

SP 1800

Stationary concrete pump



Concrete output	max.	95 m ³ /hr
Pressure on concrete	max.	108 bar
Engine output		90 - 129 kW
Machine weight		5,100 - 5,400 kg
		11,250 - 11,900 lb



RECORD BREAKING ENGINEERING

The SP 1800 from SCHWING

Reliable versatility.

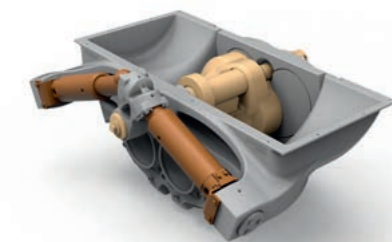
SP 1800 Stationary concrete pump

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.



SP 1800 E

Cooling system
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.



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.



SP 1800 D Stage IIIB/Tier 4i

Maintenance
The easy accessibility of the most important maintenance points of the SP 1800 reduces the time needed for daily maintenance to a minimum. 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 IIIB/Tier 4i exhaust emission standard, diesel particulate filter

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

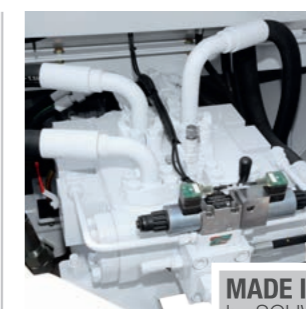


The EcoClean procedure allows the placement of all concrete inside the pipeline for high-rise pumping. As such, material and disposal costs are reduced and the efficiency of the concrete pouring is increased. All stationary concrete pumps from SCHWING are prepared for the EcoClean procedure ex works.

Operation
The most important functions of the SP 1800 can be carried out via the clearly-structured control panel. During the pumping operation, the machine is controlled via the standard cable remote control with 30 m long cables. Optionally, the SP 1800 can also be operated via radio control.



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.

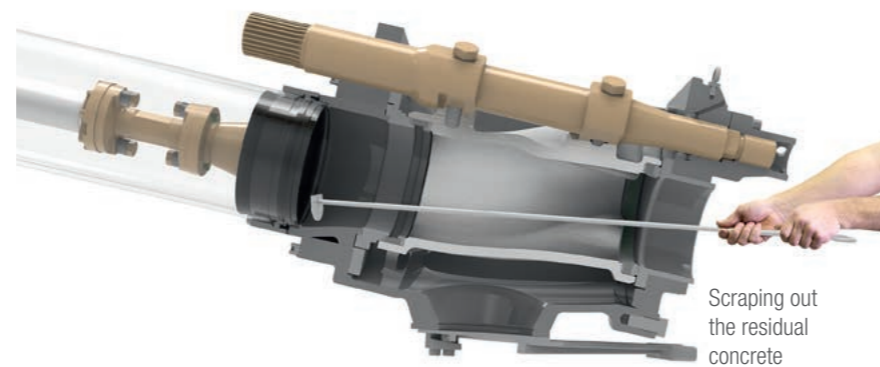


MADE IN GERMANY
by SCHWING-Stetter

The ROCK

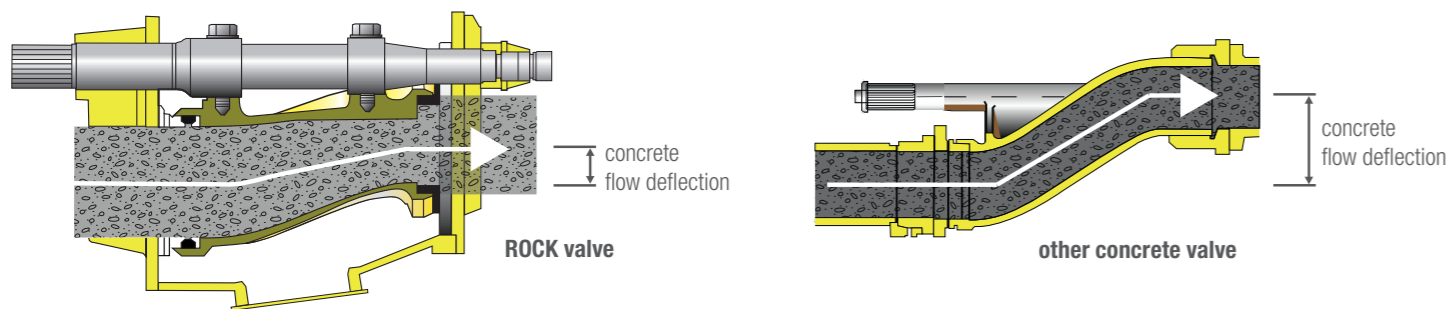
Faster clean with less water.

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.



