

Aquablast

Floor Cleaning Machines



Grid cleaning ✓ Floor cleaning ✓ Coating removal ✓
Brightening thermoplastic flooring ✓ Scarifying concrete and
asphalt ✓ Removing paint, deck coatings, rust etc. ✓
Removing mastics, laitance, adhesion inhibitors, renderings ✓
Road marking removal ✓ Cleaning oil and grease deposits ✓

CALDER

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Aquablast Basic and Basic E

The hand-held floor cleaner is designed for universal use and allows a wide range of applications. The rotating spray bar ensures an optimal cleaning performance.



The Aquablast® Basic is controlled by a mechanical (Aquablast® Basic) or electrical manual valve (Aquablast® Basic E). The chassis has four swivel castors for easy handling. The rear castors can be locked for straight running.

Performance data

500 bar – 30 l/min

1000 bar – 16 l/min

at 500 bar
max. temperature of 95 °C

- Working width: 352 mm
- Suitable for use with 4 nozzles, type A, B, M
- Ergonomic hand valve with relief lever
- Adjustable position of the handles
- Optional hose connections: M 22 x 1,5 DKO or M 24 x 1,5 DKO
- Height of the drawbar individually adjustable
- Splash guard via installed brush
- High-pressure hose between handle and swivel connection
- Electric hand valves optionally available

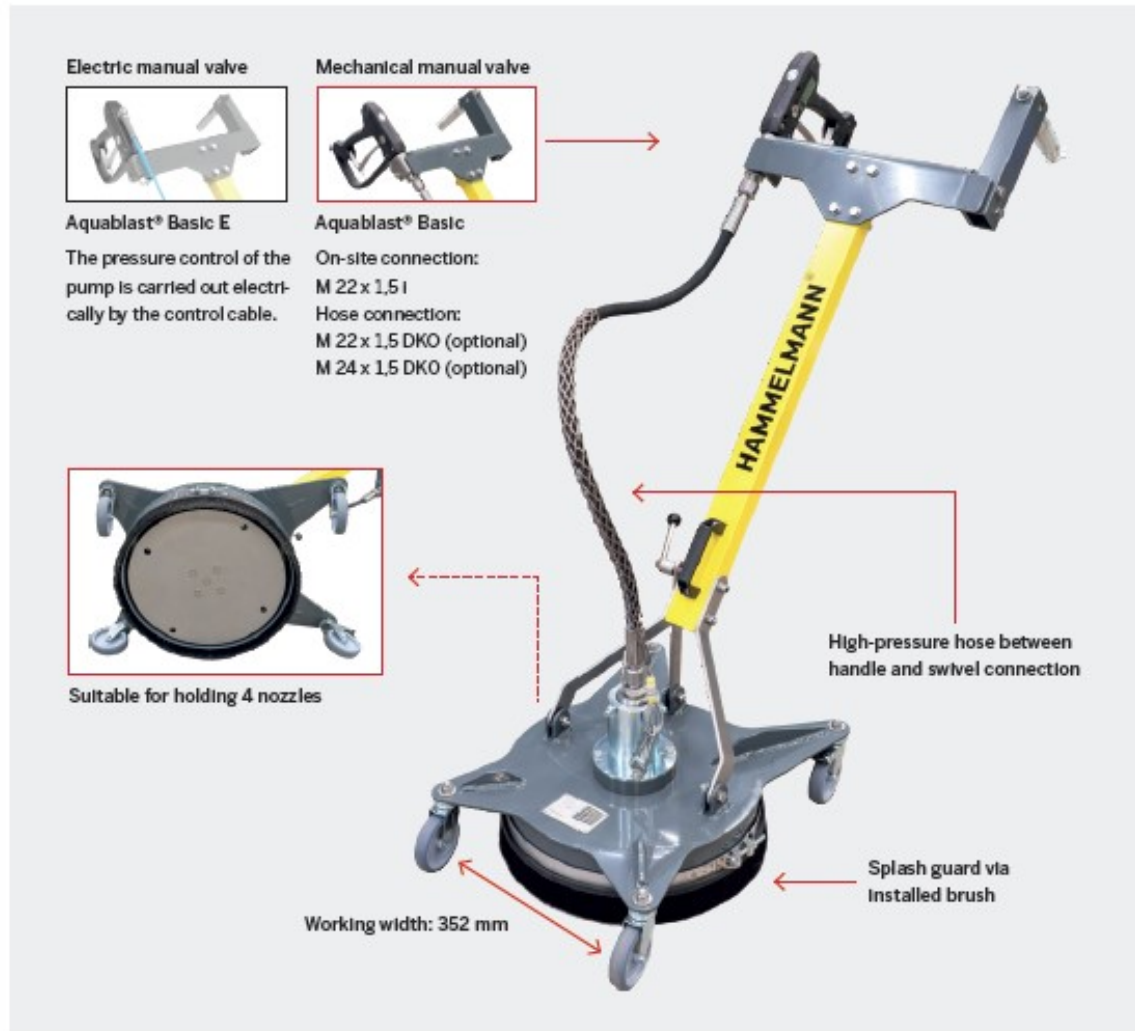
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Aquablast Basic and Basic E - continued



