

The Atlas Copco logo is centered at the top left of the page. It consists of the brand name "Atlas Copco" in a blue, italicized serif font, positioned between two horizontal teal bars.

# The complete Wellpoint dewatering solutions

The WEL range

# Wellpoint pumps

The **WEL range** of fully automatic, rapid self-priming pumps is designed for wellpoint applications with a high flow rate. The **WEL PST** model, a high-performance unit, is suitable for heavy applications where it needs to work 24 hours per day, with a highly efficient design that guarantees fuel savings.

The **WEL ECO** is capable of drawing significant quantities of air and maintaining a wellpoint system under vacuum, or draining an excavation, thanks to the semi-open impeller, which also makes it suitable for pumping liquids with solids in suspension.

The automatic **WEL TANK** range is suitable for applications with changing ground water level and flow requirements. Being electric driven, it is very silent, energy efficient and suitable to work in residential areas.



**MAX. FLOW**  
UP TO **340** m<sup>3</sup>/h

**+25% MORE**  
EFFICIENT  
IN DEEP  
WATER

**MAX. HEAD UP**  
TO **32** m

**INCREASED**  
UTILIZATION  
Simple service and  
long service  
intervals

**ENGINEERED**  
**DESIGN**  
for severe  
conditions

**30% FUEL**  
**SAVINGS**

**STACKABILITY**  
one by one

**15% SPACE**  
**SAVING**

**COMPACT**  
**SIZE**  
with maximum flow

# Wellpoint applications

The **WEL range** is the most efficient system for pumping groundwater where air is present and being able to manage large field areas. The groundwater pick level is dynamically balanced to guarantee construction operations.

## 1. Dewatering in construction

A wellpoint system of dewatering is regularly used when the groundwater level is close to the surface and the pump must handle a high percentage of air within the water that is drawn in from the ground material. It is the best choice for ground level reduction and it is used mostly before excavation for footings. Skyscrapers, underground railways, roads ... there are many applications.



## 3. Polluted soil remediation

During sanitation works, a number of preparatory operations are required, including pipeline dewatering and drying, and removal of the groundwater to assure the terrain.



## 2. Pipeline on shore – oil and gas

Pipelines used to transport crude oil or natural gas must be dewatered to guarantee the quality of the hydrocarbons, prevent the formation of hydrates and protect the pipe from internal corrosion.



## 4. Tunneling (flood control)

Groundwater is often an issue for tunneling, and dewatering is needed to allow excavation. In this case, a wellpoint system is the best choice to prevent consistent water leakage into the site.



These pumps can control the groundwater level and handle both air and water.



# WEL PST

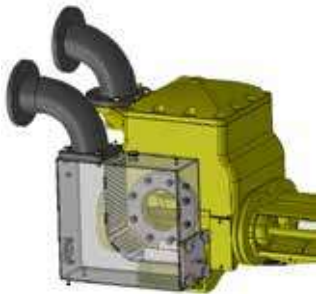
The **WEL** piston pump core is designed to perform in severe conditions, with high water flow and with air present in the wellpoint; it can be applied anywhere.

## GREAT PERFORMANCE

- The automatic self-priming pump is the key to this unit. No extra vacuum assistance is needed.
- Dry running system helps avoid downtime.

## GALVANISED STONE CATCHER

- Stone catcher traps solids in suspension, in case of inappropriate machine use.
- Stainless steel removable filter handling up-to 8 mm solids handling.
- Easy clean up and maintenance.
- Easy flushing with clean water.



## TOTAL ACCESS FOR MAINTENANCE

- Front door enables easy access to clean up cylinders' chamber and allow for easy replacement.
- Canopy version enables total access for the right maintenance.

**2000h  
SERVICE  
INTERVAL**



**EASY  
MAINTENANCE  
AND CLEAN-UP**

## FUEL EFFICIENCY

- Very low fuel consumption.



\*Available as an option



**120** RUNNING  
HOURS  
**BEFORE**  
REFUELING



## SAVE SPACE

- Stackability is key to storing the units and saving space.
- Simple belt tensioning to guarantee correct coupling between pump and engine.



