A WIRTGEN GROUP COMPANY

WIRTGEN

Economical paving of 4.0-m to 12.0-m wide concrete slabs.

Slipform Paver SP 1200

Outstanding features of the SP 1200 slipform paver

1 | TELESCOPING MACHINE FRAME

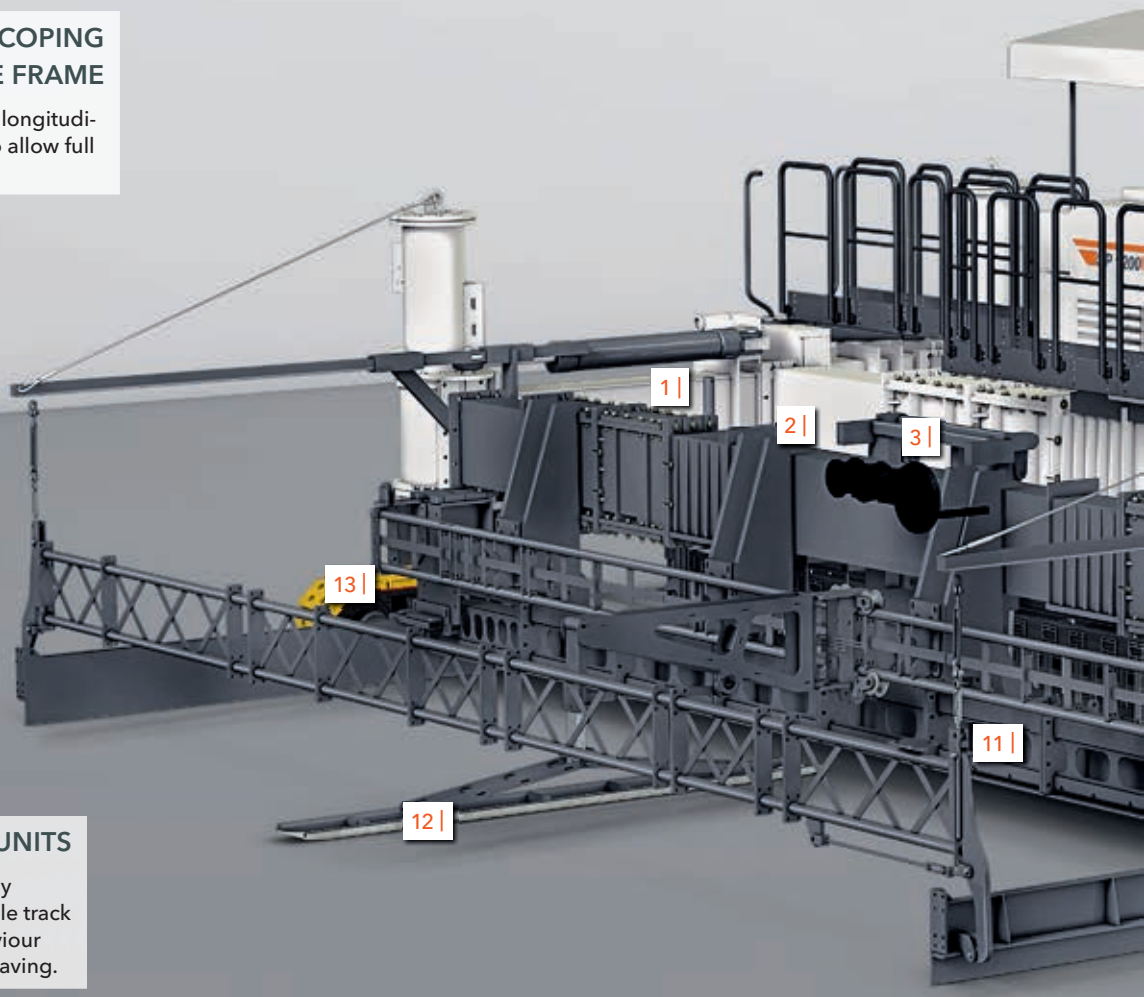
Machine frame telescoping in longitudinal and transverse direction to allow full adjustment to site conditions.

2 | SELF-LOADING FEATURE

Hydraulic module for self-loading of the dowel bar inserter, tie bar inserter and finishing equipment.

3 | LONGITUDINAL JOINT TIE BAR INSERTER

Automated insertion of longitudinal joint tie bars to prevent the slabs from drifting apart.



13 | TRACK UNITS

Hydraulically driven, separately height-adjustable and steerable track units for precise driving behaviour and high-precision concrete paving.

12 | SUPER SMOOTHER

Super smoother for a perfectly smooth surface finish.

11 | OSCILLATING BEAM

Eccentrically driven oscillating beam to remove any irregularities in the concrete surface.

4 | OPERATOR'S PLATFORM

Ergonomically designed, walk-through operator's platform for non-tiring, productive working.

5 | POWER UNIT

High-powered, fuel-efficient diesel engine for concrete paving in the optimum performance and torque ranges .

6 | CONCRETE SPREADING EQUIPMENT

Spreading plough for even distribution of the freshly delivered concrete in front of the inset paving mould.