Ergonomically adjustable hand valve with safe and easy to operate relief lever for switching mechanical pressure on/off.



Height of the drawbar individually adjustable



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Aquablast FR 1000

- Spray bar driven by reaction force of the water jets
- Wear resistant rotary action with labyrinth seal
- Optional pressure on/off control. Mechanical bypass valve or electric in 4-pole system signal to pump. Special controls available upon request.
- On/Off control by twin trigger action
- Height adjustable spray bar
- Three wheel carriage



Typical applications

- Grid cleaning
- Floor cleaning
- Coating removal

	Code no.
Spray bar for concrete removal (abrasive action)	00.03567.1299

Technical data

Working width:	300 mm	500 mm
Operating pressure:	max. 1000 bar	1000 bar
Flow rate:	max. 160 l/min.	160 l/min.
Pressure loss at 100 l/min.:	5 bar	5 bar
Pump power:	max. 170 kW	170 kW
Speed of rotation:	1500 min ⁻¹	1500 min ⁻¹

Weight:	115 kg	122 kg
Length:	approx. 1610 mm	1825 mm
Height:	approx. 950 mm	900 mm
Unit width:	approx. 370 mm	550 mm

Pressure on/off	Code no.	
	Ø 300	Ø 500
mechanical	00.00078.0025	09.00661.0180
electrical	---	09.00661.0179



Connection nipple see reverse!
Nozzle inserts "A" and "B"

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Aquablast FR 1500

- Spray bar driven by reaction force of the water jets
- Wear resistant rotary action with labyrinth seal
- Optional pressure on/off control. Mechanical bypass valve or electric in 4-pole system signal to pump. Special controls available upon request.
- On/Off control by twin trigger action
- Four wheel carriage
- Choice of version with or without protection for spray bar.



Typical applications

Aquablast without protection

- Grid cleaning
- Paint removal on steel plates

Aquablast with protection

- Floor cleaning
- Roughening concrete surfaces
- Removing road markings from concrete

Technical data

Working width:	400 mm
Operating pressure:	max. 1500 bar
Flow rate:	max. 150 l/min.
Pressure loss at 50 l/min.:	5 bar
Pump power:	max. 200 kW
Speed of rotation:	1000 min ⁻¹

Length:	approx. 1350 mm
Height:	approx. 900 mm
Unit width:	approx. 450 mm
Connection thread:	M 24 x 1,5 DKO-S



AQUABLAST® may only be driven with four nozzles. Nozzle inserts Type "A" and "B"

	Pressure on/off	Weight [kg]	Code no.
Grid cleaning (without protection)	mechanical	90	09.00661.0159
	electrical	73	09.00661.0150
Concrete removal (with protection)	mechanical	--	--
	electrical	81	09.00661.0173

Description	Code No.
Extra weight, 33 kg	01.01390.0020

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Aquablast FR 3000

- Spray bar driven by reaction force of the water jets
- Height adjustable spray bar
- Wear resistant rotary action with labyrinth seal
- Spray bar housing with special seal and suction outlets
- Electrical pressure on/off control in 4-pole system
- Four wheel carriage



Typical applications

- Cleaning up petrol, oil and grease deposits

Construction industry

- Removing paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening thermoplastic flooring
- Scarifying concrete and asphalt

Marine industry

- Removing paint, deck coatings, rust etc.

