

The Complete Conjet Hydrodemolition Solution

Conjet AB was established in 1990 through a Management Buy Out from the Atlas Copco group where the development of hydrodemolition started in 1983. Hydrodemolition is used for removing damaged and sound concrete from sensitive structures such as bridges, tunnels and quays in conjunction with repair and refurbishments.

Hydrodemolition method

Hydrodemolition uses a high-speed water jet to remove concrete. The porous material concrete has a high compressive strength but its tensile strength is roughly ten times lower. The water penetrates the porous concrete and creates an internal pressure, which when exceeding the tensile strength of the material removes it. Percussive methods (e.g. jack hammers and hydraulic breakers) on the other hand, have to overcome the compressive strength and thereby risk to damage the remaining structure.

The main benefits of using Conjet hydrodemolition can be summarized as follows:

- A rough uneven surface without micro cracks is left behind.
- This provides a superior bonding interface for the new concrete.
- Concrete can be removed from underneath the reinforcement.
- The reinforcement is cleaned.
- Selective removal will remove the damaged concrete and leave the good behind.

- Significantly faster than alternative methods.
- Safer for the operator as well as for by-passers.

Equipment

A complete hydrodemolition system consists of high pressure water pump feeding water through a high pressure hose to a lance or rotor fitted on a Robot or Jetframe. In addition to these products Conjet offers a complete range of accessories, consumables and spare parts. Conjet has five different hydrodemolition machines to cater for different applications. In addition Conjet has extensive experiences from designing and manufacturing customised solutions.

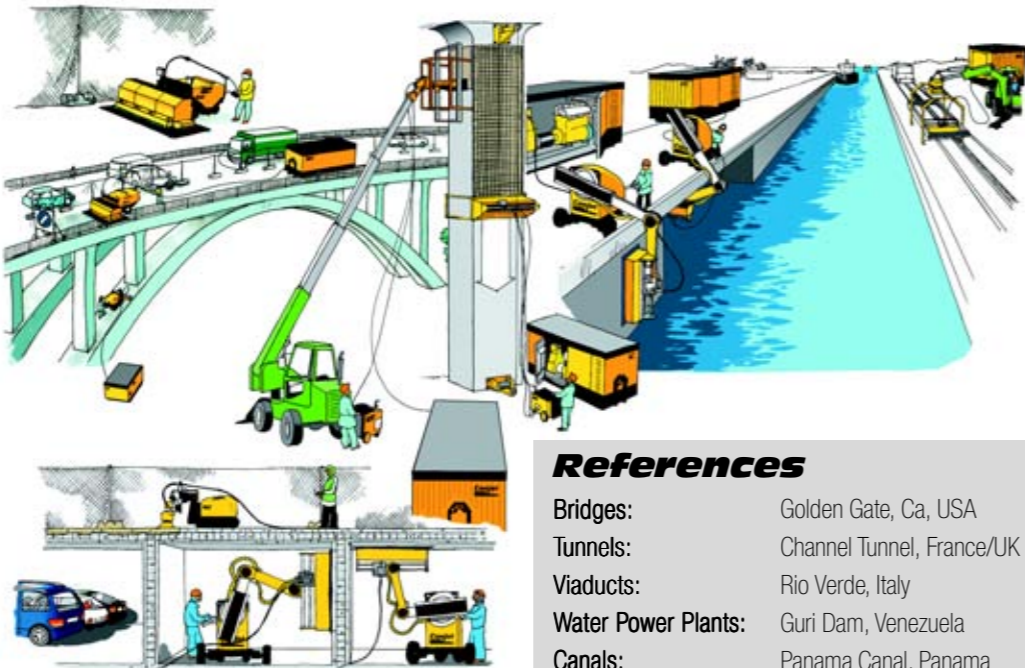
Training

Conjet has a well developed training program including an operations and maintenance training that is included with the products. Products are delivered with detailed operations and maintenances manuals as well as Spare Parts Lists.

Conjet is an ISO 9001 certified company and all its products fulfil all known safety and environmental regulations including the CE marking.

Support

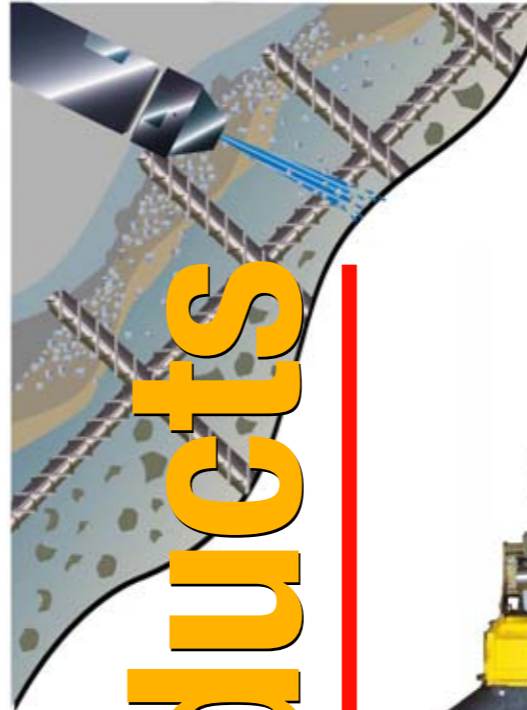
Technical support and service is delivered through Conjet's global network of representatives with extensive support from Conjet.



