

HIGH PRESSURE

HIGH PRESSURE CLEANERS



WHAT IS HIGH PRESSURE?

WATER UNDER HIGH PRESSURE IS CURRENTLY THE OPTIMAL SOLUTION FOR CLEANING OFF DIRT. A HIGH PRESSURE WATER SPRAY CONSISTS OF WATER FORCED THROUGH A NOZZLE, TO INCREASE THE WATER PRESSURE AND THUS THE CLEANING EFFECT.

A high pressure cleaner can be described as an advanced water pistol, in which six parameters determine the cleaning effect:

1. PRESSURE (LOW VS. HIGH PRESSURE)

Traditionally, high pressure cleaners operate at a pressure between 50-250 bar. High pressures will increase the ability to loosen deposits/dirt, resulting in fast cleaning.

2. WATER FLOW

The water flow in a high pressure cleaner is equivalent to just 10-30% of the consumption by a traditional garden hose. High pressure sprays thus save water in relation to their higher cleaning effect.

Higher water flows will increase the cleaning effect, typically making it possible to clean larger surfaces in one go. In addition, a high water flow has a good flushing effect, removing dirt quickly from the cleaning area. Water flow and pressure are both crucial parameters for effective cleaning.

3. TEMPERATURE (COLD VS. HOT WATER)

A higher temperature generally improves cleaning ability, due to the better solubility.

Cold water cleaners are traditionally used for cleaning water-soluble soil and dirt, while hot water cleaners are used for cleaning greasy or oily dirt and deposits (mineral/animal).

The hot water cleaner works on the same principle as the cold water cleaner, except that the water is heated in an integral oil-fired boiler with a high-pressure heating coil to a temperature of 40-120°C after the water has been pressurised.

If you only have a limited need for hot water, we recommend the following options:

- The cold water cleaner can be connected to a hot water tap. However, the inlet temperature must never exceed 60°C.
- The cold water cleaner can force the water through a "Hotbox" (oil-fired boiler with high pressure heating coil), which heats the water up to between 40-120°C.

4. UNIT TYPE (MOBILE VS. STATIONARY)

Stationary units are traditionally used where cleaning is carried out on a regular basis. A stationary unit reduces the number of hoses and cables. With stationary units, it is also possible to combine several pumps, so the system can be used by multiple users simultaneously.

Mobile units are used where the cleaning requirement varies or where higher flexibility is needed.

5. CLEANING AGENTS

Cleaning agent is also an important element for achieving high cleaning effect. By using an efficient cleaning agent you improve the overall cleaning.

6. CHOICE OF NOZZLE

It is important to use the right nozzle. A wrong choice will mean a lower water flow or unnecessary stoppages or recirculation.

HOW TO CHOOSE A HIGH PRESSURE CLEANER?

Large models will perform the task quicker and are dimensioned for more intensive use. For large tasks, an underscaled cleaner will not be as profitable, due to higher staff and operation costs. On the other hand, an over-dimensioned cleaner can result in an unprofitable investment.

Before deciding on a high pressure cleaner, the following aspects should be considered.

What type of cleaning is necessary?

The type of dirt or deposits to be cleaned is crucial for the right choice of high pressure cleaner type:

- > Pressure
- > Water flow
- > Temperature
- > Any additives to the water

What quality of cleaning is needed?

Cleaning quality can be divided into four basic levels:

- > Optically clean
- > Bacteriologically clean
- > Physically clean
- > Chemically clean

For high quality demands, a powerful high pressure cleaner should be selected.

Cleaning intensity and extent

The high pressure cleaner must be dimensioned to the required cleaning intensity and conditions, i.e. whether to choose a mobile or stationary solution, and between a powerful or less powerful model.



