

THE FORCE OF EVOLUTION



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making good things better

Our Hydrodemolition robots are tough and durable high-end products, built to operate over a long period of time. Since our establishment in 1988, we have constantly improved our products in terms of design, functionality and technology. To always make the good things better is part of our DNA. One would call it survival of the fittest. In the end, it's just basic evolution.

THE FERRARI OF HYDRODEMOLITION

Like a Ferrari, or any other premium sports car, a robot from Aquajet has the ability to stand the sands of time. A Ferrari from the the nineties is still a Ferrari in every aspect, just like a brand new Ferrari. But there's one major difference. The technological level is on an entirely different planet. Our old robots are still performing on a high level around the world, but they can't be compared with today's technological marvels. The new series of Aqua Cutter robots have the epithet "evolution" for one simple reason – they have evolved!

IT'S CALLED EVOLUTION, LITERALLY

Over the years we have continuously developed our products to be more effective, more reliable and more user friendly. Good old Aqua Cutter HV-550 and HVD 6000 are still going strong around the world with over twenty years of service. That's great and the strongest possible proof that our products are always up for the challenge. The differences between

our old and new robots are primarily technological and above all digital. Like a modern car, our new robots are partly computers, partly vehicles. First and foremost, our new robots have a completely different design concept from top to track, making them easier to use and way more efficient in operation. Our innovative design gives the operator freedom to reach all horizontal, vertical and overhead areas up to 7 meters without support. In other words, where most robots fail, the Aqua Cutter will prevail.

TAKE CHARGE, TAKE CONTROL

The Aqua Cutter evolution 2.0 can handle greater reaction forces, and has faster cutting speed, faster track speed and faster oscillation speed compared to its older siblings. In addition, it can cut through concrete at a greater lance angle of 45°. Another significant difference is the advanced control system, with a long list of useful features. Examples are Smart lance control, Equal distance system, Intelligent sensing control, programmable oscillation, radio remote control, and the ability to cut geometrical shapes at multiple cutting depths.

All in all, the Aqua Cutter evolution 2.0 is the most versatile Hydrodemolition robot on the market, suitable for all kinds of operations. There's no other robot like it. Do you want to know more about the evolution of our robots in general and the Aqua Cutter evolution 2.0 in particular? Just keep on reading!



INNOVATIONS & DESIGN

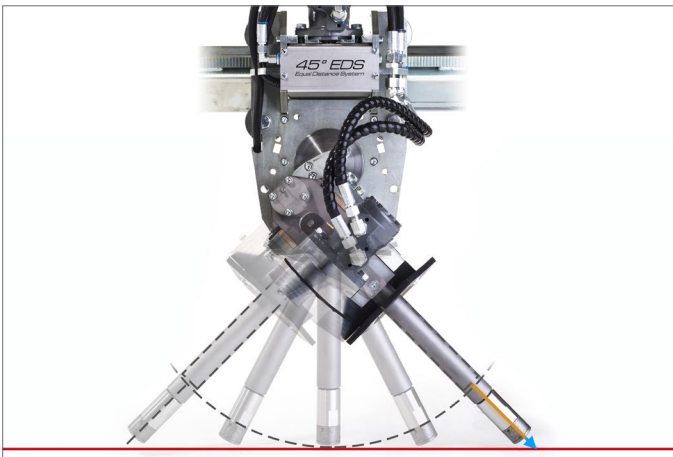
SUPERIOR DESIGN CONCEPT

All of our AQUA CUTTER robots, rail systems and accessories, are designed specifically for the purpose intended. We never take shortcuts or use any proprietary units as the basis of design and construction. Every little detail and grand feature is custom designed to meet your expectations on efficiency, function, productivity and reliability.



EDS – EQUAL DISTANCE SYSTEM

All our AQUA CUTTER robots feature our patented EDS system, short for Equal Distance System. The EDS keeps a preset distance from the nozzle to the concrete surface, regardless of the attack angle of the water jet. This is a major advantage. Standard systems without EDS make the water jet lose a lot of power before it hits the concrete.



SMART LANCE CONTROL

All AQUA CUTTER robots with the Evolution control system have the patented Smart lance software. With the software you get access to advantages that no other robot offers.



The smart lance control automatically calculates and coordinates the complete operating process and optimizes the removal from the operator's selection. All you have to do is to set a few parameters.

RELIABLE AND EASY SERVICE

Our innovative design provides unrivalled ease of access for all maintenance jobs. This means less downtime with maintenance work and more time for actual work.



The unique gullwing hood and foldable back cover of our new AQUA CUTTER robots offers total access for both daily maintenance jobs such as checking oil levels, and periodic service jobs such as oil and filter changes.

