

SP 1800
Stationary concrete pump



Concrete output max. 95 m³/h
Pressure on concrete max. 108 bar
Engine output 90 - 129 kW
Machine weight 5,100 - 5,400 kg
11,250 - 11,900 lb



## The SP 1800 from SCHWING

# Reliable versatility.

On construction sites around the world, the SP 1800 from SCHWING has been a central component of concrete logistics for decades. Proven technologies, such as the robust and easy-to-clean ROCK concrete valve and the SCHWING hydraulic components, guarantee high reliability, a strong output rate and low maintenance costs. In combination with the customer-oriented SCHWING service, the SP 1800 ensures more safety and efficiency in concrete pumping. The SP 1800 from SCHWING: manufactured in Germany. Operating worldwide.

# SP1800E

#### Cooling system

**ROCK concrete valve** 

In comparison with other concrete valves, the ROCK shows significantly lower wear

due to its intelligent design. It is also quick

to clean and is demonstrably easier to

maintain. Advantage for the SP 1800:

shorter servicing times, higher availability and lower maintenance costs.

The heat development in the open hydraulic system of the SP 1800 is significantly lower than in closed systems. In connection with the large-volume hydraulic tank and the high-powered cooling system, the output rate of the SP 1800 thus remains constantly high even in the case of extreme external temperatures.





The EcoClean procedure allows the placement of all concrete inside the pipeline for high-rise pumping. As such, material and disposal costs are reduced and the efficiency of the concrete pouring is increased. All stationary concrete pumps from SCHWING are prepared for the EcoClean procedure ex works.

The clear operating structure and large-format colour display of the machine control allow for easy and intuitive operation of the SP 1800. Machine data, operating modes and selected settings can be retrieved quickly and various parameters can be changed. The integrated diagnosis system supports safe operation and alerts the operator to the maintenance intervals.



#### Hydraulic system

Key hydraulic components of the SP 1800, such as the valve block and the differential cylinders, are developed and manufactured by SCHWING. Their generous dimensions and the open SCHWING hydraulic system guarantee a low-loss conversion of the engine power into the output rate. Result: the renowned high energy efficiency of SCHWING concrete pumps.



#### Maintenance

**SP 1800 E** 

**SP 1800** Stationary concrete pump

The easy accessibility of the most important maintenance points of the SP 1800 reduces the time needed for daily maintenance to a minimum. The AdBlue/DEF container can be swiveled to the side for quick change of the pistons (SP 1800 D Stage V/Tier 4f). Instead of fixed changing intervals, the hydraulic oil is changed based on the results of the oil analysis to be carried out by the owner. This reduces the maintenance costs and protects the environment.





#### Motors for every need

Due to its reliability and energy efficiency, the available drives of the SP 1800 ensure high productivity and low operating costs.

#### Diesel engines

- 115 kW power, Stage II/Tier 2 exhaust emission standard
- 126 kW power, Stage IIIA/Tier 3 exhaust emission standard
- 129 kW power, Stage V/Tier 4f exhaust emission standard, diesel particulate filter and SCR system

#### **Electric motors**

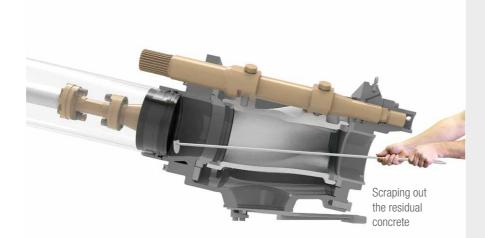
- 90 kW power, 50 Hz, efficiency class IE 3
- 108 kW power, 60 Hz, efficiency class IE 3

### **SP 1800** Stationary concrete pump

## The ROCK

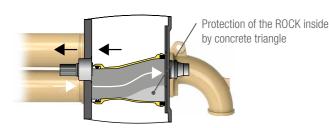
#### Faster clean with less water.

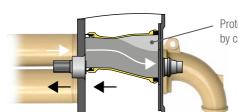
Due to its straight design, in comparison to other concrete valves, the ROCK valve is easier and quicker to clean. It also provides a direct view into the delivery cylinder and of the pumping pistons. The pump kit can therefore be cleaned easily and conveniently within just two strokes. This saves water and reduces the time needed for cleaning.



