

# SLIPFORM PAVER FOR COST-EFFECTIVE, LARGE-SCALE CONCRETE PAVING



The inset slipform paver is the perfect choice for the cost-effective paving of large concrete surfaces ranging from 16 ft to 40 ft wide and 18 in (450 mm) thick.

The slipform paver can be easily adapted to any job site situation due to the machine frame that can be hydraulically telescoped lengthwise and mechanically telescoped sideways.

Standard-configuration with four track units on hydraulic swing legs that can be conveniently swung in for easier transportation and offer outstanding adaptability for all on-site situations.

Precise insertion of tie bars and dowels via a self-loading dowel bar inserter (optional) makes it possible to pave concrete that requires reinforcing steel.

The intelligent, electronic steering and control concept ensures precise handling of the four crawler units and thus precise concrete paving.



# **OVERVIEW OF HIGHLIGHTS**

Perfectly equipped

#### **MACHINE CONCEPT**

# 01 Rugged Machine Design

The machine's rugged design guarantees consistent, high-output concrete paving and precise paving results, even under difficult site conditions.

## 02 Fully Modular Machine Design

The machine's fully modular design means it is possible to flexibly modify, upgrade with new options, and adapt the machine to the specific job-site situation.

# OS Sophisticated Transport Concept

Compact dimensions and minimal time and effort needed to prepare the machine make loading easy and transport cost-effective. Depending on the configuration, the dowel bar inserter or oscillating beam, super smoother, and concrete spreader can remain mounted to the machine during transport.



#### **CONCRETE EQUIPMENT**

# 04 Highly Flexible Concrete Paving

The standard version of the slipform paver is capable of paving perfect and precise concrete surfaces from 16.0 ft to 40.0 ft wide and up to 18 in (450 mm) thick.

## 05 Tried-And-Tested Paving Mold

Compatible with the 1310 wi series of imperial inset paving molds and comes standard-equipped with a wear sole, tamper, grout box auger, and optional crown profile.

# Reinforcement Insertion Built into the Machine

A self-loading dowel bar inserter with fully automated dowel magazine, a tie bar inserter, and side tie bar inserter(s) are available on request.

# 07 Alternative Consolidation Technology

Depending on site requirements, the machine can be equipped with a hydraulic or electric vibrator drive. The machine comes standard with 24 hydraulic connections (optional: 30 or 36), and optionally with either 26 or 34 electrical connections.



#### **ENGINE TECHNOLOGY AND OPERATION**

#### 08 COST-EFFECTIVE ENGINE MANAGEMENT

The "ECO Mode" setting automatically adjusts engine power to the current performance requirements to ensure fuel-efficient diesel consumption and low noise emissions.

#### 09 STATE-OF-THE-ART ENGINE TECHNOLOGY

The SP 124 i features cutting-edge, high-performance engine technology (321 kW/430 HP/436 PS) that meets US EPA Tier 4f emissions standards.

#### 10 PERFECT ERGONOMICS AND HANDLING

The ergonomically designed operator's platform, the standardized, intuitive operating concept for all SP series' models, and exceptional visibility makes the job easier for the operator.

#### **CONTROL AND STEERING**

# 11 High-Precision Steering and Drive Systems

Intelligent steering and control systems for extremely smooth operation - even around tight curves - make high-precision concrete paving possible.

# Machine Control Systems Featuring Advanced Intelligence

WIRTGEN's efficient WITOS FleetView telematics system supports fleet management, position and status monitoring, as well as maintenance and diagnostic processes.