7 | VIBRATORS

Electrically driven vibrators for reliable concrete compaction.

8 | INSET PAVING MOULD

Inset paving mould suitable for mounting between the track units, underneath the machine.

10 | SIDE TIE BAR INSERTER

Automated insertion of side tie bars to enable the paving of adjacent concrete slabs.

9 | DOWEL BAR INSERTER

Automated insertion of dowel bars to maintain the surface levels of adjacent concrete slabs.


WIRTGE

Fully focused

on top performance.

ROAD TRANSPORT IS INCREASING CONTINUOUSLY. TECHNOLOGICAL DEVELOPMENT IS FORGING AHEAD AT AN EVER FASTER PACE. OFFERING YOU MORE OPPORTUNITIES – ALSO IN CONCRETE ROAD CONSTRUCTION. WE ARE A KEY PLAYER IN DRIVING THIS DEVELOPMENT WITH PIONEERING TECHNOLOGIES. WITH THE SP 1200 SLIPFORM PAVER. A MOBILE ROAD CONSTRUCTION PLANT. EXPERTISE IN HIGHLY AUTOMATED CONCRETE PAVING. FOR DURABLE ROADS OF EXCELLENT DIMENSIONAL STABILITY. THE SP 1200 – PREDESTINED FOR TOP PERFORMANCE.

1 |

Concrete pavements of high quality produced at low cost

EFFICIENCY, HIGH QUALITY, FLEXIBILITY

The innovative SP 1200 slipform paver sets new standards for the perfect paving of concrete slabs at widths of up to 12.0 m. The mobile road construction plant produces high-quality, highly durable pavements that are unrivalled in terms of production costs. Ease of operation and automated processes guarantee highly precise, homogeneous working results. The outstanding economic efficiency of the SP 1200 is based on a flexible machine concept with modular extension options, exceptional ease of maintenance and minimum time required for machine modifications.

It is really not surprising, therefore, that the SP 1200 pays for itself quickly by offering an extremely wide range of applications. The most extraordinary highlight is the paver's smart self-loading option: this feature allows convenient loading of the machine within an extremely short period of time without the use of expensive loading cranes.

1 | *The SP 1200 produces high-quality concrete pavements with economic efficiency.*

2 | *The slipform paver's state-of-the-art design concept guarantees high daily production rates.*

Automated functions ensure consistently high pavement quality

LOW LABOUR REQUIREMENTS

The SP 1200 is distinctive for its high level of automation and reliable engineering. The spreading plough distributes the freshly delivered concrete evenly across the full paving width in a first step, followed by the mould which slipforms the new slab. Electrically driven high-frequency vibrators compact the concrete during the paving operation. Depending on requirements, the SP 1200 inserts dowel bars, central tie bars and side tie bars into the freshly paved concrete at precisely the specified intervals. The oscillating beam and super smoother then produce a perfectly even concrete surface. To put it briefly: the paver's high level of automation optimizes the overall process, thus enabling the operator to fully focus on monitoring the paving operation.

WIRTGEN additionally offers texture curing machines which give the surface a specified texture and then apply a dispersion to improve the pavement's skid resistance.

1 | *Controlled via stringline, the SP 1200 guarantees accurate final results.*

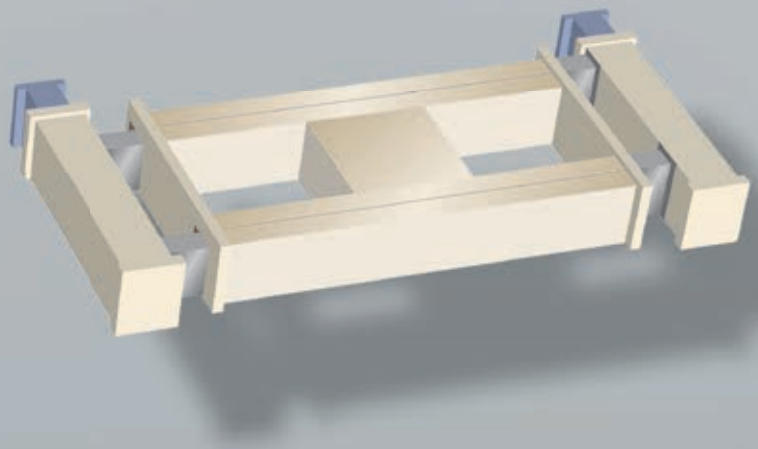
2 | *The spreading plough distributes the concrete evenly across the full paving width.*

3 | *The machine's automated functions ensure a smooth flow of the paving process.*