## WATER DRAINAGE SYSTEM

- Double tank to avoid spillage.
- Easy-release valve system to flush the water after every engine start.

# WEL ECO

**WEL ECO** is the high-performance wellpoint range. Sizes 4 to 6 are commonly used in very long pipeline wellpoint applications.

## PRIME YOUR PUMP WITH A CONTINUOUS MIX OF AIR AND WATER

- Patented Air System separator, robustly designed and engineered, to manage consistent mixed water.
- A mechanical trap system avoids moisture in the vacuum pump on every start-up.
- Release valve enables simple pipeline disassembly in all conditions.

## MINIMIZE CLEANING TIME

- Simple and quick access to the wear components.

**EASY  
MAINTENANCE**  
 **3 MIN  
CLEAN-UP**

## WORK IN THE TOUGHEST CONDITIONS

- Performance tested and verified in the toughest working conditions.
- Robustness in prime and reprime





## REFUEL ONCE IN A WORKING WEEK

- Very low fuel consumption.



**50 HOURS  
RUNNING  
BEFORE  
REFUELING**

## SOLIDS HANDLING CAPABILITY

- The whole range can handle high solids.

**UP TO  
76 mm  
SOLIDS**

## ONE PUMP MULTIPLE PACKAGING

- The WEL ECO pump range is based on modular designs with mobility, heavy duty skid and stack frame options available



\* Optional on some models

# WEL tank

The **WEL tank** is an electric driven pump system, totally automatic, used to manage wellpoint fields where the flow and the ground level of water is continuously changing.

The equipment is capable to adapt the performance of flow according to the different type of ground and conditions.

The **WEL Tank** is really suitable to work in residential areas, waste water treatments and polluted soil remediations, thanks to operate in energy saving conditions.

## ENERGY SAVING

- The WEL tank design is based on an automatic system to provide different type of flow according to the field test and environment.

 **AUTOMATIC SYSTEM**



VARIABLE FLOW  
UP TO **274** m<sup>3</sup>/h



MAX. POWER CONSUMPTION  
**15** kW

CLEAN-UP THE TANK  
**3** min



MAX. HEAD UP  
TO **24** m



HIGH **90%** EFFICIENCY



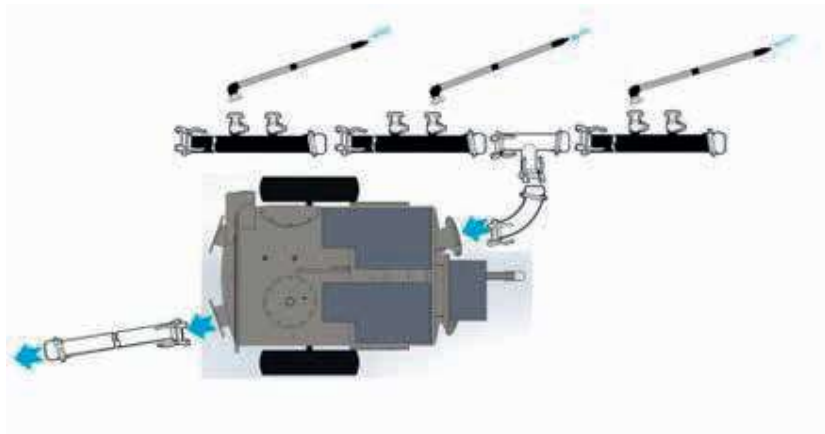
FLEXIBLE FIELD INSTALLATION





## FLEXIBLE FIELD INSTALLATION

- Thanks to the port predisposition that allow to connect all the pipeline according to the orientation of the unit.



## SERVICEABILITY

- The unit, with the hinge door can be opened to guarantee cleaning or replacement pumps & wear components directly in field with any lifting devices.



## CONTROL PANEL

- Vanguard of our automatic dry priming, allows to use the right power for Low Medium Maximum Flow.
- It act on 2 submersible and 2 vacuum pump in start up switch on switch off .