A HIGH PRESSURE CLEANER INSTALLATION BASICALLY CONSISTS OF:

High pressure cleaner

- > Piston pump
- > Motor
- > Expansion tank

Energy source

- > Electric (single-phase/three-phase)
- > Gas
- > Petrol or diesel-driven
- > Hydraulic

Water supply

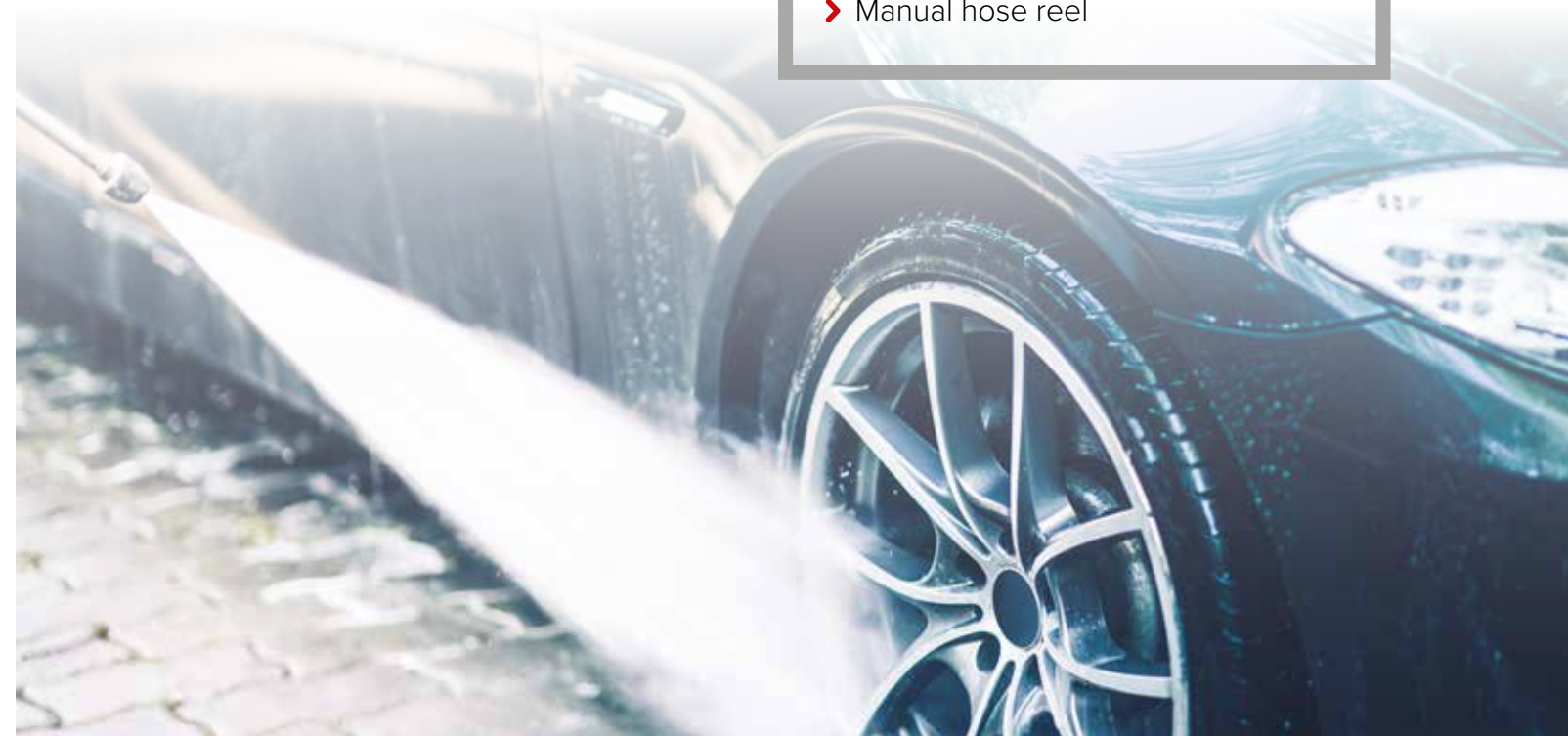
- > Via hose
- > Via tank (cold or hot water)

Piping

- > 15 mm (max. recomm. l/min. 25)
- > 22 mm (max. recomm. l/min. 80)

Hose reel/hose

- > Automatic hose reel
- > Manual hose reel



MOBILE CLEANERS

LARGE ASSORTMENT OF MOBILE HIGH PRESSURE CLEANING SOLUTIONS, FOR ALL YOUR CLEANING TASKS - SMALL TO LARGE. DESIGNED FOR AGRICULTURAL AND INDUSTRIAL USE.