#### 13 Field-Proven 3D Interface

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





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TECHNICAL SPECIFICATIONS SP 124i				
Range of Applications				
Slab paving application without crown	Paving width: 16 ft to 40 ft <sup>1)</sup> Layer thickness: up to 18 in (450 mm) <sup>1)</sup>			
Slab paving application with crown	Paving width: 16 ft to 40 ft <sup>1)</sup> Layer thickness: up to 18 in (450 mm) <sup>1)</sup>			
Concrete Spreading Equipment				
Spreading plough	Modular extension to up to 40 ft			
Slab Paving Equipment				
Slab paving mold type 1310 wi (without wearing pan, without crown feature)	Modular extension to up to 40 ft			
Slab paving mold type 1310 wm (with wearing pan, with or without crown feature)	Modular extension to up to 40 ft			
Oscillating beam	Modular extension to up to 40 ft			
Super smoother	Modular extension to up to 40 ft			
Vibrators and Circuits				
Hydraulic vibration	24 connectors (optional: 30 or 36 connectors)			
Electric vibration	26 connectors (optional: 34 connectors)			
Hydraulically driven vibrators	Curved (D66)			
Electrically driven vibrators	Curved (D76)			
Engine				
Engine manufacturer	Cummins			
Туре	L9 C430			
Cooling	Water			
Number of cylinders	6			
Rated power at 2,100 rpm	321 kW / 430 HP / 436 PS			
Displacement	543 in <sup>3</sup> (8,900 cm <sup>3</sup> )			
Fuel consumption, full load   field mix <sup>2)</sup>	22.3 gal/h (84.6 l/h)   6.7 gal/h (25.4 l/h)			
Exhaust emission standards EU Stage 5				

TECHNICAL SPECIFICATIONS SP 124i	
Electrical System	
Voltage supply	24 V DC
Electric vibration	110 V AC 3~ / 200 Hz
Filling Capacities	
Fuel	174 gal (660 l)
AdBlue® / DEF <sup>3)</sup>	26 gal (100 l)
Hydraulic oil, electric vibration	79 gal (300 l)
Hydraulic oil, hydraulic vibration	172 gal (650 l)
Water	145 gal + 145 gal + 211 gal (550 l + 550 l + 800 l)
Driving Performance	
Paving speed	0 to 39 ft/min (0 to 12 m/min)
Travel speed	0 to 82 ft/min (0 to 25 m/min)
Track Units	
Number 4	
Type B4: Dimensions (L x B x H)	6 ft 10 in x 17 in x 2 ft 4 in (2,090 x 430 x 712 mm)
Height Adjustment	
Hydraulic	3 ft 3 in (1,000 mm)
Mechanical (hole pattern)	6 in (155 mm)
Crown	
Variable adjustment range	For paving widths from 16 ft to 28 ft: max. 3 $\%^{4)}$ For paving widths from 28 ft to 40 ft: max. 2 $\%^{4)}$
Transport Dimensions (L x W x H)	
Paving width 16 ft:  Machine with slab paving mold type 1310 wi, including spreading plough, oscillating beam and super smoother	37 ft 5 in x 11 ft 6 in x 10 ft 6 in (11,400 x 3,500 x 3,200 mm)
Paving width 40 ft: Machine with slab paving mold type 1310 wi, including spreading plough, oscillating beam and super smoother	61 ft 12 in x 11 ft 6 in x 10 ft 6 in (18,900 x 3,500 x 3,200 mm)
Machine weights	
Operating weight CE <sup>5)</sup>	105,822 lbs to 233,690 lbs (48,000 kg to 106,000 kg

<sup>1)</sup> Please consult factory for special paving widths, layer thicknesses and optional equipment features

<sup>&</sup>lt;sup>2)</sup> The reference value is based on statistically weighted values from experience gathered by WIRTGEN GmbH in the course of projects on construction sites around the world. The underlying fuel consumption figures originate from the engine manufacturers' engine control units. The actual, individual fuel consumption on a construction site depends on numerous different factors, for example, but not exclusively, machine usage (operator input, engine loading, etc.), the machine configuration (mold type, machine set-up width, dowel bar inserter, etc.), and the conditions on the construction site (paved material quantity, material properties, logistics, etc.).