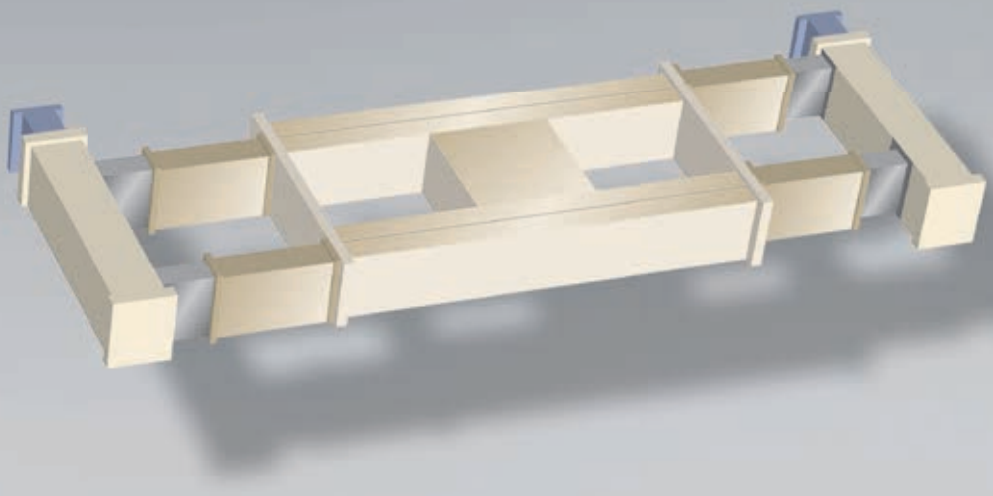
4 | *A texture curing machine applies a broom or burlap drag finish on the concrete slab while simultaneously spraying a curing compound.*

Modular paving width turns the SP 1200 into a multipurpose machine

SP 1200 MAIN FRAME SET UP FOR A TOTAL WORKING WIDTH FROM 4.0 M TO 8.0 M – RETRACTED OR FULLY TELESCOPED

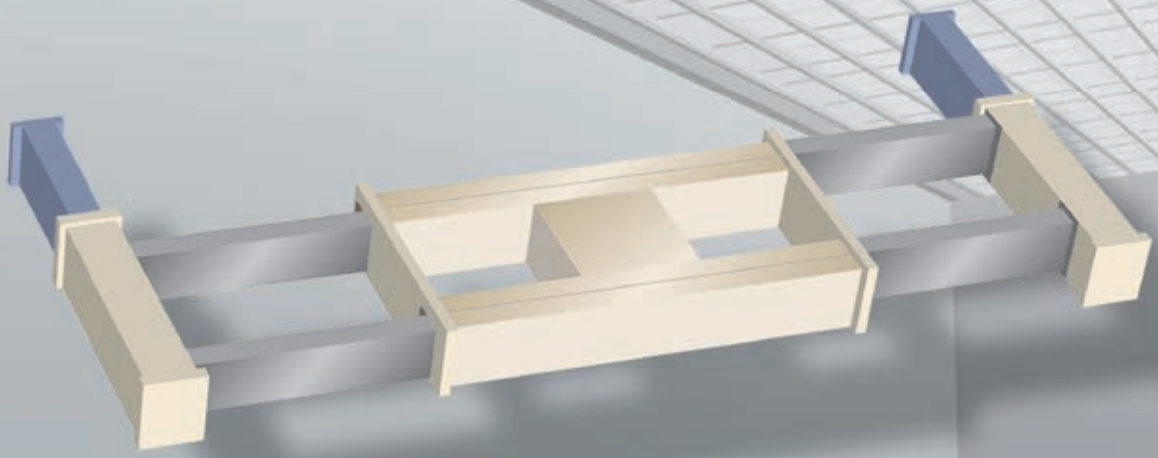


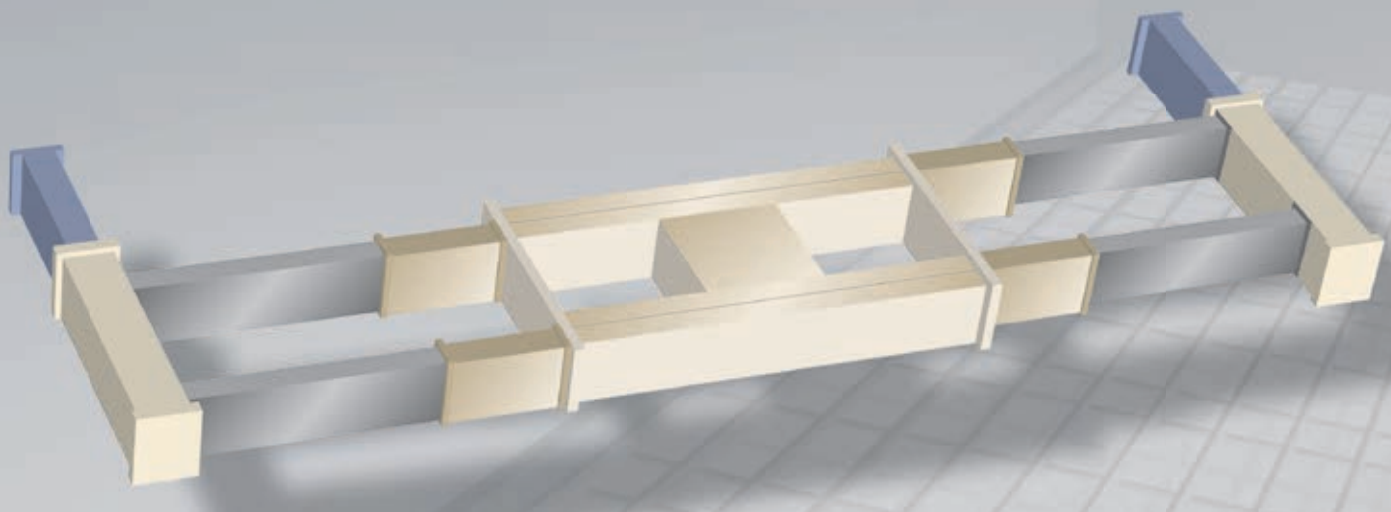
SP 1200 MAIN FRAME WITH SECTIONAL ELEMENTS SET UP FOR A MAXIMUM WORKING WIDTH FROM 8.0 M TO 12.0 M – RETRACTED OR FULLY TELESCOPED



