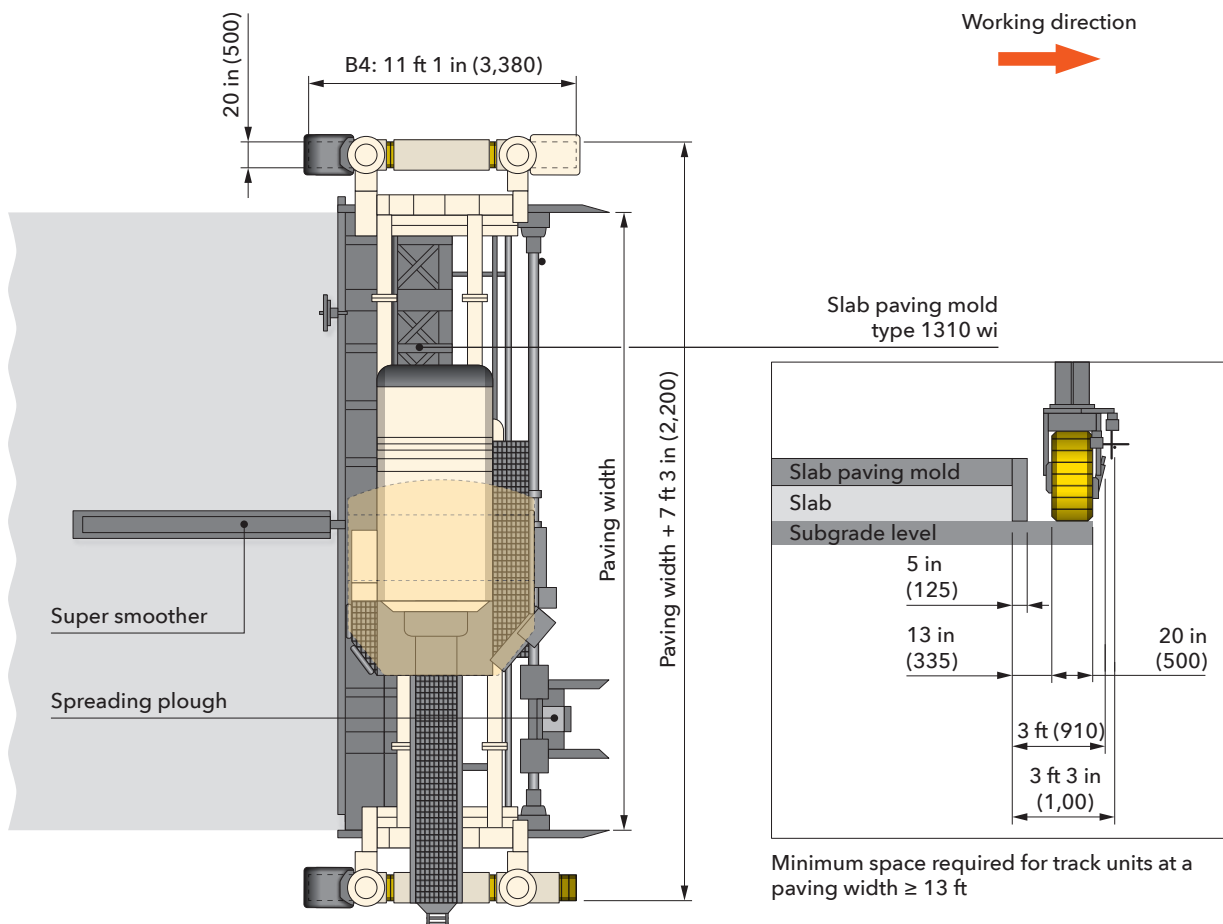
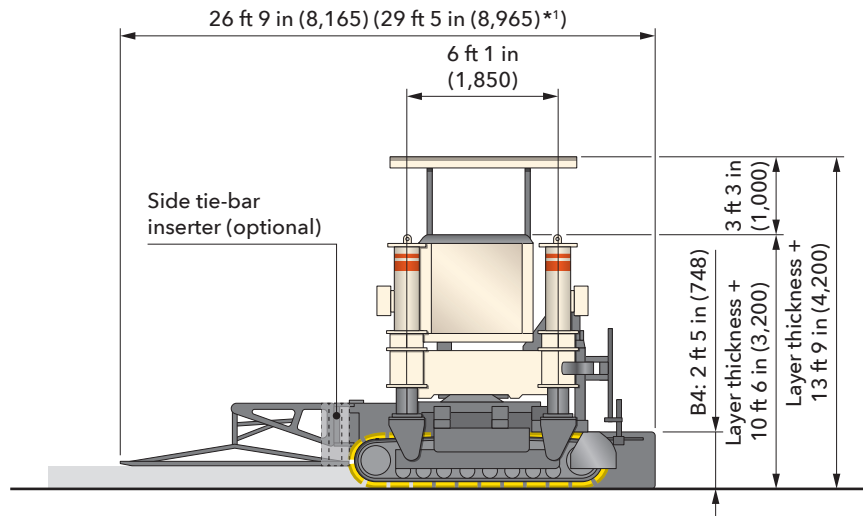
*⁴ = Machine weight, half-full tanks, vehicle tool kits, machine operator (165 lbs (75 kg)), excluding optional equipment