# WEL

## Technical data



StageV

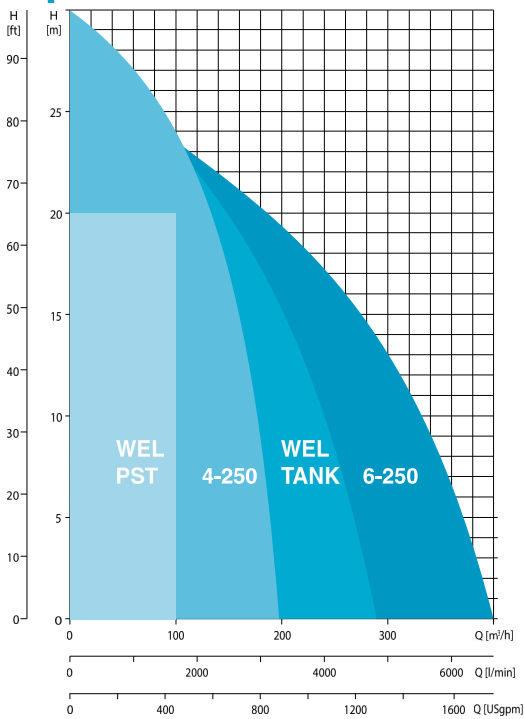


StageV



Specifications		WEL PST 100	WEL ECO 4-250	WEL ECO 6	WEL ECO 6-250	WEL Tank
Max. head	m	20	32	26	28	24
Max.capacity	m <sup>3</sup> /h	100	180	300	340	137+137 (274)
Nominal Air capacity	m <sup>3</sup> /h	-	75	75	75	105+105 (210)
Suction / discharge size	in	6	4	6	6	4 or 6
Max. solids handling	mm	-	50	50	76	-
Best efficiency point	%	93	65	65	62	90
Max. absorbed power	kW	5,5	13,2	14	19	5,6 + 5,6 (11.2)
Version		Canopy	Open frame	Open frame	Open frame	Open frame
<b>Engine</b>						electric driven
Egine Emission	EU	Stage 5	Stage 5	Stage 5	Stage 5	-
	LRC	T3	T2-T3	-	T2-T3	-
Max. operating speed	rpm	2000	1800	1800	1800	1450 (50Hz)
Max. fuel autonomy	h	120	53	53	53	-
<b>Weight and dimensions</b>						
Weight	kg	1590	960	1060	1060	900
Width	mm	1100	995	995	995	1370
Length	mm	2200	1950	2115	2115	1900
Height	mm	1550	1520	1520	1520	1850

## Operation area



LOOKING FOR ELECTRIC?\*

**EID** Pump OPTIONS  
ALSO AVAILABLE

\* Please consult with your local representative.

# Wellpoint accessories

## Complete wellpoint solutions available

### Wellpoint spear

Filters that are installed in ground and act as water intake. Available in multiple materials options suitable for any environment.



Length	Connections		Material
0,35 mm	32 mm	1 1/4 in	PVC + PE HD/Aluminium +Stainless steel
0,65 mm			

### Pipe connections / joints

Wide variety of connections and joints in different sizes for easy and quick connections.



Type	Connections		Material
Threaded	100 - 120 - 150 mm	4 - 5 - 6 in	Galvanized Steel
Flanged			

### Riser pipe

Pipe connections for WellPoint spear filter allowing flexibility in reaching different depth. Available in different material with/without 90° bends



Length	Connections		Material
2 - 3 - 4 - 5 - 6 mm	32 mm	1 1/4 in	PVC/Aluminium

### Header pip with/without multiple cock assembly

Connected to multiple spear and riser pipes, acts as collector pipe for the complete WellPoint system. It is connected to pump via suction hoses.



Length	Connections		Material
3 - 4 - 5,8 mm	100 - 120 - 150 mm	4 - 5 - 6 in	PE-HD

### Suction / discharge pipes and hoses

Available in different material, connection sizes and lengths gives excellent flexibility for you application.