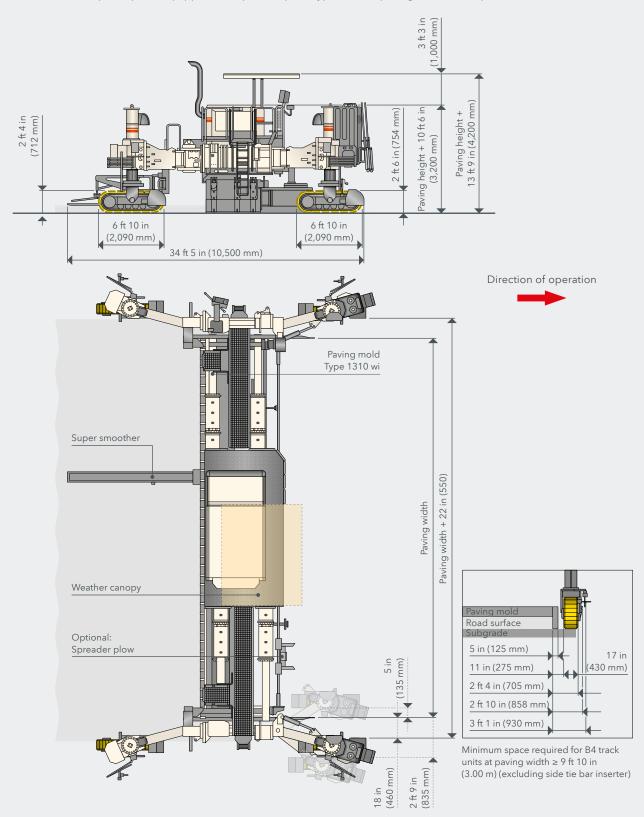
<sup>3)</sup> AdBlue® is a registered trademark of the Association of the Automotive Industry (Verband der Automobilindustrie e. V.; VDA)

<sup>&</sup>lt;sup>4)</sup> Values within standard transport height; please consult factory for special dimensions

<sup>&</sup>lt;sup>5)</sup> Weight of machine, half weight of all consumables, machine operator (75 kg), on-board tool kit, no optional equipment; weights depend on the actual equipment installed and the working width

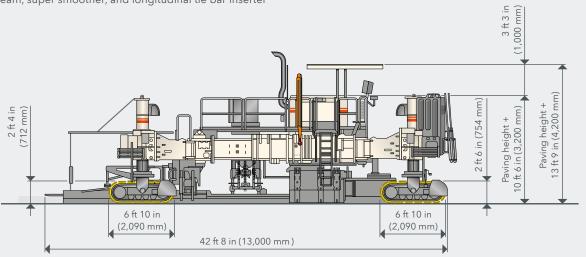
#### SIDE VIEW / TOP VIEW SP 124i

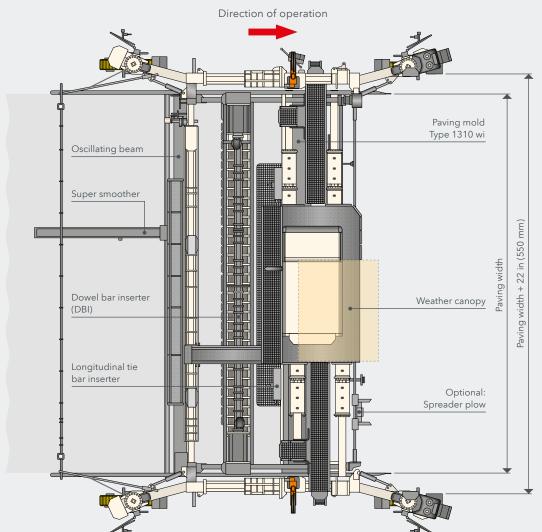
Paving situation: SP 124i slipform paver equipped with spreader plow, type 1310 wi paving mold, and super smoother



#### SIDE VIEW / TOP VIEW SP 124i

Paving situation: SP 124i slipform paver equipped with spreader plow, type 1310 wi paving mold, dowel bar inserter (DBI), oscillating beam, super smoother, and longitudinal tie bar inserter





Basic Machine	
> Fuel tank, 175 gal (660 l)	
> Electrical system (24 V)	
> Cooling system with temperature-controlled fan speed	
> 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	-
Main Frame and Height Adjustment	
> Frame connections on four hydraulic pivoting legs for flexible adaptation to site requirements	
> Heavy-duty design for accommodating telescoping elements, machine frame telescoping continuously to both sides for accommodating paving molds between the track units from 14 ft to 31 ft (optional: up to 40 ft) in width	-
> Heavy-duty steel frame telescoping continuously by a total of 7 ft 3 in on both sides; the telescopic box can optionally be extended by up to $2 \times 12$ ft 4 in using fixed-width expansion pieces	
> The machine frame is pre-fitted with multiple mounting points for the modular addition of a variety of equipment features	
> Mechanical telescopic unit used to extend the machine frame longitudinally in order to accommodate additional options (DBI, longitudinal joint tie bar inserters)	
> Frame elements for mechanical telescoping in increments to working widths of up to 31 ft 2 in	
Crawler Units and Chassis Linkage	
> Four height-adjustable track units with hydraulic pivoting legs, including cylinder steering	
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	
> Four hydraulic leveling cylinders with a stroke of 3 ft 3 in (1.00 m)	
Vibration	
> Hydraulic vibrator drive for max. 24 vibrators	
> 12 curved vibrators D66, hydraulically driven	
Concrete Equipment for Slab Paving	
> Paving mold series 1310 wi, without crown - basic width 16 ft	
> One-piece sideplates for paving molds series 1300 wi / 1310 wi	
> Flat inserts for the outer edges of the mold series 1310 wi	