*⁵ = Weight specifications depend on the installed equipment and paving width

Dimensions

SP 102i

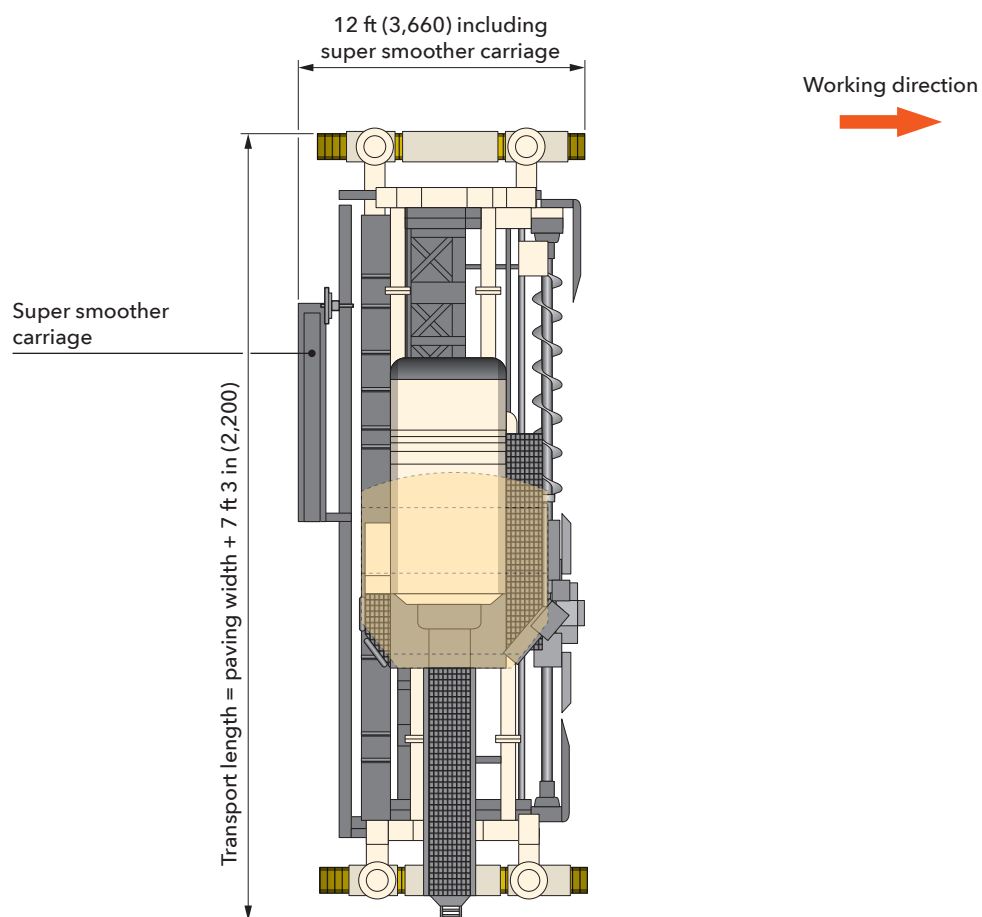
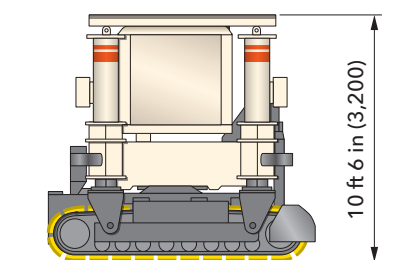
Paving situation: slipform paver SP 102i equipped with spreading plough, slab paving mold type 1310 wi and super smoother