Technical data

Working width:	215 mm
Operating pressure:	max. 3000 bar
Flow rate:	max. 40 l/min.
Pressure loss at 40 l/min.:	60 bar
Speed of rotation:	max. 3000 min ⁻¹

Weight:	76 kg
Length:	approx. 1410 mm
Height:	approx. 900 mm

Connections:	
Bypass control cable:	ITT-plug
High pressure hose:	M 14 x 1,5 LH

Pressure on/off	Code no.
electrical 3000 bar	09.00661.0232



Nozzle inserts
Type "P" (16 pieces)

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Aquablast FRE 3000

- Electrically driven spray bar and drive carriage controlled by a frequency converter to achieve optimal speed combination to suit the job in hand.
- Twin handgrip pressure control.
- Four wheel drive carriage.
- "Anti splash" brush seal.
- Carriage drive cut out for manual deployment.



Typical applications

- road marking removal

Code no.
00.00078.0017



Technical data

Working width:	350 mm
Op. pressure:	max. 3000 bar
Flow rate:	max. 40 l/min
Pressure loss at 40 l/min:	60 bar
Pump power:	max. 170 kW
Spray bar speed:	600 - 2400 min ⁻¹
2-pole motor:	3 kW
<u>Power requirement:</u>	380 - 400 V
	50 - 60 Hz
Removal rates: (depending upon marking material)	approx. 200 - 1600 m/h
Weight:	approx. 150 kg
Length:	approx. 1600 mm
Height:	approx. 1000 mm
Unit width:	approx. 550 mm
No. of nozzles:	20 pieces
Nozzle type:	"P"
Connection thread:	M 26 x 1,5
	(Pressure collar/Pressure nut)

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Aquablast FRV 2500

Type FRV 2500

- Available with and without direct vacuuming of water and waste material.
- Spray bar driven by reaction force of the water jets.
- Optimum spray bar design with 4 nozzle arms enabling the fitting of up to 16 nozzle inserts.
- Height adjustable spray bar
- Wear resistant rotary action with dynamic high pressure seal.
- Spray bar housing with special seal and suction outlets.
- Mechanical bypass valve.
- Four wheel carriage.



Technical data

Typical applications

- Direct vacuuming allows the use of high pressure water blasting in factories and machine shops without halting production or on roads, upper storeys of buildings etc. without the need for closure.
- Cleaning PLUS vacuuming of petrol, oil and grease deposits.

Construction industry

- Removing PLUS vacuuming of paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening PLUS vacuuming of thermoplastic flooring.
- Scarifying PLUS vacuuming of concrete and asphalt.

Marine industry

- Removal PLUS vacuuming of paint, deck coatings, rust etc.

Working width:	215 mm
Operating pressure max.:	2500 bar
Flow rate max.:	40 l/min.
Pressure loss at 40 l/min.:	60 bar
Reaction force max.:	550 N
Perm. speed of rotation max.:	3000 min ⁻¹

Weight with 10 m suction hose:	130 kg
Weight without suction hose:	86 kg
Length approx.:	1430 mm
Height approx.:	960 mm

Connections:

High pressure hose:	M 14 x 1.5 LH, bs.
Suction hose:	B-coupling

Pressure on/off	Code no.
Mechanical with suction and pressure hose	09.00680.0013
Mechanical without suction and pressure hose	09.00680.0012

Description	Code no.
Suction and pressure hose	00.04590.0019



Nozzle inserts
Type "P" – 16 pieces

CALDER

HAMMELMANN®

Aquablast FRV 3000

Type FRV 3000

- Available with and without direct vacuuming of water and waste material
- Spray bar driven by reaction force of the water jets
- Optimum spray bar design with 4 nozzle arms enabling the fitting of up to 16 nozzle inserts.
- Height adjustable spray bar
- Wear resistant rotary action with dynamic high pressure seal
- Spray bar housing with special seal and suction outlets
- Electrical pressure on/off control in 4-pole system.
- Four wheel carriage



Technical data

Working width:	215 mm
Operating pressure max.:	3000 bar
Flow rate max.:	40 l/min.
Pressure loss at 40 l/min.:	60 bar
Reaction force max.:	550 N
Perm. speed of rotation max.:	2500 min ⁻¹

Weight with 10 m suction hose:	130 kg
Weight without suction hose:	86 kg
Length approx.:	1430 mm
Height approx.:	960 mm

Connections:

Bypass control cable:	ITT-plug
High pressure hose:	M 14 x 1.5 LH, bs.
Suction hose:	B-coupling

Typical applications

- Direct vacuuming allows the use of high pressure water blasting in factories and machine shops without halting production or on roads, upper storeys of buildings etc. without the need for closure
- Cleaning PLUS vacuuming of petrol, oil and grease deposits

Construction industry

- Removing PLUS vacuuming of paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening PLUS vacuuming of thermoplastic flooring
- Scarifying PLUS vacuuming of concrete and asphalt

Marine industry

- Removing PLUS vacuuming of paint, deck coatings, rust etc.