FLEXIBILITY FOR A WIDE RANGE OF APPLICATIONS

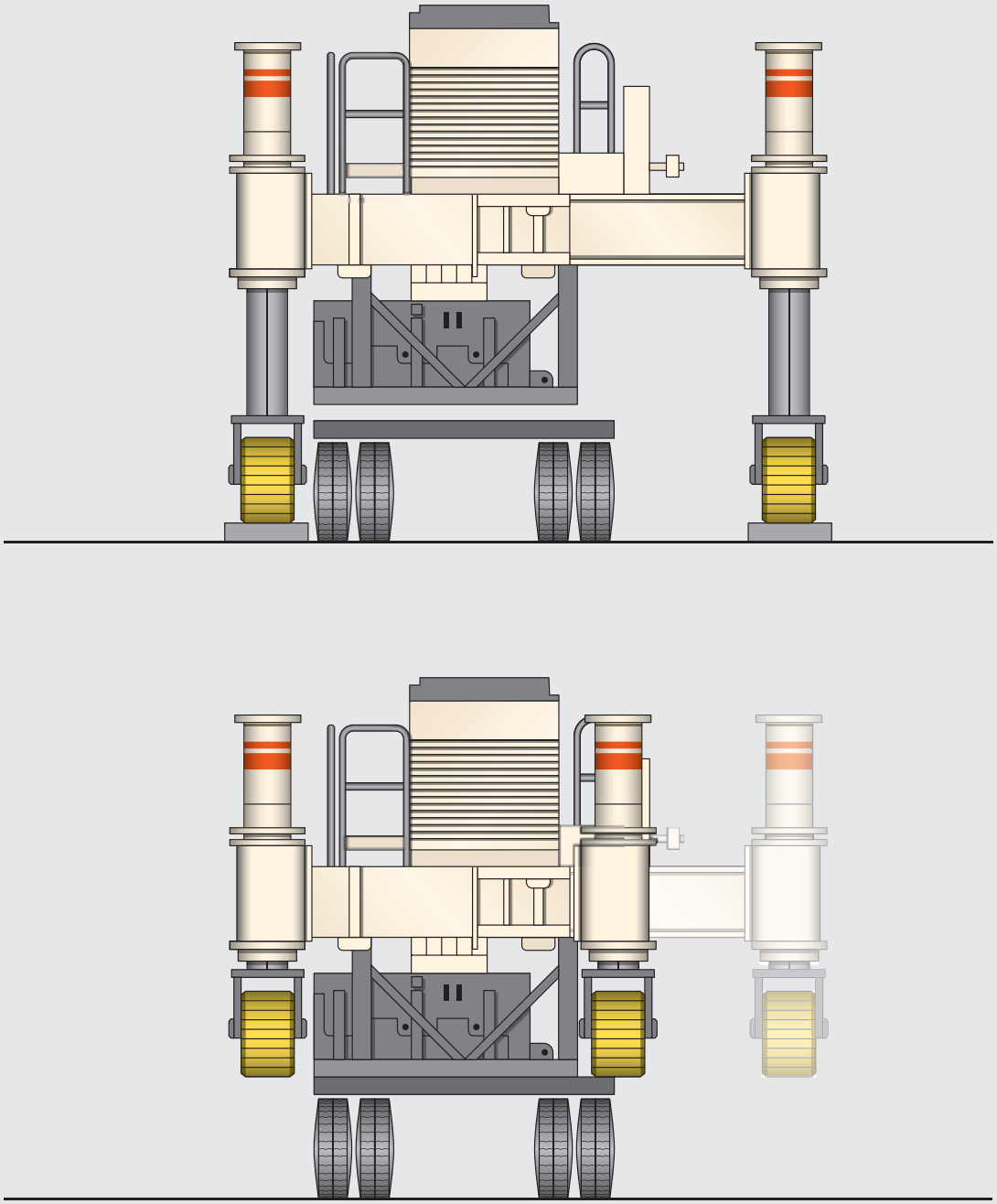
The field-proven SP 1200 slipform paver meets all requirements when it comes to flexibility in application. Its hydraulically telescoping machine frame enables paving widths between 4.0 m and 8.0 m with the basic equipment package. The wide range of concrete paving applications is broadened even further by means of optional extension elements. The system's modular design then permits paving widths of up to 12.0 m. Converting the SP 1200 to a different paving width doesn't take long: ease of modification guarantees that the highly versatile paver will be ready for the next job in no time at all. The paver offers a maximum paving thickness of 450 mm. Both the modules for inserting the dowel bars, central tie bars and side tie bars and the number of vibrators are adjusted to the specified application in a few simple steps. The concrete paving kit, which is of modular design, allows the production of a central crown at a maximum transverse slope of 3%.