Dimensions in American standard and mm

*1 = Including optional side tie-bar inserter

Transport situation: slipform paver SP 102i equipped with spreading plough, slab paving mold type 1310 wi and super smoother



Standard Equipment

SP 102i

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Basic Machine	
Hydraulic system including an generously dimensioned hydraulic oil tank and a pump transfer gearbox with four output shafts and the pumps required for the machine's basic equipment package	■
Cooling system with temperature-controlled fan speed	■
Electrical system (24 V)	■
Fuel tank 132 gal (500 l)	■
Main Frame and Height Adjustment	
Robust steel frame, incremental hydraulic telescoping on both sides by up to 9.00 ft, can also be optionally extended using fixed extension pieces	■
The machine frame is pre-fitted with multiple mounting points for the modular addition of a variety of equipment features	■
Four hydraulic leveling cylinders with a stroke of 3 ft 3 in (1.00 m)	■
Frame sections for continuous hydraulic telescoping to working widths of up to 22 ft 4 in (6.80 m), including extension elements	□
Crawler Units and Chassis Linkage	
Model with two B4 track units (8 rollers), fitted with polyurethane track pads	■
Machine control, leveling and steering	
WI-CONTROL - high-quality control system ensuring perfect interaction between all machine features	■
Error messages are displayed on the machine's control screen	■
The existing CAN-bus system can be expanded to customer specifications	■
ECO mode: performance-optimized engine management system for reduced diesel consumption and low noise emissions	■
Proportional electrohydraulic leveling and steering by means of a PLC system including four leveling sensors and two steering sensors	■
Sensor mounting brackets, adjustable in height and range	■
Vibration	
Hydraulic vibrator drive for max. 18 vibrators	□
10 curved vibrators D66, hydraulically driven	□

- = Standard equipment
- = Standard equipment, can be replaced with optional equipment if desired
- = Optional equipment

Concrete equipment for Slab Paving	
Paving mold series 1310 wi, without crown – basic width 16 ft	<input type="checkbox"/>
One-piece sideplates for paving molds series 1300 wi / 1310 wi	<input type="checkbox"/>
Flat inserts for the outer edges of the mold series 1310 wi	<input type="checkbox"/>
Operator's Platform	
Ergonomically designed operator's platform providing a perfect view of the paving process	<input checked="" type="checkbox"/>
Three control panels with clear, language-independent labeling for ergonomic operation	<input checked="" type="checkbox"/>
Control panel 1 for machine setup according to site requirements	<input checked="" type="checkbox"/>
Control panel 2 with multifunctional control screen providing the operator with all relevant machine parameters and allowing settings to be made via a menu	<input checked="" type="checkbox"/>
The control panel can be adjusted to all directions of travel and paving configurations	<input checked="" type="checkbox"/>
Control panel 3 for controlling the concrete equipment	<input checked="" type="checkbox"/>
Two control panels can be stored in the engine compartment; the third control panel can be protected against vandalism and weather by means of a lockable cover	<input checked="" type="checkbox"/>
Automatic recognition of each machine configuration provides easy orientation for the machine operator	<input checked="" type="checkbox"/>
Miscellaneous	
Electrically switchable pendulum axle (left / right / off) for paving with 3 height sensors / slope control sensors	<input checked="" type="checkbox"/>
Large tool kit in lockable tool box	<input checked="" type="checkbox"/>
Comprehensive safety package with EMERGENCY STOP switches	<input checked="" type="checkbox"/>
Pre-fitting for installing the WITOS FleetView control unit	<input checked="" type="checkbox"/>
Filling of the machine's hydraulic system with mineral hydraulic oil	<input checked="" type="checkbox"/>
Standard painting in RAL 9001 (cream)	<input type="checkbox"/>
WITOS FleetView – professional telematics solution for machine operation and service optimization	<input type="checkbox"/>
Lighting system including 4 halogen working lights, 24 V	<input type="checkbox"/>

