



WOMA[®] COMPACT CLASS

Powerful and reliable water jetting unit solutions.

EcoMaster D 190Z: up to 1,500 bar | up to 112 l/min

EcoMaster D 190/250MX: up to 3,000 bar | up to 40 l/min

Engineered by WOMA, configured by you!

THE NEW COMPACT CLASS

A powerful unit concept with a wide range of possibilities and options.

In collaboration with our customers and users as well as our decades of experience, we have engineered a new unit concept: the new WOMA Compact Class. Discover ultra-high pressure units that set new standards in terms

of performance, reliability and serviceability. Configure your individual unit to your requirements.

Engineered by WOMA, configured by you!

YOUR ADVANTAGES AT A GLANCE

- A wide range of possibilities and options. Every unit is built according to your needs: from a modular system to a fully equipped unit.
- The right performance for your applications:
 - EcoMaster D 190Z: up to 1,500 bar | up to 112 l/min
 - EcoMaster D 190/250MX: up to 3,000 bar | up to 40 l/min
- You have the choice: stationary or mobile, without hood, with an open frame design, with a sound damping hood or in a 10 ft. container.
- easy accessibility, high serviceability
- trailer weight < 3 tonnes
- total trailer height of 2 metres

THE RIGHT HIGH-PRESSURE PUMP FOR YOUR APPLICATION

The heart of the unit

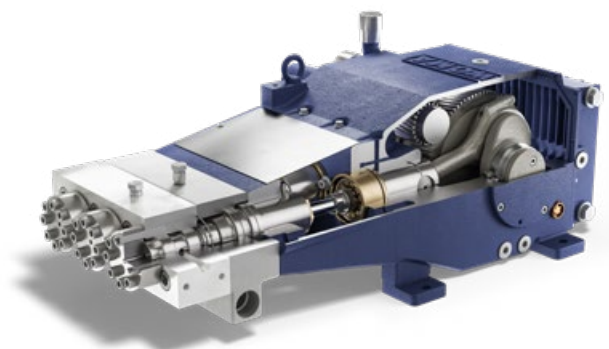
Do you need pressures of up to 1,500 bar and a high flow rate of up to 112 l/min for **cleaning, surface preparation and removal**? Then the **190Z** high-pressure pump is the right choice for you.

The NeXt Level: The new MX-series

Are your main areas of application **concrete removal** and **surface preparation**? Then the newly developed pumps of the **MX-series** are the right choice. The new pump generation takes service life and maintenance intervals in the ultra-high pressure range to the next level. The **190MX** high-pressure plunger pump offers a maximum operating pressure of 3,000 bar and a maximum nominal flow rate of 34 l/min.

The type **250MX** high-pressure pump offers a maximum operating pressure of 3,000 bar and a maximum nominal flow rate of 40 l/min.