Smart self-loading feature

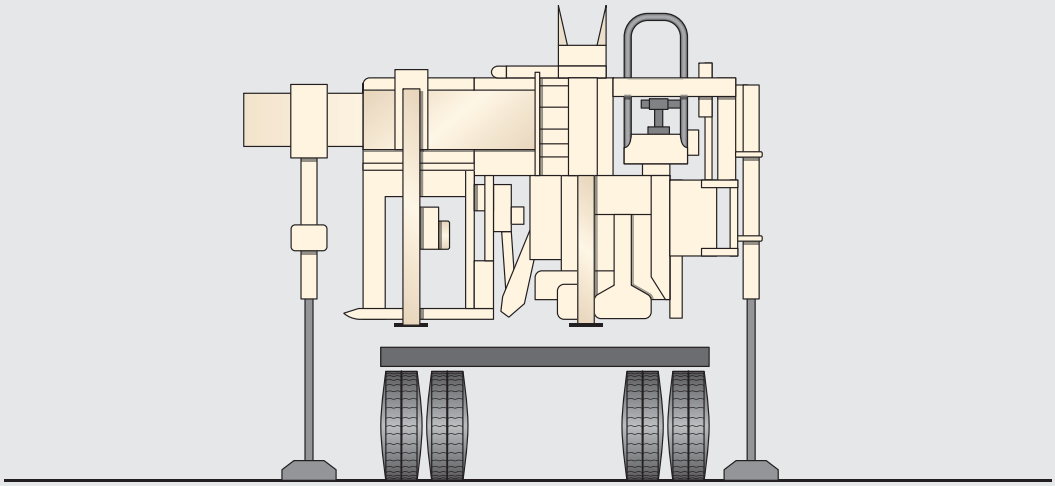
LOADING EXAMPLE: MACHINE

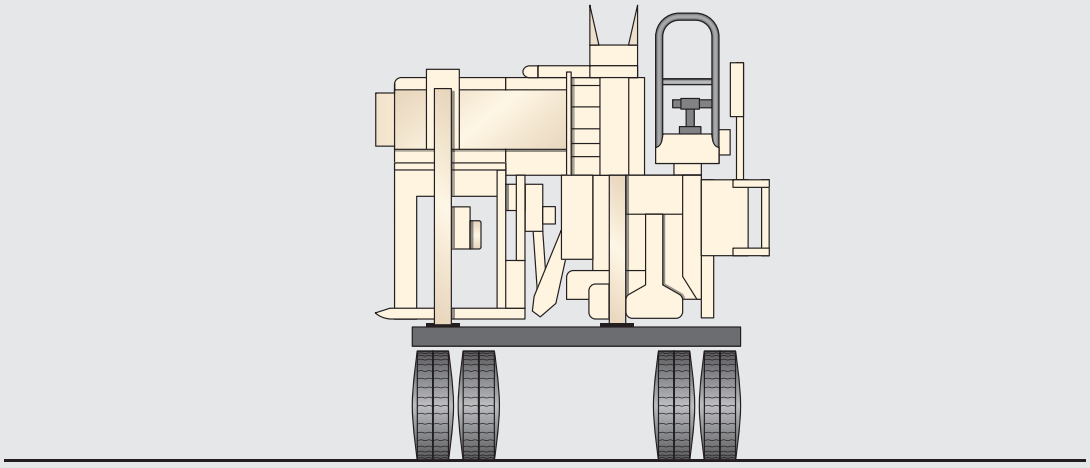


MAXIMUM CUSTOMER BENEFIT

Real-life usability is an important part of WIRTGEN's philosophy. The SP 1200 provides evidence to that effect with its innovative self-loading technology. This feature enables the machine to conveniently lower itself onto a waiting flatbed truck. In addition, the machine's transport dimensions can be reduced significantly by retracting the hydraulically operated telescoping frame. Quick loading and unloading of the mobile slipform paver allows for fast transportation between job sites. Preparing the height-adjustable loading unit – which comprises the dowel bar inserter, tie bar inserter and finishing equipment – for transport does not require the use of expensive loading cranes. Prior to being disconnected from the main frame, the loading unit is lowered onto the flatbed truck. As soon as the machine frame has been removed, the loading unit is ready for transport.