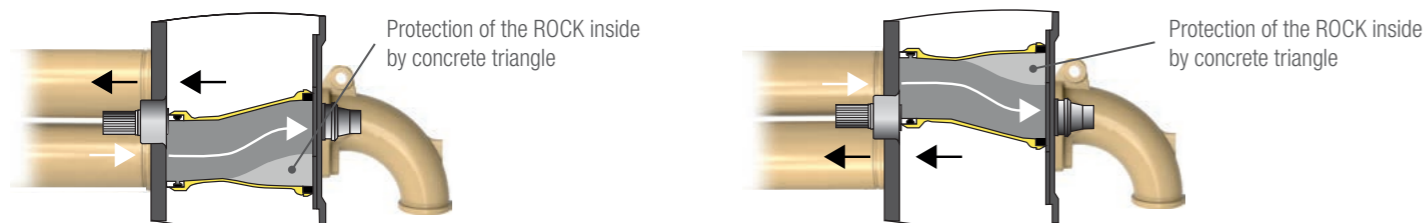
Optimum geometry for low-friction concrete flow.

The smaller the concrete flow is diverted in the concrete valve, the lower the pressure loss and wear at this point. And that is precisely the case with the ROCK valve: its optimum geometry ensures a straight and thus extremely low-friction concrete flow out of the delivery cylinder into the outlet. This reduces wear in the concrete valve and minimises the energy required for the drive. It also ensures the lowest maintenance and operating costs.



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 m³.



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.

Water pump



Once the concreting work is finished, the water pump facilitates cleaning of the SP 1800 with up to 80 l/min and up to 20 bar of water pressure.

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
- Radio remote control

Standard equipment

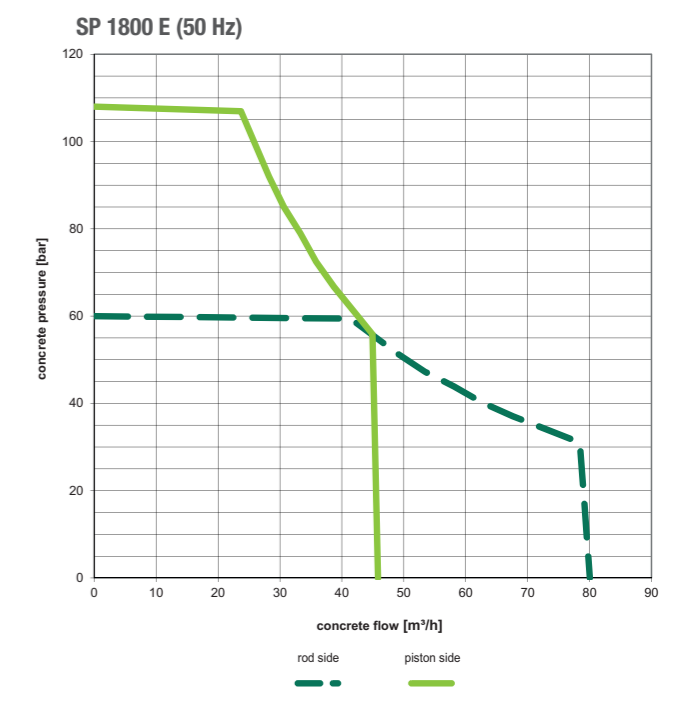
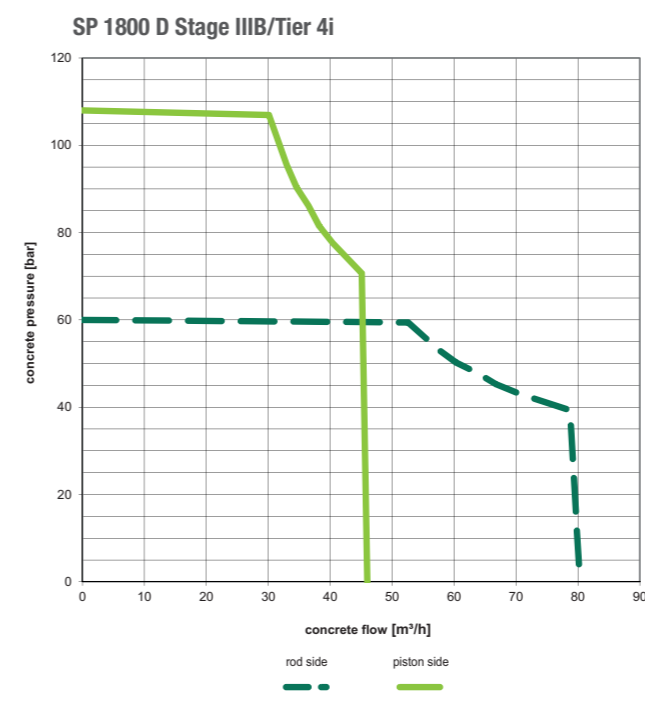
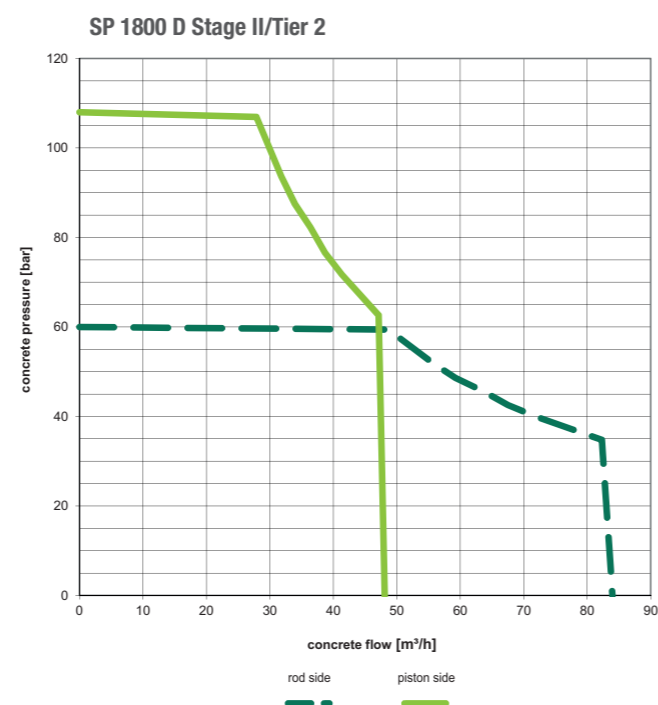
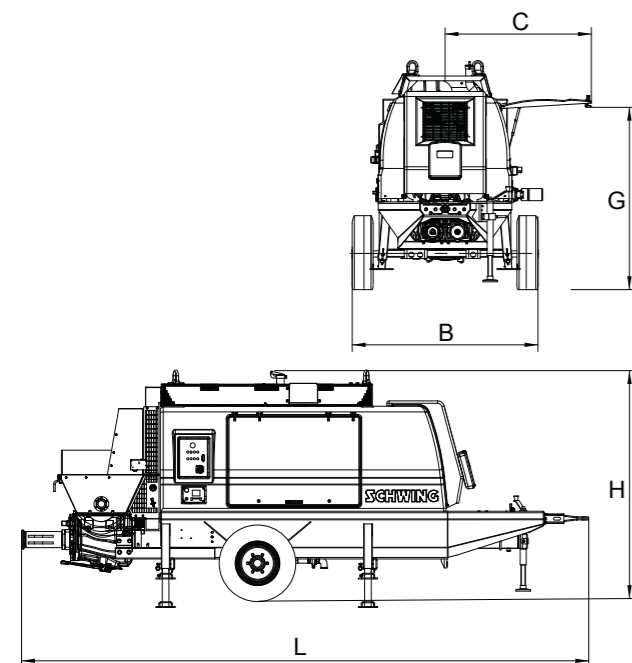
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|--------------------------------------|---------------------------------------|
| electrically driven ventilator | Emergency-off button at the hopper |
| Cable remote control with 30 m cable | Batteries with 170 Ah |
| Four lashing eyes at the bottom | Supporting leg |
| Four attachment points at the top | Pressure gauge for hydraulic pressure |
| Central greasing strip at the hopper | |