Connections		Material
40 - 50 - 100 - 120 - 150 - 200 - 250 - 300 mm	4 - 5 - 6 - 8 - 10 - 12 in	PVC/PE HD/Galvanised Steel / Rubber

# Product portfolio

## GENERATORS

**PORTABLE**  
1,6–12 kVA



**MOBILE**  
9–1250\* kVA



**INDUSTRIAL**  
10–2250\* kVA



**LARGE POWER**  
800–1450 kVA



\*Multiple configurations available to produce power for any size application

## DEWATERING PUMPS

**ELECTRIC SUBMERSIBLE**  
250–16.200 l/min



**SURFACE PUMPS**  
833–23.300 l/min



Diesel and electric options available

## ENERGY STORAGE SYSTEMS

**ZENERGIZE**



## LIGHT TOWERS

**DIESEL**



**BATTERY**



**ELECTRIC**



## AIR COMPRESSORS AND HANDHELD TOOLS

**AIR COMPRESSORS**  
1–116 m<sup>3</sup>/min  
7–345 bar



**HANDHELD TOOLS**  
Pneumatic  
Hydraulic  
Petrol engine driven



## ONLINE SOLUTIONS

**SHOP ONLINE  
PARTS ONLINE**

Spare parts for power equipment. We handle your orders 24 hours a day.



**POWER CONNECT**

Scan the QR code on your machine, and go to the QR Connect Portal to find all the information about your machine.



**LIGHT THE POWER:  
YOUR SIZING TOOL**

A useful calculator to help you choose the best solution for your power and light needs.



**FLEETLINK**

Intelligent telematics is a system that helps optimize fleet usage and reduce maintenance, ultimately saving time and cutting operating costs.



# WEL PST CNP

Qmax 20 l/s (75 m<sup>3</sup>/h) - Hmax 20 m (65 ft)



## WEL PST - Piston pumps

The WEL PST pump is a twin cylinder, quadruple acting, crankshaft driven piston pump. Water, air or a mixture of both are primed and discharged four times per revolution. Two crankshaft driven pistons are arranged at an angle of 90 degrees to enable four piston strokes for each revolution.

The crank timing produces a moderate pulsating action in the dewatering line that prevents clogging of the wellpoint strainers and achieves priming from greater depths. Even with suction heights of several meters the pump rapidly evacuates the air from the suction pipe and starts to pump.

## Applications

Both Atlas Copco and Varisco have decades of experience in designing and producing pumps. We have put those years of expertise into providing a solutions portfolio that works across multiple applications. The WEL PST range is packed with features that not only meet, but exceed the needs of the market. We are focused on an efficient, extremely versatile pump that is suitable for many industries, including construction, general dewatering, Wellpoint systems, horizontal drainage with hoses and pumping of remediation filtered water.

## Benefits

### Positive Displacement pump

Positive displacement pump with constant flow and capable of simultaneously drawing air and water

### Rapid "dry" priming

Up to a height of 7,5 m (24.6 ft) without the need of a vacuum priming pump

### High resistance

Can run dry indefinitely without risk of damage or excessive wear of parts

### Environment friendly

Low power consumption and low noise unit

### Easy maintenance

High accessibility for easy inspection and maintenance which require no special skills