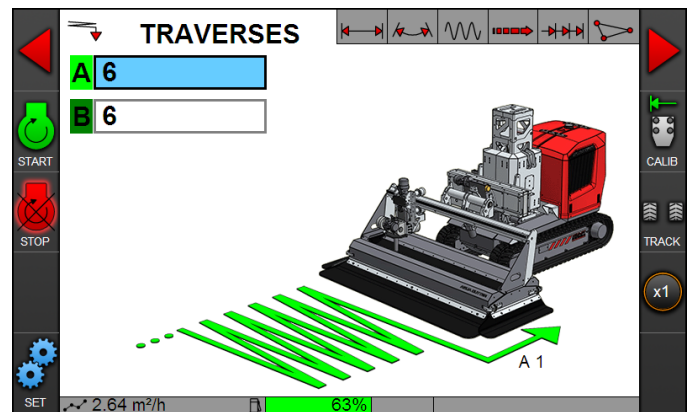
USER FRIENDLY

INTERACTIVE GRAPHIC DISPLAY

Fast and easy programming which decreases set-up times even more and makes programming and control like a walk in the park.



The display is interactive and shows with graphics how the settings will affect the operation. The system can be set to basic mode for normal operation and fast set-up or advanced mode for the most demanding tasks.



CONNECTED CONTROLS

For increased performance and safety while operating the robot you can use the radio control. In this system you can also incorporate the control of your Power Pack. Read and set the operation parameters of the Aqua Cutter robot and the Power Pack right on the spot, from a safe distance.



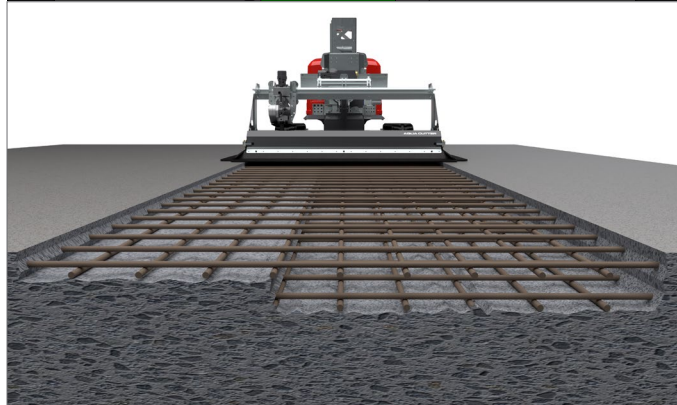
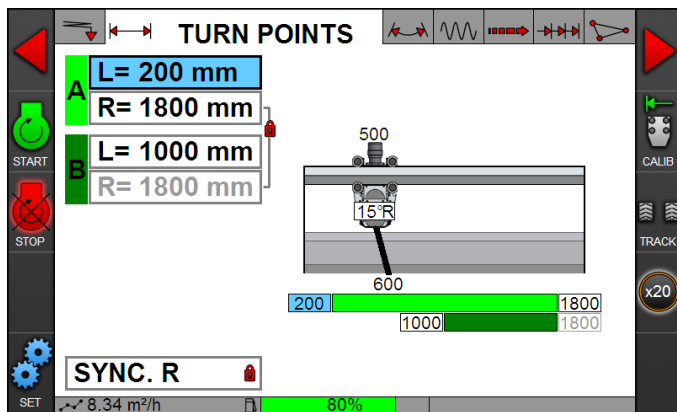
SOFTWARE

SOPHISTICATED AND SMART

The AQUA CUTTER evolution 2.0 control system features highly computerized robotic management for advanced operations. The evolution control system enables you to program geometrical figures such as circles, triangles, squares and rhomboids. Today, it's the most sophisticated and flexible system on the market for Hydrodemolition robots.



With the evolution control system you can operate in different depths in the same overpass. The display panel uses clear and simple symbols combined with multi-language text, making it very easy to program the most advanced operations. By combining a very sophisticated control system with EDS lance control we have been able to develop a robot with very high efficiency and flexibility.