LOADING EXAMPLE: DOWEL BAR INSERTER, TIE BAR INSERTER AND FINISHING EQUIPMENT (LOADING UNIT)





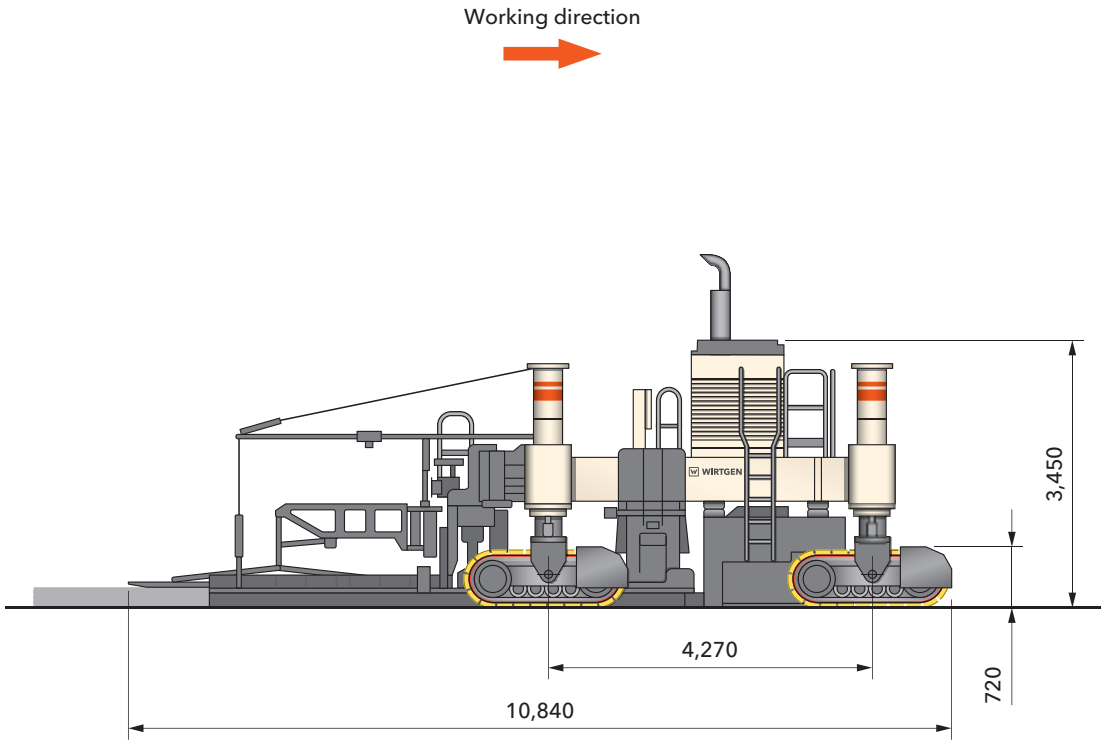
Technical specification

	SP 1200
Range of applications	Slab paving
Concrete spreading	
Spreading plough for working width	4,000 – 12,000 mm
Slab paving equipment	
Working width	4,000 – 12,000 mm *1
Paving thickness	0 – 450 mm *1
Transverse camber adjustment	0 – 3%
Dowel bar inserter	
Working width	4,000 – 12,000 mm *2
Diameter of dowel bars	20 – 40 mm *2
Dowel bar length	450 – 600 mm *2
Central tie bar inserter	
Diameter of tie bars	20 – 40 mm *3
Tie bar length	400 – 1,200 mm *3
Side tie bar inserter	
Diameter of tie bars	20 – 40 mm *3
Tie bar length	400 – 800 mm *3
Oscillating beam	
Working width	4,000 – 12,000 mm
Super smoother	
Working width	4,000 – 12,000 mm
Vibration	
Connectors for electric vibration	24, can be extended to 36 (option)
Number of electric vibrators, curved	6, can be extended to 36 (option)
High-frequency generator	80 kVA
Engine	
Engine manufacturer	Cummins
Type	QSC-8.3 C-300
Cooling	Water
Number of cylinders	6
Rated power at 2,100 min^{-1}	224 kW / 300 HP / 305 PS
Displacement	8,300 cm^3
Fuel consumption, full load	61 l / h
Fuel consumption, $^2/_3$ load	40 l / h
Emission standards	EC Stage 3a / US Tier 3
Electrical system	24 V