### Long life

Economical and longer carefree service life reducing overall operating costs

### Great autonomy

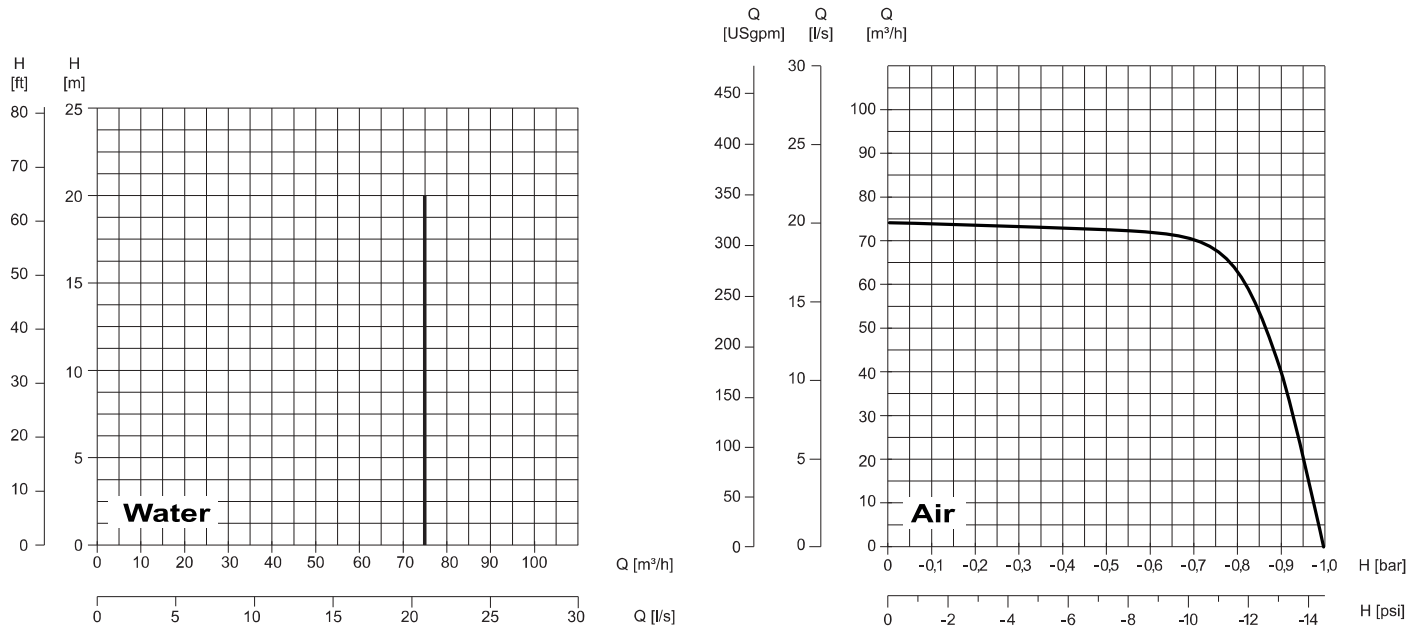
Up to 170 h with fuel tank of 200 L (52.8 USG)

# WEL PST CNP

## Performance curves

Test according to UNI EN ISO 9906 standard - level 2

Test liquid: clean water, density  $1,000 \text{ kg/m}^3$



## Technical data

### Pump

Model	
Qmax	20 l/s - 75 m³/h
Hmax	20 m (65 ft)
Q max eff.	20 l/s - 75 m³/h
Eff. max	93%
Suction port	Flanged - DIN 125
Delivery port	Flanged - DIN 125
Materials	
Casing	EN-GJL-250 cast iron
Helical gear wheels	GJS-400 ductile iron
Shaft	Steel
Piston rod	AISI 431 stainless steel
Piston	AISI 431 stainless steel
Piston cups	Leather
Cylinders	AISI 304 stainless steel
Valves	Brass
Valves discs	NBR rubber
Valves guides	AISI 431 stainless steel

# WEL PST 100

## Technical data

<b>Make</b>	<b>Hatz</b>
Model	1D90
Type	Diesel direct injection, aspirated, four strokes
Displacement	997 cm <sup>3</sup> (61 in <sup>3</sup> )
No. cylinders	2
Cooling	Air
Rpm type	Variable
Standard speed	2.000 rpm
EU emissions	2002/88/CE Stage V
US emissions	EPA Tier 4F
Starting	Electric
Starting voltage	12 V
Oil change interval	250 h
Market	Worldwide
<b>Speed [rpm]</b>	<b>1500</b>
Consumption [l/h]	1,2
Power [kW]	6,5
Power [HP]	8.7

## Control panel

Manual operation
Hour meter
LCD display
Engine failure alarms with LED lights in case of: <ul style="list-style-type: none"><li>- low oil pressure</li><li>- engine overheating</li><li>- lack of battery charging</li></ul>
Throttle rod

# WEL PST 100

## Arrangements

### Sound attenuated canopy



### WEL PST 100 CNP

Dimensions	1100 x 2255 x 1615mm
Material	S235JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 µm
Color	Yellow and grey Atlas Copco (standard)
Features	Galvanised base, stackable
Battery	Acid charge Pb-Ca maintenance free, 12 V - 65 Ah - 580 A
Tank	200 L (52.8 USG)
Drip pan	300 L (79.2 USG, 150% of the total volume of the tank)
Emergency stop	Outside the canopy
Locking keys	Control panel door and canopy doors
H suction port	1 m
Weight	1.970kg