☒ = Standard equipment
☐ = Standard equipment, can be replaced with optional equipment if desired
☐ = Optional equipment

Optional Equipment

SP 102i

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Main Frame and Height Adjustment	
Frame sections for continuous hydraulic telescoping to working widths up to 31 ft 2 in (9.50 m)	<input type="checkbox"/>
Frame sections for continuous hydraulic telescoping for working widths up to 40 ft (12.30 m)	<input type="checkbox"/>
Machine control, leveling and steering	
Cross-slope sensor for machine	<input type="checkbox"/>
Automatic crown adjustment	<input type="checkbox"/>
Two slab tracers	<input type="checkbox"/>
Four slab tracers	<input type="checkbox"/>
Control unit for manual track unit steering	<input type="checkbox"/>
Preliminary equipment for 3D leveling with Leica Topcon or Trimble	<input type="checkbox"/>
Additional slope sensors for 3D leveling	<input type="checkbox"/>
Concrete Spreading Equipment for Slab Paving	
Spreading plow - basic width 16 ft	<input type="checkbox"/>
Spreading plow - extension element 1.00 ft	<input type="checkbox"/>
Spreading plow - extension element 1.50 ft	<input type="checkbox"/>
Spreading plow - extension element 2.00 ft	<input type="checkbox"/>
Spreading plow - extension element 4.00 ft	<input type="checkbox"/>
Spreading plow - extension element 6.00 ft	<input type="checkbox"/>
Vibration	
Hydraulic vibrator drive for max. 24 vibrators	<input type="checkbox"/>
Hydraulic vibrator drive for max. 30 vibrators	<input type="checkbox"/>
Version without vibrators	<input type="checkbox"/>
Tamper bar with / without crown - basic width 16 ft	<input type="checkbox"/>
Curved vibrator D66, hydraulically driven	<input type="checkbox"/>
Tamper bar - extension element 1.00 ft	<input type="checkbox"/>
Tamper bar - extension element 1.50 ft	<input type="checkbox"/>
Tamper bar - extension element 2.00 ft	<input type="checkbox"/>
Tamper bar - extension element 4.00 ft	<input type="checkbox"/>
Tamper bar - extension element 6.00 ft	<input type="checkbox"/>
Concrete equipment for slab paving	
Split metering gate for paving molds with / without crown - basic width 16 ft	<input type="checkbox"/>
Automatic metering gate control for concrete paving mold	<input type="checkbox"/>
Split grout box auger with / without crown - basic width 16 ft	<input type="checkbox"/>
Paving mold series 1310 wi, with crown - basic width 16 ft	<input type="checkbox"/>
Split side plates for start of shift with paving molds series 1300 wi / 1310 wi	<input type="checkbox"/>
ESC "Edge Slump Control" inserts for the outer edges of the mold series 1310 wi	<input type="checkbox"/>
Super smoother - basic width 16 ft	<input type="checkbox"/>
1 side tie bar inserter for straight tie bars, max. $\varnothing \frac{3}{4}$ ", length 2.50 ft	<input type="checkbox"/>
2 side tie bar inserters for straight tie bars, max. $\varnothing \frac{3}{4}$ ", length 2.50 ft	<input type="checkbox"/>
Metering gate - extension element 1.00 ft	<input type="checkbox"/>
Metering gate - extension element 1.50 ft	<input type="checkbox"/>
Metering gate - extension element 2.00 ft	<input type="checkbox"/>
Metering gate - extension element 4.00 ft	<input type="checkbox"/>
Metering gate - extension element 6.00 ft	<input type="checkbox"/>