COMPACT CLEAN 145/7

EFFICIENT AND RELIABLE HIGH PRESSURE CLEANERS

> The mobile cleaners are characterized by their robustness and functionality in agriculture and industry. All cleaners except the Compact Clean-range comes in galvanized plates, which ensures longevity.

Cleaners in the Compact Clean-range are lighter, thus more mobile and handy.



200/21 | 200/30

MOBILE CLEANERS AND ITS PROS:

- ✓ Extremely mobile
- ✓ Incl. accessories
- ✓ Robust cleaners
- ✓ Reliable with functionality at the forefront
- ✓ Suitable for industrial tasks

Depending on your needs, our mobile cleaners are available in different sizes.

											
Model	Art. no.	kW	hp	Amp	rpm	bar	l/min.	Max. °C	V	kg	LxWxH (mm)
P145/7	15204	2,1	2,8	-	2800	145	7,5	50	230/1/50	21,5	420x360x930
M170/14	M17014-M4	4	5,5	9	1400	170	14	60	400/3/50	45	620x480x400
M165/14	M16514-P4	4	5,5	9	1400	165	14	60	400/3/50	45	620x480x400

STATIONARY CLEANERS

STATIONARY CLEANERS FOR INDOOR INSTALLATION. TYPICALLY APPLIED IN AGRICULTURE AND SLAUGHTERHOUSES. ALL SOLUTIONS CAN BE CUSTOMIZED TO YOUR SPECIFIC NEEDS.



ST.170-200

CUSTOM HIGH PRESSURE CLEANERS

> All stationary cleaners can be customized to your specific needs. Our stationary cleaners are flexible and environmentally friendly with automatic start/stop-system, thus costs of power is reduced. All cleaners comes with ceramic pistons and flex coupling.

Hoses, double nozzles and a spray-gun are included in all cleaners.

STATIONARY CLEANERS AND ITS PROS:

- ✓ Suitable for bigger installations
- ✓ Incl. accessories
- ✓ Custom solutions
- ✓ Reliable with functionality at the forefront
- ✓ Suitable for industry and agriculture



See our complete assortment of stationary cleaners at www.reno.dk/en or in our product catalogue.

											
Model	Art. no.	kW	hp	Amp	rpm	bar	l/min.	Max. °C	V	kg	LxWxH (mm)
St. 200/42*	S200/42	2x7,5	10	30	1400	200	42	60	400/3/50	263	900x470x1650
St. 200/42	S200/42-SOFT	2x7,5	10	30	1400	200	42	60	400/3/50	263	900x470x1650
St. 170/50	S17050-SOFT	2x7,5	10	30	1400	170	50	60	400/3/50	270	900x470x1650
St. 200/60	S20060-SOFT	2x11	15	44	1400	200	60	60	400/3/50	380	900x470x1650

* Without Soft-start.

HOT WATER CLEANERS

HIGH QUALITY SOLUTIONS FOR CLEANING TASKS WHERE HOT WATER IS REQUIRED. THE GEYSER CLEANERS ARE VERY ROBUST MACHINES, DEVELOPED FOR INDUSTRIAL PURPOSES.



M6 | M7

MOBILE AND STATIONARY HOT WATER CLEANERS

Hot water cleaners are reliable machines suitable for demanding tasks. Our assortment consist of both mobile and stationary cleaners, depending on the size of the cleaning task.