Nozzle inserts
Type "P" – 16 pieces

Pressure on/off	Code no.
electrical without suction and pressure hose	09.00680.0014

Suction and pressure hose	Code no.
with control cable	00.04590.0028

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Aquablast Drive

Surface blaster

- With direct vacuuming of water and waste material.
- Spray bar driven by reaction force of the water jets
- Optimum twin spray bar design with 2 x 4 nozzle arms enabling the fitting of up to 8 nozzle inserts. Includes protective plates.
- Wear resistant rotary action with labyrinth packing.
- Spray bar housing with special seal and suction connections.



Typical applications

- Direct vacuuming allows the use of high pressure water blasting in factories and machine shops without halting production or on roads, upper storeys of buildings, cleaning landing runways etc. without the need for closure.
- Cleaning and vacuuming of petrol, oil and grease deposits.

Construction industry

- Removing and vacuuming of paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening and vacuuming of thermoplastic flooring.
- Scarifying and vacuuming of concrete and asphalt.



Nozzle inserts
Type "A" – 8 pieces



Technical data

Working width: 1000 mm
Operating pressure max.: 1000 bar
Flow rate max.: 240 l/min.
Pressure loss at 240 l/min.: 10 bar

Total weight: 890 kg
Length: ca. 3890 mm
Height: ca. 1950 mm
Width: ca. 1410 mm

High pressure hose: M 24 x 1.5 DKO-S
Vacuum: - 0.5 bar

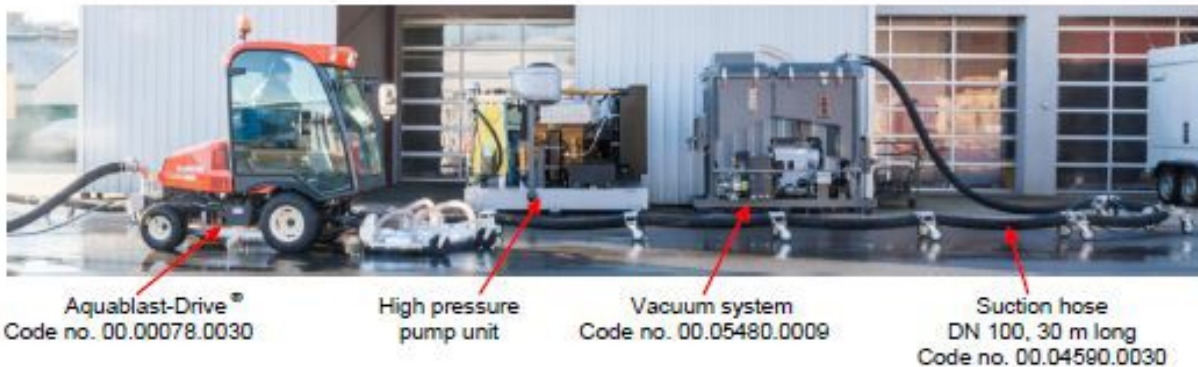
Vehicle: Kubota F3090
Drive: 4-wheel
Engine power: 22.4 kw

	Code no.
Aquablast® - Drive	00.00078.0030
Suction hose DN 100 (Length: 30 m)	00.04590.0030
Vacuum system	00.05480.0009

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Aquablast Drive - continued



Vacuum system

A two chamber system to vacuum and pre-filter the used high pressure water.

Consisting of:

- Stationary waste collection unit with rigid, torsion free frame on shock absorbers and forklift shoes.
- Waste water and solids are separated within the system for further disposal.
- The pre-cleaned waste water is pumped out of the unit so that downtime is minimised.
- Separator collects materials in suspension.
- Hinged doors to allow solids removal.
- De-watering pump with over suction protection.
- Sight glass for monitoring content level.



Technical data	
Pre-separator:	630 Liter
Fiine-separator:	430 Liter
Throughput:	650 m³/h
Vacuum:	240 mbar
Drive:	3-cylinder diesel engine
Weight:	1.5 t

Description	Code no.
Vacuum system	00.05480.0009

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Floor Cleaning Machines



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