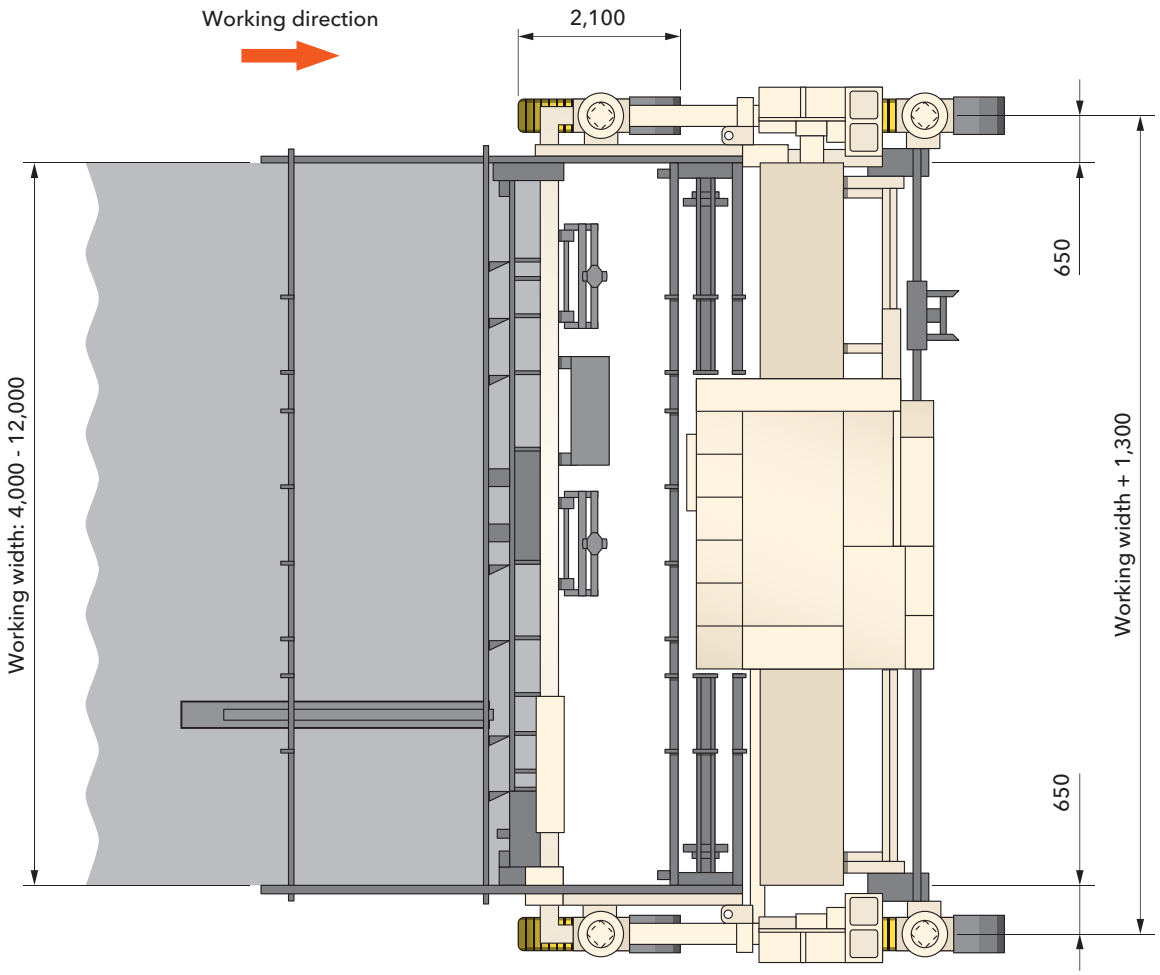
	SP 1200
Filling capacities	
Fuel tank	420 l
Hydraulic oil tank	305 l
Water tank	1,100 l
Driving characteristics	
Operating speed	0–5.9 m/min
Travel speed	0–23.5 m/min
Track units	
Number	4
Pivoting angle	±90°
Dimensions (L x W x H)	2,100 x 430 x 720 mm
Height adjustment of machine	
Max. hydraulic height adjustment	1,000 mm
Transport dimensions (L x W x H)	
Machine with slab paving mould, with spreading plough, min.	7,500 x 3,500 x 3,250 mm
Machine with slab paving mould, with spreading plough, max.	15,500 x 3,500 x 3,250 mm
Machine weights*4	
Operating weight CE*5 (including concrete spreading equipment, mould, oscillating beam and super smoother, excluding dowel bar inserter), working width 9.0 m	66,000 kg
Operating weight CE*5 (including concrete spreading equipment, mould, oscillating beam and super smoother, dowel bar inserter and tie bar inserter), working width 9.0 m	74,000 kg
Operating weight CE*5 (including concrete spreading equipment, mould, oscillating beam and super smoother, excluding dowel bar inserter), working width 12.0 m	69,000 kg
Operating weight CE*5 (including concrete spreading equipment, mould, oscillating beam and super smoother, including tie bar inserter), working width 12.0 m	78,000 kg

*1 = Please consult factory for other special applications
*2 = Applicable for the range of dowel bar dimensions specified; for any other dimensions, please consult factory; the dowel bar inserters will be customized in accordance with pre-selected customer requirements
*3 = Applicable for the range of tie bar dimensions specified; for any other dimensions, please consult factory; the longitudinal joint tie bar and side tie bar inserters will be customized in accordance with pre-selected customer requirements
*4 = Weights depend on the machine's range of equipment and working width
*5 = Weight of machine with half-full water tank, half-full fuel tank, driver (75 kg) and on-board tools