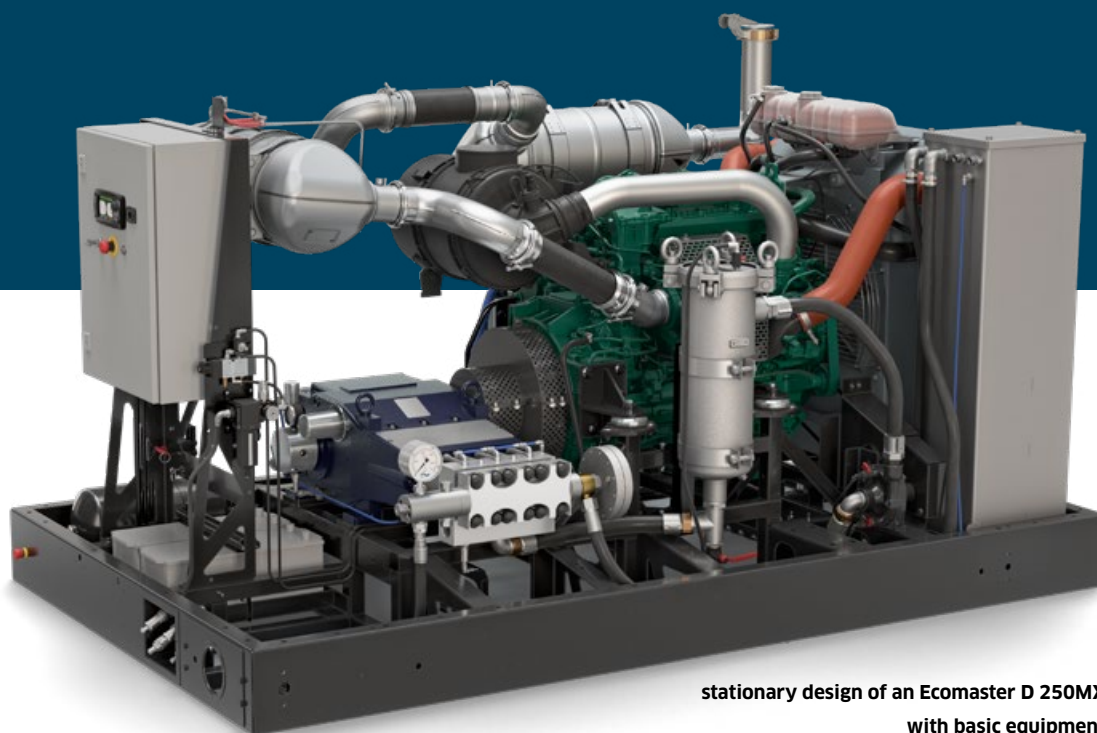
All pumps are equipped with a safety valve (Z-series) or bursting disc (MX-series) and sensors.



pump 250Z

COMPREHENSIVE BASIC EQUIPMENT AS STANDARD

Even the basic version of the EcoMaster D Compact Class impresses with its comprehensive, high-quality standard equipment.