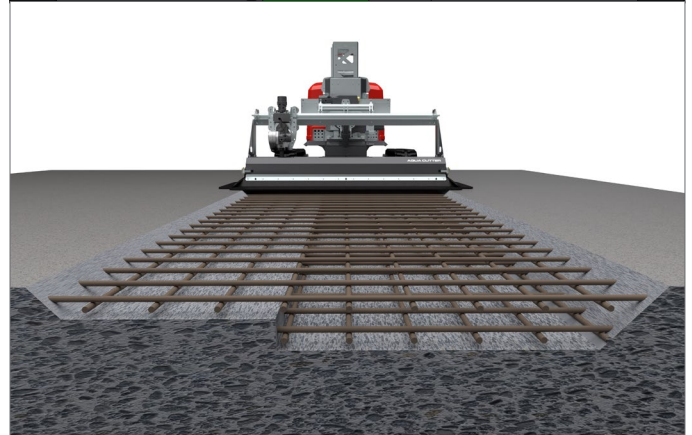
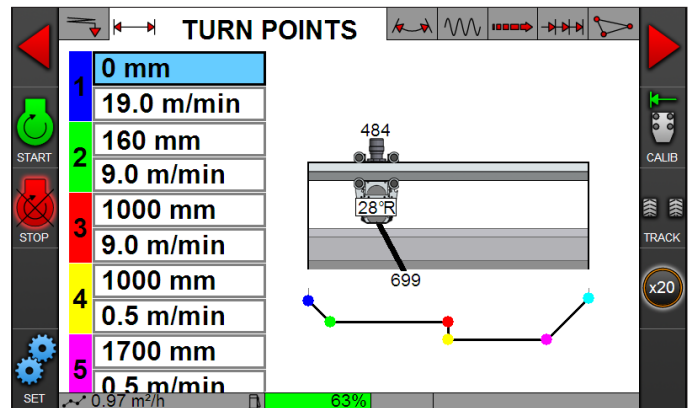
SPEED ZONES

The use of speed zones enhances the possibility to even more accurate removal, and removal of different depths at the same overpass. These zones can also be used to control the lance angle and oscillation.



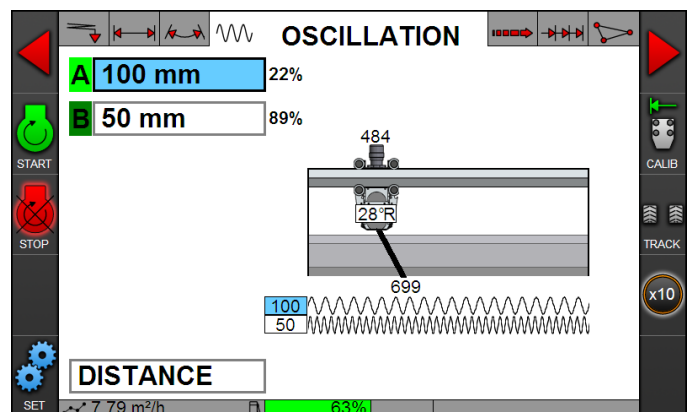
3D ZONES

Removal of complex structures and uneven concrete, and the ability to create Geometrical Shapes. 3D zones works like our patented shape function, on the depth.



SMART LANCE CONTROL

The pattern of the oscillation can be changed in different steps and wavelengths. You can also set a fixed wavelength. Programming for multiple oscillation patterns, lance angles and removal depths in the same overpass. All movements are precise and smooth. In other words – better lance control and increased life time of mechanical parts.



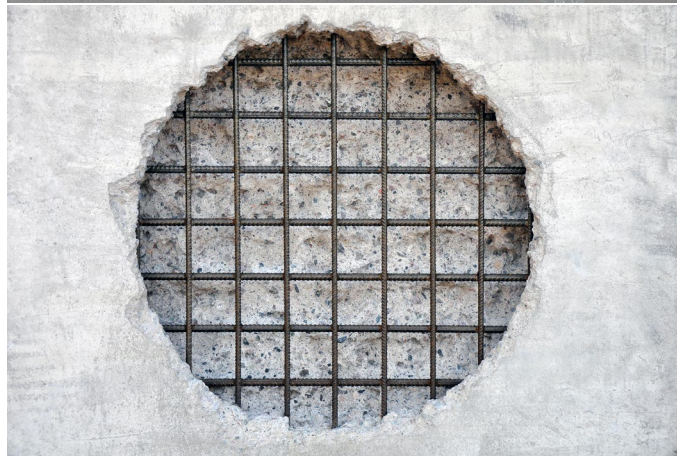
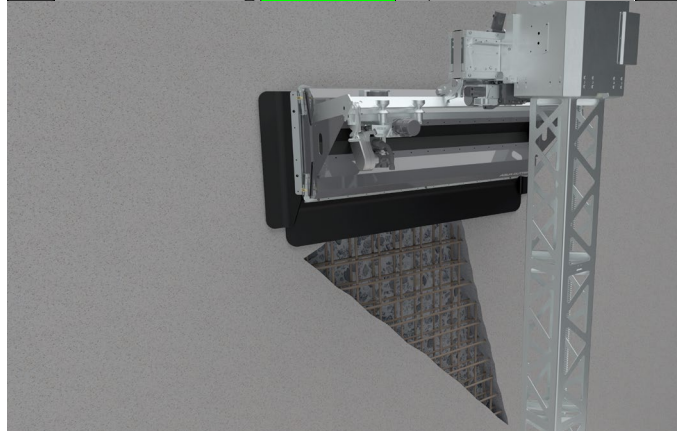
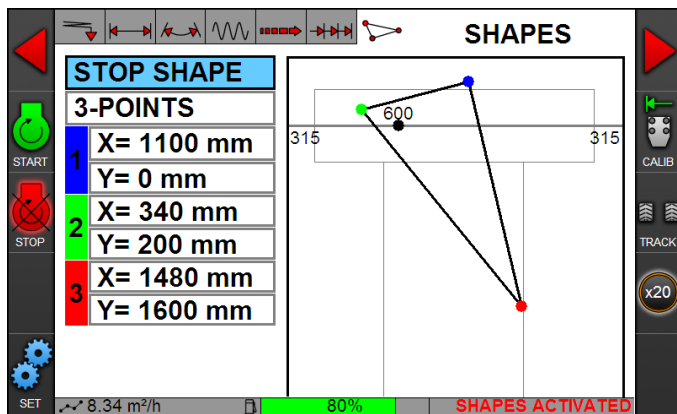
GEOMETRICAL SHAPES