# **STANDARD EQUIPMENT SP 124i Operator's Platform** > Ergonomically designed operator's platform providing a perfect view of the paving process > Three control panels with clear, language-independent labeling for ergonomic operation > Control panel 1 for machine setup according to site requirements > Control panel 2 with multifunctional control screen providing the operator with all relevant machine parameters and allowing settings to be made via a menu > Control panel 3 for controlling the concrete equipment > Control panels 1 and 3 can be adjusted to all directions of travel and paving configurations > 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 > Automatic recognition of each machine configuration provides easy orientation for the machine operator Miscellaneous > Paving Plus package: pivot angle display, speed indicator and fully digital Ackermann steering > Large tool kit in lockable tool box, including a torque multiplier and torque wrench > Comprehensive safety package with EMERGENCY STOP switches > Pre-fitting for installing the WITOS FleetView control unit > Filling of the machine's hydraulic system with mineral hydraulic oil > Standard painting in RAL 9001 (cream) > WITOS - professional telematics solution for machine operation and service optimization > Lighting system including 4 halogen working lights, 24 V

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 $<sup>\</sup>blacksquare$  = Standard equipment, can be replaced with optional equipment if desired

<sup>=</sup> Optional equipment

OPTIONAL EQUIPMENT SP 124i	
Main Frame and Height Adjustment	
> Chassis components for mechanical telescoping in increments to working widths of up to 40 ft	
Crawler Units and Chassis Linkage	
> Four height-adjustable track units with hydraulic pivoting legs, including hydraulic rotational drives	
Machine Control, Leveling and Steering	
> Self-leveling feature for transport mode	
> Additional control console for track unit adjustment	
> Two slab tracers	
> Four slab tracers	
> Control unit for manual track unit steering	
> Pre-fitting for 3D leveling	
> Gateway for external 3D-System	
Concrete Spreading Equipment for Slab Paving	
> Spreading plow - basic width 16 ft	
> Split grout box auger with / without crown - basic width 16 ft	
> Screw-on tube extension elements for basic widths up to 20 ft (6.25 m)	
> Spreading plow - extension element 23 ft (7.0 m) to 31 ft (9.5 m) and 31 ft (9.5 m) to 40 ft (12 m)	
> Grout box auger - extension element 1 ft	
> Grout box auger - extension element 1.50 ft	
> Grout box auger - extension element 2 ft	
> Grout box auger - extension element 4 ft	
> Grout box auger - extension element 6 ft	
Vibration	
> Hydraulic vibrator drive for max. 30 vibrators	
> Hydraulic vibrator drive for max. 36 vibrators	
> Electric vibrator drive with 60-kVA generator for max. 26 vibrators	
> Electric vibrator drive with 60-kVA generator for max. 34 vibrators	
> 12 curved vibrators D76, electrically driven	
> Tamper bar with / without crown - basic width 16 ft	
> Curved vibrator D66, hydraulically driven	
> Curved vibrator D76, electrically driven	
> Tamper bar - extension element 1 ft	
> Tamper bar - extension element 1.50 ft	
> Tamper bar - extension element 2 ft	
> Tamper bar - extension element 4 ft	
> Tamper bar - extension element 6 ft	