stationary design of an Ecomaster D 250MX
with basic equipment

Low-vibration design and individual components from brand manufacturers

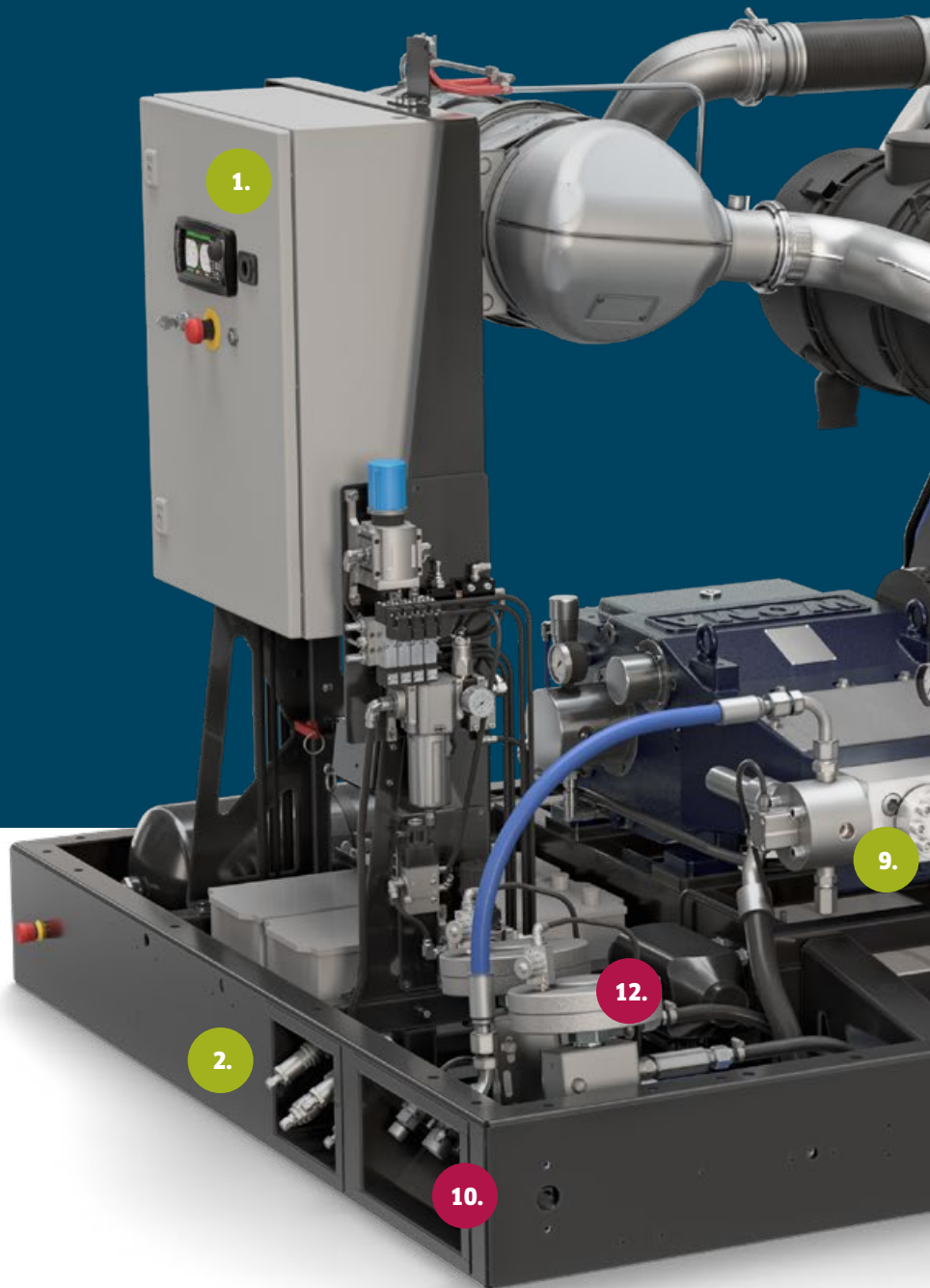
- rigid, torsion-free base frame
- drive via highly flexible coupling with protective cover
- Volvo diesel engine: 5 litre displacement, 4 cylinders, with the latest emission standards, technologies and exhaust technology
 - 105-160 kW at 1,800 min⁻¹, EU Stage IIIA/EPA Tier 3, non EU
 - 105-175 kW at 1,800 min⁻¹, EU Stage V with particle filter, EU
- fuel tank capacity sufficient for an 8-hour shift
- simple refueling of diesel and AdBlue (only for stage V) from outside possible
- 120l corrosion-resistant water tank with float valve and return lines for bypass and cooling water
- booster pump made of cast steel in the standard version, high-quality stainless steel version optionally available, each with V-belt drive
- stainless steel water filter with bag filtration, optionally also with cartridge filters
- pneumatic system with compressor from diesel engine and compressed air tank
- 4.3' control display
- equipped for a wide range of extensions:
 - ErgoControl RRC, MC (in combination with Expert control unit)
 - Telematics
 - and many more

BASIC CONFIGURATION

1. 4.3' control display
2. connection panels
3. highly flexible clutch
4. modern and efficient 5-litre Volvo diesel engine
5. 120 litre water tank
6. 240 litre fuel tank
7. booster pump
8. stainless steel water filter
9. high-pressure plunger pump (structure shown with Z-pump)