#### Intelligent wear protection.

The wear in the concrete valve is particularly high as the concrete is fed into the outlet at high pressure. In order to minimize this wear, at the most heavily loaded point of the ROCK concrete does not rub on steel, but rather on concrete. This is because the intelligent design of the ROCK leads to the formation of a concrete triangle after each shift. Protected by this concrete layer, the ROCK has a significantly longer service life than other concrete valves. For noticeably more profit per m<sup>3</sup>.





Protection of the ROCK inside by concrete triangle

#### Easy maintenance.

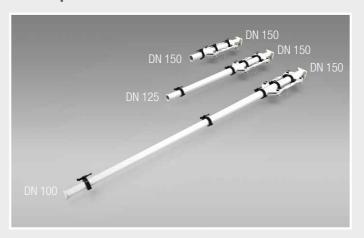
The ROCK valve not only has a significantly longer service life than other concrete valves, it is also easier to maintain. After removing the housing cover, the wear parts are easily accessible and can be replaced quickly and safely. Time-consuming adjustment work is not required after replacement. And the number of wearing parts at 15 with the ROCK valve is just half as high as with other concrete valves. The maintenance of the ROCK valve: simple, fast and safe.





# **Options**

#### **Outlet options**



For the connection of the pipeline chosen for the project (DN 100, DN 125 or DN 150) to the outlet of the SP 1800 (DN 150), suitable output options are available.

#### **Remote controls**



Cable remote control with 30 m cable

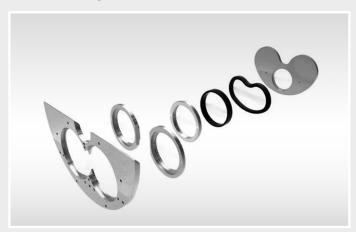
Radio remote control

#### **Hydraulic control unit**



Components, such as a shut-off valve, can be easily operated by the SP 1800 (with up to 210 bar and up to 30 l/min) via the hydraulic control unit.

#### Carbide wear parts



Due to the hardened surface, the carbide wear parts have a significantly longer service life than standard wear parts. As such, the maintenance effort and service costs are reduced, whilst the availability of the SP 1800 is increased.

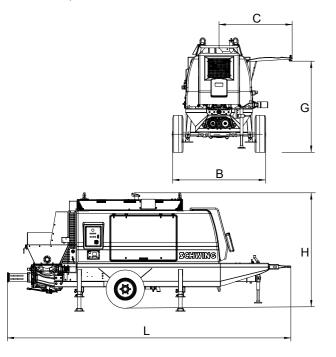
More options	
Concrete vibrator on the grid	
Water pump	
Standard equipment	
Electrically driven ventilator	Emergency-off button at the hopper
Four lashing eyes at the bottom	Batteries with 170 Ah
Four attachment points at the top at the bottom	Supporting leg
Central greasing strip at the hopper	Pressure gauge for hydraulic pressure

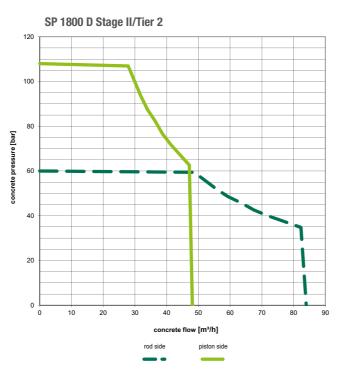
## **SP 1800** Stationary concrete pump

# **Technical data**

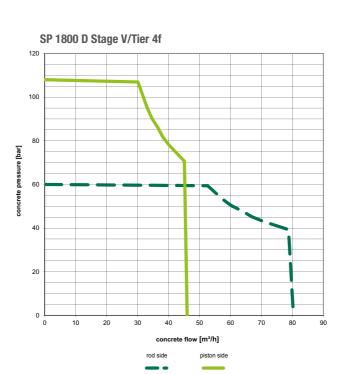
Designation		SP 1800 D Stage II/Tier 2		SP 1800 D Stage IIIA/Tier 3	SP 1800 D	SP 1800 D Stage V/Tier 4f	
Weight	kg / lb	5,400 / 11,900		5,300 / 11,700	5,400 / 11,900		
Length (L)	mm	5,950		5,950	5,950	5,950	
Height (H)	mm	2,550		2,570	2,330		
Width (B)	mm	1,950		1,950	1,950		
Width (C)	mm	1,532		1,532	1,530	1,530	
Height (G)	mm	1,880		1,880	1,910		
Performance		rod-sided	piston-sided		rod-sided	piston-sided	
Pump kit	<b>.</b>	P1620		······	P1620		
Delivery cylinders	mm	200 x 1,600			200 x 1,600	200 x 1,600	
Concrete output max.	m³/hr	84	48			46	
Pressure on concrete max.	bar	60	108		60	108	
Stroke rate max.	1/min.	28	16		27	15	
Concrete valve	<b>.</b>	L-ROCK			L-ROCK		
Hydraulic system	<b>.</b>						
Design	<b>.</b>	open system					
Hydraulic tank		400					
Motors	<b>.</b>	••••					
Engine type	<b>.</b>	Diesel Deutz BF4M 1013EC		Diesel Deutz TCD2013 L04	Diesel CAT	C4.4	
Engine power	kW	115		126	129		
Emission standard	···•	Stage II/Tier 2		Stage IIIA/Tier 3	Stage V/Tier	4f	
Emission control system	<b>.</b>	-		-	DPF + SCR	DPF + SCR	
Fuel tank	1	250		250	250	250	