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Concrete equipment for slab paving	
Grout box auger – extension element 1.00 ft	<input type="checkbox"/>
Grout box auger – extension element 1.50 ft	<input type="checkbox"/>
Grout box auger – extension element 2.00 ft	<input type="checkbox"/>
Grout box auger – extension element 4.00 ft	<input type="checkbox"/>
Grout box auger – extension element 6.00 ft	<input type="checkbox"/>
Paving mold series 1310 wi – extension element 1.00 ft	<input type="checkbox"/>
Paving mold series 1310 wi – extension element 1.50 ft	<input type="checkbox"/>
Paving mold series 1310 wi – extension element 2.00 ft	<input type="checkbox"/>
Paving mold series 1310 wi – extension element 4.00 ft	<input type="checkbox"/>
Paving mold series 1310 wi – extension element 6.00 ft	<input type="checkbox"/>
Profile insert for series 1300 wi / 1310 wi	<input type="checkbox"/>
Super smoother – extension element 1.00 ft	<input type="checkbox"/>
Super smoother – extension element 1.50 ft	<input type="checkbox"/>
Super smoother – extension element 2.00 ft	<input type="checkbox"/>
Super smoother – extension element 4.00 ft	<input type="checkbox"/>
Super smoother – extension element 6.00 ft	<input type="checkbox"/>
Operator's Platform	
Weather canopy for operator's platform, hydraulically telescoping in height	<input type="checkbox"/>
Weather canopy for operator's platform, hydraulically telescoping in height, with LED lighting	<input type="checkbox"/>
Extension of walkway allowing the operator to pass from one side of the machine to the other, 31 ft (9.50 m)	<input type="checkbox"/>
Extension of walkway allowing the operator to pass from one side of the machine to the other, 40 ft (12.30 m)	<input type="checkbox"/>
Miscellaneous	
Standard painting in RAL 9001 (cream)	<input type="checkbox"/>
Painting in one special color (RAL)	<input type="checkbox"/>
Painting in two special colors (RAL)	<input type="checkbox"/>
Model without WITOS FleetView	<input type="checkbox"/>
Lighting system including 4 halogen working lights, 24 V	<input type="checkbox"/>
High-performance lighting system including 8 LED working lights, 24 V	<input type="checkbox"/>
Hydraulic high-pressure water cleaning system with 145 gal (549 l) plastic tank	<input type="checkbox"/>
Two hydraulic high-pressure water cleaning systems with two 145 gal (549 l) plastic tanks	<input type="checkbox"/>
Additional electrical water pump, 24 V, with 32 ft 10 in (10 m) hose and spray gun with handle	<input type="checkbox"/>
Self-leveling feature for transport mode	<input type="checkbox"/>
Rotating beacon, halogen 24 V, with magnetic base	<input type="checkbox"/>
Two flashing beacons, 24 V, with magnetic base	<input type="checkbox"/>
Two LED floodlights including power generator (230 V)	<input type="checkbox"/>
Two LED floodlights including power generator (110 V)	<input type="checkbox"/>
High-performance lighting system including 4 LED working lights, 24 V, for illuminating the compaction compartment	<input type="checkbox"/>
Two LED floodlights 24 V	<input type="checkbox"/>
Stringline tensioning system, complete with 3,280 ft (1,000 m) steel wire rope	<input type="checkbox"/>
Additional tensioning winch for stringline tensioning system	<input type="checkbox"/>
Stringline tensioning system, complete with 4 x 984 ft (4 x 300 m) nylon rope	<input type="checkbox"/>
Machine commissioning (day rate)	<input type="checkbox"/>
Export packaging	<input type="checkbox"/>

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