OPTIONAL EQUIPMENT

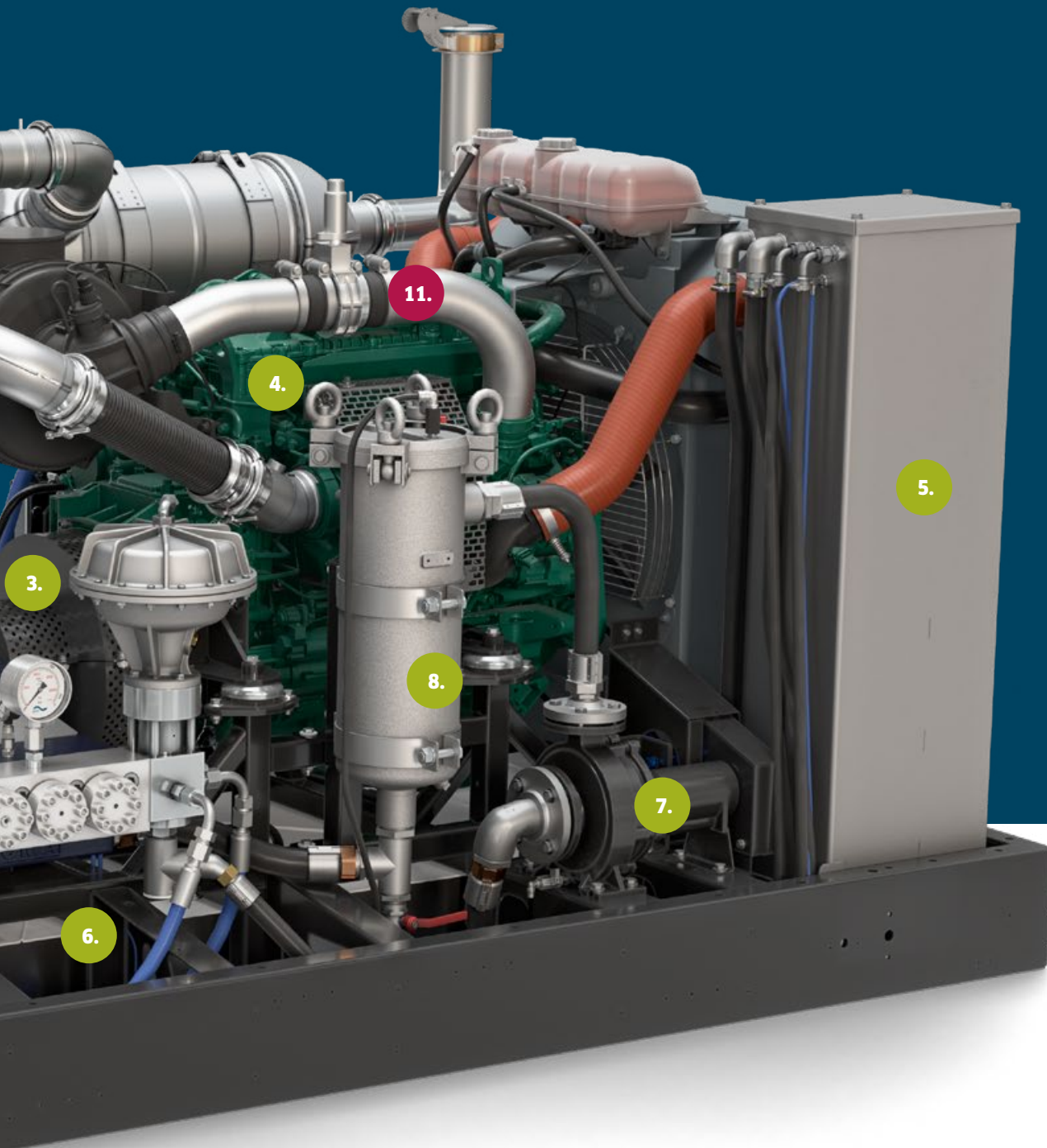
10. hydraulic connection panel
 11. chalwyn valve
 12. multi-consumer system
- and many more, see below



You have the choice:

OPTIONAL TECHNICAL EQUIPMENT

- air shut-off damper (chalwyn valve)
- spark arrester (only for level 3A)
- hydraulic connection panel on the outside of the base frame
- Storage space package available for the following accessories:
 - Control cable 30/50 m on drum, pre-pressure hose on drum, high-pressure gun with nozzle, helmet, toolbox, documentation
- lifting points on the unit frame
- multi-consumer valve type MVV, twice
- filter differential pressure monitoring
- i-control interface instead of the 24V control interface
- additional 24V or i-control interface for use
 - with HP release station with emergency stop (Advanced and Expert only) or
 - with external emergency stop (all unit variants)
- high-pressure control on/off on the control cabinet
- ErgoControl RRC, ErgoControl HP, ErgoControl ES



stationary setup of an Ecomaster D 190Z with full equipment

OPTIONAL OPERATING MODE EXTENSIONS

- automatic speed control for dump gun variants
- hold engine speed after HP off
- automatic mode, pressure and speed
- large consumer mode
- small-consumer mode
- and many more

Digital software solution

- Telematics: all important machine data at a glance - anywhere and at any time

Further options and variants are available for the flow tank (external), the booster pump and the control unit (Classic, Advanced, Expert). We are happy to assist you in selecting the ideal unit equipment tailored to your specific requirements.

CONSTRUCTION VARIANTS

ENCLOSURE



Sound damping hood

- fuel and AdBlue fuel nozzles are externally accessible
- external access to the aggregate controls

Additional options:

- weather protection for openings in the hood, interior lighting, auxiliary heating system, paintwork and labelling according to customer requirements



Open unit frame design

- top-mounted lifting hooks
- optional weather protection cover

MOBILITY



No mobility

- stationary design with optional housing variants
- without forklift pockets
- with forklift pockets optional



Trailer design

- galvanised 2-axle trailer in accordance with german road traffic regulations
- Total weight < 3 tonnes
- approved for 80 km/h (optionally up to 100 km/h)

Other construction variants, such as in a 10 ft container or on a flat wagon, are also possible.

TECHNICAL DATA

PERFORMANCE DATA 190Z

pinion shaft		crankshaft	P24		P26		P28		P30		P35	
1,500 1/min	1,800 1/min		1,500 bar		1,300 bar		1,150 bar		1,000 bar		720 bar	
gear ratio		1/min	kW	l/min	kW	l/min	kW	l/min	kW	l/min	kW	l/min
4,25		424	138	50	142	59	146	70	147	81	147	112
4,25		353	115	42	118	49	122	58	123	67	122	93

PERFORMANCE DATA 190MX / 250MX

pinion shaft		crankshaft	P16		P18		P20	
1,500 1/min	1,800 1/min		3,000 bar		2,750 bar		2,200 bar	
gear ratio		1/min	kW	l/min	kW	l/min	kW	l/min
3.57		504	124	24.5	146	31,5	152	40.0
4.25		424	104	20.5	123	26,5	127	33.5
3.04		493	121	24.0	144	30,5	148	39.0
3.57		420	103	20.5	122	26,0	126	33.5
4.25		353	87	17.0	103	22,0	106	28.0

AVAILABLE VARIANTS

variant	length [mm]	width [mm]	height [mm]	weight [kg]
unit with protective hood	2,810	1,680	1,815*	2,705*
open unit enclosure	2,810	1,680	1,815*	2,810*
10 ft container	2,991	2,438	2,591	-
unit on base frame	2,810	1,680	1,815*	2,475*
mobile unit with protective hood (trailer)	4,260	2,245	2,000	2,940

* with subframe for forklift pockets

Subject to technical changes

THE RIGHT SOLUTION WITH OUR EXPERIENCE

Do you need advice and support?

Our experts have decades of cross-industry experience to find the perfect system solution with the right parameters for your specific needs.



WHATEVER THE TASK. WE HAVE THE SOLUTION.

WOMA GmbH
Werthausen Straße 77-79
47226 Duisburg

P: +49 2065 304 0
F: +49 2065 304 200

info@woma.karcher.com
www.woma-group.com