All products with the Evolution control system have the ability to cut geometrical shapes, such as circles, triangles, squares and rhomboids. You can program your shape of choice on the display or draw on the surface and use the robots teach-in system.



3D ZONES COMBINED WITH SHAPES

Speed zones and 3D zones can be combined with Geometrical Shapes. For example, you can create a circle with an inclined bottom or a rhomboid in several levels.



MORE FOR THE EFFICIENCY

On top of all above advantages there are a number of features that makes life easier and jobs more efficient for you.



- Statistics that shows the current capacity and productivity.
- All settings can be saved to a file for later use.
- Selectable units, Metric or US.
- Selectable tools, it is possible to select if you are controlling for example an Aqua Spine or an Aqua Frame from your robot. The system will help you with the correct settings.
- Possible to change robot model in the display when upgrading your robot.



SPECIFICATIONS

Aqua Cutter robots

	HV-550	HVD-6000	710V evolution 2.0
SIZE			
Length:	2,4 m (7,9 ft) fixed	2,48-2,73 m (8,1-8,9 ft)	2,57-2,82 m (8,4-9,2 ft)
Min. width:	1,25 m (4,1 ft)	1,03 m (3,4 ft)	1,03 m (3,4 ft)
Track width:	1,0 m (3,3 ft) fixed	1,03-1,53 m (3,4-5,0 ft)	1,03-1,63 m (3,4 -5,4 ft)
Min. height:	1,35 m (4,4 ft)	1,38 m (4,5 ft)	1,3/1,6 m (4,2/5,2 ft)
Operating height:	5,5 m (18 ft)	6 m (20 ft)	7 m (23 ft)
Side shift:	0,3 m (1,0 ft)	0,3 m (1,0 ft)	2 m (6,6 ft)
Working width:	0-2 m (0-6,5 ft)	0-2 m (0-6,5 ft)	0-2,45 m (0-8,0 ft)
Working width extended:	Not possible	Not possible	0-4,45 m (0-14,6 ft)

OPERATION			
Max reaction force:	1500 N	2000 N	3000 N
Max cutting speed:	15,0 m/min	17,0 m/min	25,0 m/min
Max track speed:	8,0 m/min	10,0 m/min	30,0 m/min
Max oscillation speed:	300 rpm	300 rpm	360 rpm
Lance angle:	± 22°	± 22°	± 45°
EDS system:	No	Yes	Yes
Removal in corners:	No	No	Yes

ENGINE			
Engine power:	Electric 7,5 kW	14 kW / 1850 rpm	18 kW / 1600-2600 rpm
Hybrid kit option:	No	No	Yes

CONTROL SYSTEM			
Smart lance control:	No	No	Yes
ISC - Intelligent Sensing Control:	No	No	Yes
Geometrical shapes:	No	No	Yes
Multiple cutting depths:	No	No	Yes
3D zones:	No	No	Yes
Programmable oscillation:	No	No	Yes
Wireless HP pump control:	No	No	Yes
Radio remote control:	No	Option	Yes
Display on radio remote control:	No	No	Yes
Sensor system roller:	Inductive	Inductive	Pulse / ISC / Inductive / Angle
Sensor system lance:	Time	Time	Pulse / Time
Sensor system hoist:	Time	Time	Pulse / Time
Sensor system tracks:	Time	Pulse / Time	Pulse / Time

ACCESSORIES			
Rotolance:	Yes	Yes	Yes
Extension kit:	No	No	Yes
Circular Power Head:	Yes	Yes	Yes
Hybrid kit:	No	No	Yes



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