Technical data

Designation		SP 1800 D Stage II/Tier 2	SP 1800 D Stage IIIA/Tier 3	SP 1800 D Stage IIIB/Tier 4i	
Weight	kg / lb	5,400 / 11,900	5,300 / 11,700	5,400 / 11,900	
Length (L)	mm	5,942	5,942	5,942	
Height (H)	mm	2,553	2,570	2,390	
Width (B)	mm	1,950	1,950	1,950	
Width (C)	mm	1,532	1,532	1,532	
Height (G)	mm	1,880	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.	m ³ /hr	84	48	80	46
Pressure on concrete max.	bar	60	108	60	108
Stroke rate max.	1/min.	28	16	27	15
Concrete valve		L-ROCK		L-ROCK	
Hydraulic system					
Design		open system			
Hydraulic tank	l	400			
Motors					
Engine type		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 IIIB/Tier 4i	
Emission control system		-	-	DPF	
Fuel tank	l	250	250	250	

Designation		SP 1800 E (50 Hz)	SP 1800 E (60 Hz)		
Weight	kg	5,100 / 11,250	5,100 / 11,250		
Length (L)	mm	5,942	5,942		
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.	m ³ /h	80	46	95	45
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	

Performance specifications are maximum theoretical values.





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



SCHWING
Stetter

SCHWING GmbH
Heerstrasse 9-27 · 44653 Herne, Germany
Phone +49 23 25 - 987-0 · Fax +49 23 25 - 72922
www.schwing-stetter.com · info@schwing.de

Stetter GmbH
Dr.-Karl-Lenz-Strasse 70 · 87700 Memmingen, Germany
Phone +49 83 31 - 78-0 · Fax +49 83 31 - 78 275
www.schwing-stetter.com · info@stetter.de

Subject to technical and dimensional modifications. Illustrations are non-binding. The exact standard specification, the scope of delivery and the technical data are detailed in the offer.

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