All models include accessories.

HOT WATER CLEANERS AND ITS PROS:

- ✓ Mobile and stationary
- ✓ Incl. accessories
- ✓ Robust machines
- ✓ Reliable with functionality at the forefront
- ✓ Suitable for big and demanding tasks

Some models are available in different sizes, depending on the size of the cleaning tasks.



Geyser SD15

											
Model	Art. no.	kW	hp	Amp	rpm	bar	l/min.	Max. °C	V	kg	LxWxH (mm)
Geyser M6	HW16019-F4	4	2,8	10	1400	165	14	110*	230/1/50	21,5	1200x800x990
Geyser M65	M17021-F4A	5,5	5,5	12	1400	160	19	110*	400/3/50	45	1200x800x990
Geyser M7	HW20018-F4A	6,5	6,5	14	1400	170	21	110*	400/3/50	45	1200x800x990
Geyser SD15	DHW26021	14,9	20	-	1400	260	21	110	-	355	1440x800x1090

* At reduced water volume.

HOTBOXE

WHEN ADDING A HOTBOX, YOUR COLD WATER CLEANER WILL FORCE WATER THROUGH THIS OIL-FIRED BOILER AND HEAT UP THE WATER TO BETWEEN 40-120 DEGREES.



Hotbox 54 - 104 kW

HOT WATER FROM YOUR COLD WATER CLEANER

All hotboxes are made for the purpose of solving tasks that demand mobility and hot water. The models are applied with a cold water cleaner, and provide water with pressure up to 250 bar.

Hotbox 54-104 kW comes in ergonomic design with rotatable wheels with a lock mechanism that ensures high mobility.

HOTBOXES AND ITS PROS:

- ✓ Efficient and reliable
- ✓ Smart and mobile
- ✓ Applied with cold water cleaner
- ✓ Demands power or diesel
- ✓ Used in different cleaning tasks

Visit www.reno.dk/en and find more information about our hotboxes.



											
Model	Best. nr.	kW	hk	Amp	rpm	bar	l/min.	Max. °C	V	kg	LxBxH (mm)
Hotbox 54 kW	HB5415-F1	0,12	0,16	1	-	200	15	110*	230/1/50	103	815x665x965
Hotbox 104 kW	HB10425-F1	0,12	0,16	1	-	250	25	110*	230/1/50	110	815x665x965

PETROL DRIVEN CLEANERS

PETROL DRIVEN HIGH PRESSURE CLEANERS ARE IDEAL FOR TASKS WITHOUT ACCESS TO POWER SUPPLY. EASY TO USE AND HIGHLY TRANSPORTABLE.



PD 120/13 | PD 120/17 | PD 220/20

MOBILE SOLUTIONS FOR MANY PURPOSES

> Petrol driven cleaners can be applied for a long range of tasks, and are thus very versatile. In addition, they are mobile and suitable for tasks on the go. All petrol driven cleaners are available with either manual or electric-start.

All models comes with a hose.

PISTON DRIVEN CLEANERS AND ITS PROS:

- ✓ Mobile and stationary
- ✓ Incl. accessories
- ✓ With manual or electric-start
- ✓ Reliable with functionality at the forefront
- ✓ Suitable for tasks on the go

Visit www.reno.dk/en and find more information about our piston driven cleaners.



PD 200/17 | PD 200/18

											
Model	**Art. no.	kW	hp	Amp	rpm	bar	l/min.	Max. °C	V	kg	LxWxH (mm)
*PD 120/13	30 Honda	4	5,5	-	3400	120	13	60	-	45	700x650x650
*PD 200/17	B20015	8,3	11	-	1400	200	17	60	-	65	900x650x750
*PD 220/20	B22018	10	13	-	1400	220	20	60	-	75	900x650x750
*PD 200/17	B20017-S3-	8,3	11	-	1400	200	17	60	-	161	800x1200x1750
*PD 220/18	B22018-S3-	10	13	-	1400	220	20	60	-	161	800x1200x1750

* Also available with electric-start
** PD 200/17 and PD 220/18 are available with either 800 or 1.000 L tank size.