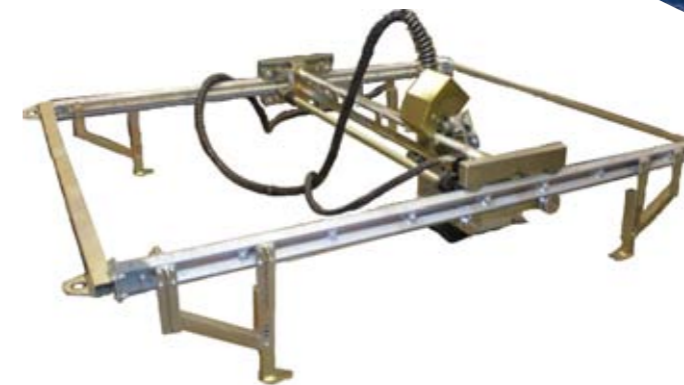
References

Bridges:	Golden Gate, Ca, USA
Tunnels:	Channel Tunnel, France/UK
Viaducts:	Rio Verde, Italy
Water Power Plants:	Guri Dam, Venezuela
Canals:	Panama Canal, Panama
Dry docks:	Dubai Dry Docks, UAE
Parking Decks:	Heathrow Airport, UK
Turbines:	Drava River, Slovenia

Pictures are illustrative only and do not necessarily show the configuration of the products on the market at the given point in time. These products must be used in conformity with safe practice and applicable statutes, regulations, codes and ordinances. Subject to change without prior notice.
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Products



Conjet

Equipment for Hydrodemolition



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APPLIED WATERJET TECHNOLOGY



Robot 324



The most compact, light weight flexible and cost effective Hydrodemolition Robot on the market.

The compact Robot 324 is designed for:

- Confined spaces and easy operation
- Horizontal concrete removal
- Vertical concrete removal
- Under up concrete removal
- Below track level concrete removal
- Circular tunnels
- Steel and concrete tubes
- Pillars with and without tower*
- Steep slopes with the winch kit*
- Surface preparation with hydraulic rotor*
- Scarifying with double lance*
- Low weight makes it ideal for operating on platforms and scaffoldings
- Powered by electricity
- no exhaust gases
- no health threat for operator
- Easy to operate and manoeuvre
- PLC based control system monitors the process and is easy to learn and use
- Reactivation button for safety reasons
- Remote control with cable or radio*
- Emergency stop circuit securing Robot and Powerpack
- Cable or Bluetooth* interface with Conjet Powerpacks

*option

Technical Data

Length	2350 mm (7 ft 9 in)
Width over tracks	820 mm - 1220 mm (2 ft 8 in - 4 ft)
Width feed beam	1520 mm (5 ft)
Cutting width	1600 mm (5 ft 3 in)
Cutting height under up/with ext.	1950 / 2450 mm (6 ft 5 in / 8 ft)
Cutting hgt vert./with ext./shifted	2300/2750/3050 mm (6 ft 5 in / 8 ft / 10 ft)
Cutting below track level	1000 mm (3ft 4 in)
Height, carrier	1170 mm (3 ft 10 in)
Weight	1100 kg (2425 lb)
Power supply	380-480 V, 16 A
Permitted reaction force/with ext.	1400 N / 950 N

Robot 365



The most versatile Hydrodemolition Robot with superior reach and stability on the market.

Robot 365 MPA with its versatile Multi Purpose Arm is designed for:

- Horizontal concrete removal
- Vertical concrete removal (up to 6.4 m)
- Under up concrete removal (up to 6.0 m)
- Below wheel base (down to 3.3 m)
- Circular tunnels with special feed beam*
- Surface preparation with hydraulic rotor*
- Scarifying with double lance*
- Stability through large extendable wheel base up to 2.8 m (9 ft)
- Adjustable height of steering wheels in order to improve positioning of the feed beam
- Powered by electricity
- no exhaust gases
- no health threat for operator
- PLC based, Closed Loop Control Monitoring System
- 4 fixed preloaded programs with possibility to save 16 user defined programs
- Two level cut, i.e. concrete is removed to two different depths in one pass
- Reactivation button for safety reasons
- Remote control with cable or radio*
- Emergency stop circuit securing Robot and Powerpack
- Cable or Bluetooth* interface with Conjet Powerpacks

*option

Technical Data

Length	3400 mm (11 ft 2 in)
Width over wheels	1880 - 2580 mm (5 ft 10 in - 8 ft 2 in)
Width, transport	2300 mm (7 ft 7 in)
Width, feed beam	2000 mm (6 ft 7 in)
Cutting width	2100 mm (7 ft)
Cutting height under up	6000 mm (20 ft)
Cutting height vertical	6400 mm (21 ft)
Cutting below wheel level	3300 mm (10 ft 10 in)
Height, minimum	1770 mm (5 ft 10 in)
Weight	2400 kg (5290 lb)
Power supply	380-480 V, 32 A
Permitted reaction force	2000 N, 3000N*

Robot 432 D



The most powerful Hydrodemolition Robot in the market for large scale horizontal surfaces.