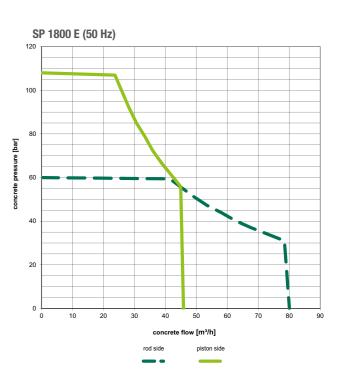
Maximum concrete output and maximum pressure on concrete cannot be achieved simultaneously. DPF: Diesel particulate filter; SCR: selective catalytic reduction.
Performance specifications are maximum theoretical values.





Designation	•••••	SP 1800 E (50 Hz)		SP 1800 E (60 Hz)		
Weight	kg	5,100 / 11,250		5,100 / 11,250		
Length (L)	mm	5,950		5,950		
Height (H)	mm	2,080		2,080		
Width (B)	mm	1,950		1,950		
Width (C)	mm	1,532		1,532		
Height (G)	mm	1,880		1,880		
Performance		rod-sided	piston-sided	rod-sided	piston-sided	
Pump kit	· • · · · · · · · · · · · · · · · · · ·	P1620		P1620		
Delivery cylinders	mm	200 x 1,600		200 x 1,600		
Concrete output max.	m³/h	80	46	95	54	
Pressure on concrete max.	bar	60	108	60	108	
Stroke rate max.	1/min.	26	15	31	18	
Concrete valve		L-ROCK		L-ROCK		
Hydraulic system						
Design		open system				
Hydraulic tank	l	400				
Motors						
Engine type		Electric motor		Electric motor		
Engine power	kW	90		108		
Frequenz	Hz	50		60		
Efficiency class		IE3		IE3		





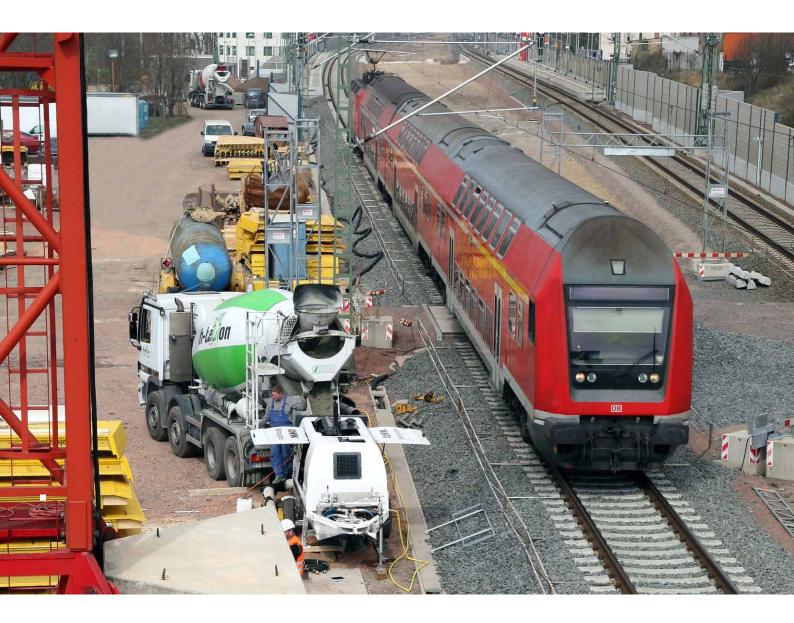




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SCHWING stationary concrete pumps. Performance and safety at all levels.