HYDRAULIC CLEANERS

HYDRAULIC CLEANERS ARE ESPECIALLY WELL-SUITED FOR TASKS ON THE ROAD, AS THEY CAN BE POWERED BY TRACTOR, LORRY OR LIKewise. ARE OFTEN USED IN THE FISHING INDUSTRY, FOR AGRICULTURAL PURPOSES AND BY TRUCK OPERATORS.



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TRANSPORTABLE HYDRAULIC DRIVEN CLEANERS

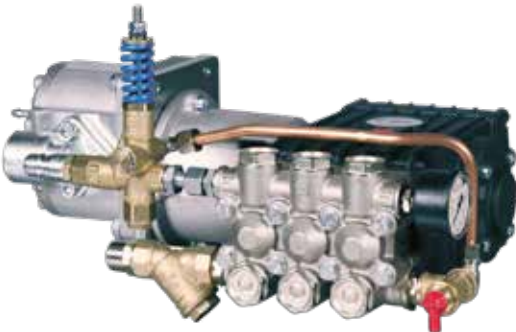
> The hydraulic cleaner is extremely mobile and can be driven by a tractor, lorry or similar, and are therefore ideal for cleaning tasks on the go.

The cleaners come with a hose, double nozzles and a spray-gun.

HYDRAULIC CLEANERS AND ITS PROS:

- ✓ Can be driven by a tractor, lorry or similar
- ✓ Incl. hose, double nozzles and a spray-gun
- ✓ Ideal for tasks on the go
- ✓ Ideal for tasks demanding mobility
- ✓ Applied in the fishing industry and by truckdrivers

Visit www.reno.dk/en and find more information about our hydraulic cleaners.



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Model	Art. no.	kW	hp	rpm	bar	l/min.	Max. °C	kg			
170/14	775	4	5,5	1440	170	14	60	24	rpm	l/min.	bar
200/21	O20021	7,5	10	1440	200	21	60	35	1440	*	>200
250/35	O25035	15	20	1750	250	35	60	40	1750	*	>200

* Contact customer support for information on oil flow.

BRAKE CLEANER

THE BRAKE CLEANER IS INDISPENSABLE FOR CAR REPAIR SHOPS.



EFFICIENT AND INDISPENSABLE BRAKE CLEANER

> The brake cleaner is efficient and indispensable for every car repair shop. It is extremely handy and mobile, with built-in heater (2000 W).

Tank and cover in stainless steel ensures longevity.



THE BRAKE CLEANER AND ITS PROS:

- ✓ Mobile and handy
- ✓ Long lifetime
- ✓ With built-in heater
- ✓ Efficient and reliable
- ✓ Indispensable for car repair shops

Model	Best. nr.	 bar	 l/min.	 m	 m	 L
Brake cleaner	6004	6	1,5	3	3,3	23

ACCESSORIES

RENO OFFERS A WIDE RANGE OF ACCESSORIES AND PARTS FOR OUR HIGH PRESSURE CLEANERS, INCLUDING HOSES AND REELS, LANCES, NOZZLES, VALVES AND MUCH MORE. BROWSE THROUGH OUR ASSORTMENT BELOW.



Nozzes



Couplings



Piping and fittings



Hoses



Hose reels



High pressure guns



Lances



Foam and chemical eq.



Various accessories

CUSTOMIZED SOLUTIONS

Reno designs and develops customized high pressure cleaners, for all types of companies in need of a special solution. In close collaboration with you as our customer, we deploy our specialist skills in the development and optimization of a high quality solution, designed for your specific needs.

We plan and design complete high pressure installations with stainless piping systems. We only use quality components, which we have long experience working with. From our own service department, we provide total installation and piping, making sure everything works from day one.



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