OPTIONAL EQUIPMENT SP 124i	
Concrete Equipment for Slab Paving	
> Split metering gate for paving molds with / without crown - basic width 16 ft	
> Automatic metering gate control for concrete paving mold	
> Metering gate - extension element 1 ft	
> Metering gate - extension element 1.50 ft	
> Metering gate - extension element 2 ft	
> Metering gate - extension element 4 ft	
> Metering gate - extension element 6 ft	
> Paving mold series 1310 wi, with crown - basic width 16 ft	
> Two-piece side plates for start of shift with paving molds series 1300 wi / 1310 wi	
> ESC "Edge Slump Control" inserts for the outer edges of the mold series 1310 wi	
> Paving mold series 1310 wi - extension element 1 ft	
> Paving mold series 1310 wi - extension element 1.50 ft	
> Paving mold series 1310 wi - extension element 2 ft	
> Paving mold series 1310 wi - extension element 4 ft	
> Paving mold series 1310 wi - extension element 6 ft	
> Profile insert for series 1300 wi / 1310 wi	
> Automatic dowel bar inserter (DBI) for use without crown - basic width 16 ft	
> Automatic dowel bar inserter (DBI) for use with crown - basic width 16 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 16 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 18 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 22 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 26 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 30 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 34 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 38 ft	
> Base group for dowel bar inserter (DBI) for paving width up to 40 ft	
> Dowel bar inserter (DBI) - extension element 1 ft	
> Dowel bar inserter (DBI) - extension element 1.50 ft	
> Dowel bar inserter (DBI) - extension element 2 ft	
> Dowel bar inserter (DBI) - extension element 4 ft	
> Dowel bar inserter (DBI) - extension element 6 ft	
> Load brackets as modification aid for altering the width of the dowel bar inserter (DBI)	
> DBI self-loading device including a diesel-powered hydraulic unit	
> DBI self-loading device	

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

OPTIONAL EQUIPMENT SP 124 i	
Concrete Equipment for Slab Paving	
> Oscillating beam without crown - basic width 16 ft	
> Oscillating beam with / without crown - basic width 16 ft	
> Oscillating beam - extension element 1 ft	
> Oscillating beam - extension element 1.50 ft	
> Oscillating beam - extension element 2 ft	
> Oscillating beam - extension element 4 ft	
> Oscillating beam - extension element 6 ft	
> Super smoother - basic width 16 ft	
> Super smoother - extension element 1 ft	
> Super smoother - extension element 1.50 ft	
> Super smoother - extension element 2 ft	
> Super smoother - extension element 4 ft	
> Super smoother - extension element 6 ft	
> Super smoother - extension element 10 ft	
> 1 side tie bar inserter for straight tie bars, max. ø ³/₄", length 2.50 ft	
$>$ 2 side tie bar inserters for straight tie bars, max. ø $^3/_4$ ", length 2.50 ft	
Operator's Platform	
> Weather canopy for operator's platform, hydraulically telescoping in height, with LED lighting	

OPTIONAL EQUIPMENT SP 124 i	
Miscellaneous	
> Painting in one special color (RAL)	
> Painting in two special colors (RAL)	
> Model without WITOS	
> High-performance lighting system including 8 LED working lights, 24 V	
> Hydraulic high-pressure water cleaning system with 145 gal (550 l) plastic tank	
> Two hydraulic high-pressure water cleaning systems with two 145 gal (550 l) plastic tanks	
> Additional electrical water pump, 24 V, with 32 ft 10 in (10 m) hose and spray gun with handle	
> Rotating beacon, halogen 24 V, with magnetic base	
> Two flashing beacons, 24 V, with magnetic base	
> Automatic crown adjustment	
> Radio remote control used to adjust the height of the strike-off wall	
> Camera system consisting of 1 camera and 1 screen, expandable to up to 6 cameras	
> Additional camera as an extension to an existing camera system	
> Two LED floodlights including power generator (230 V)	
> Two LED floodlights including power generator (110 V)	
> High-performance lighting system including 4 LED working lights, 24 V, for illuminating the compaction compartment	
> Two LED floodlights 24 V	
> 230 volt power generator, hydraulically driven, rated power of 4 kW	
> 110 volt power generator, hydraulically driven, rated power of 4 kW	
> One hydraulically driven crane system	
> Two hydraulically driven crane systems	
> Stringline tensioning system, complete with 3,280 ft (1,000 m) steel wire rope	
> Additional tensioning winch for stringline tensioning system	
> Stringline tensioning system, complete with 4 x 984 ft (4 x 300 m) nylon rope	
> Machine commissioning (day rate)	
> Export packaging	

= Standard	equipment
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<sup>=</sup> Standard equipment
= Standard equipment, can be replaced with optional equipment if desired
= Optional equipment





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For further information, please scan the code.