Dimensions



Slipform paver SP 1200 equipped with dowel bar inserter (DBI)
Dimensions in mm



Slipform paver SP 1200 equipped with dowel bar inserter (DBI)
Dimensions in mm

Standard equipment

Base machine	
420 l fuel tank	■
305 l hydraulic oil tank	■
Electrical system (24 V)	■
Separate hydraulic oil cooler	■
Main transmission with three output shafts	■
Two hydraulic pumps controlled by servo valve, closed circuit, for the advance drive (2 independent circuits)	■
A Hydraulic pump controlled by servo valve, closed circuit, for driving the spreader plough	■
A hydraulic pump controlled by servo valve, closed circuit, for driving the high-frequency generator	■
A pressure-controlled pump, open circuit, for all cylinder functions	■
A geared pump for the oil cooler fan	■
High frequency generator, 80 kVA, 110 V, 200 Hz, with hydraulic drive motor, for max. 36 vibrators for concrete compacting and 32 vibrators for DBI and TBI	■
Main frame and height adjustment	
In robust configuration, double-sided infinitely variable telescoping for holding paving moulds between the crawler units from 4 m to 8 m wide	■
Paving moulds up to 12 m working width can be mounted by attaching additional frame extension elements	■
Chassis unit and chassis unit connections	
Four hydraulically driven crawler units, 2.075 m long with 0.43 m wide PU track pads, transmission ration 1:305, hydraulic motor with two speed ranges	■
Infinitely variable paving sped from 0 - 5.5 m/min.	■
Infinitely variable travelling speed from 0 - 22 m/min.	■
Four levelling cylinders with 0.95 m stroke	■

■ = Standard equipment
▩ = Standard equipment, replaceable with optional equipment
□ = Optional equipment

Machine control and levelling and steering	
Digital control system with LCD display which displays all necessary information for the user on a menu and allows parameter settings, e.g. free choice of languages (D / GB / F / E / NL)	■
Proportional electrohydraulic levelling and steering by PLC system including four (4) levelling sensors, two (2) steering sensors	■
Sensor mountings, adjustable in height and range	■
Concrete spreading for road surface	
Spreader plough - 4 m	□
Vibration	
6x bended vibrators (D76), electrically driven	□
Concrete equipment for carriageway paving	
Version without metering gate control	□
Paving mould, base 4 m	□
Oscillating beam 4 m	□
Super smoother 4 m	□
Others	
Lighting package with 5 halogen headlights 24V	■
Paint standard cream white RAL 9001	□

■ = Standard equipment
■ = Standard equipment, replaceable with optional equipment
□ = Optional equipment

Optional equipment

Chassis unit and chassis unit connections	
Frame extension elements for working widths 8 m - 12 m	☐
Machine control and levelling and steering	
Slab tracer, 2 pcs	☐
Slab tracer, 4 pcs	☐
Concrete spreading for road surface	
Spreader plough - extension element 0.25 m	☐
Spreader plough - extension element 0.5 m	☐
Spreader plough - extension element 1 m	☐
Spreader plough - extension element 1.5 m	☐
Version without spreader unit	☐
Vibration	
Bent vibrator D76, electrically driven	☐
Concrete equipment for carriageway paving	
Automatic metering gate control for concrete paving mould	☐
Paving mould, base 4 m - with crown profile	☐
Paving mould - extension element 0.25 m	☐
Paving mould - extension element 0.5 m	☐
Paving mould - extension element 1.0 m	☐
Paving mould - extension element 1.5 m	☐
Version without paving moulds	☐
Trailing sideplates depth extensions for 0.35 m to 0.4 m thickness	☐
Oscillating beam 4 m, with crown profile	☐
Oscillating beam - extension element 0.25 m	☐
Oscillating beam - extension element 0.5 m	☐
Oscillating beam - extension element 1 m	☐
Oscillating beam - extension element 1.5 m	☐
Version without oscillating beam	☐
Super smoother - extension element 0.25 m	☐
Super smoother - extension element 0.50 m	☐
Super smoother - extension element 1 m	☐
Super smoother - extension element 1.5 m	☐
Version without super smoother	☐
Electrical control for dowel bar inserter (DBI) and tie-bar inserter (TBI)	☐

■ = Standard equipment
▣ = Standard equipment, replaceable with optional equipment
☐ = Optional equipment

Concrete equipment for carriageway paving	
Automatic dowel inserter without crown profile, basic 4.0 m	☐
Automatic dowel inserter with crown profile, basic 4.0 m	☐
Dowel inserter (DBI) - extension element 0.25 m	☐
Dowel inserter (DBI) - extension element 0.5 m	☐
Dowel inserter (DBI) - extension element 1.00 m	☐
Dowel inserter (DBI) - extension element 1.50 m	☐
Base group for dowel bar inserter (DBI) for paving width 4.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 5.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 6.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 7.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 8.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 9.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 10.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 11.00 m	☐
Base group for dowel bar inserter (DBI) for paving width 12.00 m	☐
Electrical control for dowel bar inserter (DBI) and tie-bar inserter (TBI)	☐
Longitudinal tie-bar inserter, max. ø 12 - 25 mm, length 800 - 1,200 mm	☐
Side tie-bar inserter for straight tie-bar, max. ø 35 mm, length 800 mm	☐
Operator´s stand	
Weather canopy for operator's stand	☐
Others	
Paint in one special colour (RAL)	☐
Paint in two special colours (RAL)	☐
Paint in maximum two special colours with substructure in special colour (RAL)	☐
High-pressure cleaning system, 800 l	☐
Electric cabinet ventilation	☐
4 halogen headlights 110 V, 500 W	☐
Crane system, hydraulic drive	☐
Wire tensioning system, complete with 1,000 m steel wire	☐
Second tensioning winch for levelling the machine using two wire ropes	☐
Daily rate for startup	☐
Export packing	☐

■ = Standard equipment
▒ = Standard equipment, replaceable with optional equipment
☐ = Optional equipment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