Robot 432 Diesel with its heavy duty protective hood can handle the largest pumps and achieve the highest production in the market and it is designed for:

- Horizontal concrete removal
- Surface preparation with hydraulic rotor*
- Scarifying with double lance*
- High removal capacity - rated for pump power up to 1100 kW (1500 hp)
- The PLC based control system monitors the process and is easy to learn and use
- Two level cut, i.e. concrete is removed to two different depths in one pass
- Wheels that provide stability and good manoeuvrability
- Diesel engine powered
- Reactivation button for safety reasons
- Remote control with cable or radio*
- Emergency stop circuit securing Robot and Powerpack
- Cable or Bluetooth* interface with Conjet Powerpacks

*option

Technical Data

Length	3500 mm (11 ft 6 in)
Width over wheels	1800 mm (5 ft 11 in)
Width, transport	2220 mm (7 ft 3 in)
Width with side covers	2660 mm (8 ft 9 in)
Width, feed beam	2220 mm (7 ft 3 in)
Cutting width	2220 mm (7 ft 3 in)
Height	1500 mm (4 ft 11 in)
Weight	2500 kg (5500 lb)
Permitted reaction force	4000 N

Jetframe 114



Heavy duty Jetframe to be mounted on carrier for extended reach or bolted to surfaces in confined spaces.

Jetframe 114 has been designed for:

- Areas out of reach for robots
- Can be fitted to a tool carrier e.g. skylift access platform, fork lift or crane
- Easy to bolt to concrete surfaces
- Support legs
- Controllable from Conjet CCU or Conjet Robot
- A hydraulic driven rotor*, a single or double lance* can be attached
- Under water use*

*option

Technical Data

Length standard	4000 mm (20 ft)
Width standard	2000 mm (10 ft)
Cutting length standard	3500 mm (18 ft)
Width feed beam	2000 mm (6 ft 7 in)
Cutting width	2150 mm (7 ft 1 in)
Height	500 mm (1 ft 8 in)
Weight	300 kg (660 lb)
Permitted reaction force	2000 N
<i>Other dimensions available on request</i>	

CCU 208



CCU 208 controls the movements and functions of Jetframes and additional accessories.

CCU 208 is a hydraulic unit with following features:

- PLC based, Closed Loop Control Monitoring System
- 4 fixed preloaded programs with possibility to save 16 user defined programs
- Two level cut, i.e. concrete is removed to two different depths in one pass
- Reactivation button for safety reasons
- Remote control with cable or radio*
- Emergency stop circuit securing Robot and Powerpack
- Cable or Bluetooth* interface with Conjet Powerpacks

*option

Technical Data

Length standard	1750 mm (5 ft 9 in)
Width standard	770 mm (2 ft 6 in)
Height	1300 mm (4 ft 3 in)
Weight	300 kg (660 lb)
Power supply	380-480 V, 16 A

Powerpack



Probably the most reliable high pressure water pump installation designed and built for contractors.

Conjet Powerpacks are designed for:

- Operating 24 hours/day, 7 days/week
- Reliable High Pressure Pump
- Reliable engine from Caterpillar
- Dimensions as a 20 ft ISO container
- Rigid design - Certified for sea freight
- Safety
- Designed to improve operator and third parties safety
- Remotely controlled from Robot or CCU
- Integrated emergency stop circuits
- Pump/engine separated from control room
- Separate room for storage of parts, hoses, etc
- Theft and vandalism proof design.
- Environmental
- Exhaust emission meets U.S. EPA and EU regulations
- Silenced to meet noise emission regulations
- Insulated to meet different climate conditions
- Over spill tray with grating floor to collect, oil, cooling water, or fuel

Technical Data

Type	Flow kW	Flow l/min (gpm)	Pressure bar (P.S.I.)	Reaction force (N)
530-250kW	116 (31)	139 (37)	1150 (17000)	920
525-250kW	96 (25)	80 (21)	1350 (19600)	820
345-360kW	163 (43)		1650 (24000)	760
340-360kW	128 (34)		1150 (16700)	1290
350-480kW	256 (68)		1550 (22500)	1120
345-480kW	205 (54)		1000 (14500)	1890
340-480kW	160 (42)		1200 (16700)	1660
545-750kW	342 (90)		1550 (22500)	1400
540-750kW	268 (71)		1150 (16700)	2700
			1450 (21100)	2340

*Other specifications upon request.

Jetframe 101 NALTA



Technical Data

Length, feed beam (2x1100 mm)	2200 mm (7 ft 2 in)
Weight, feed beam (2x6 kg)	12 kg (26 lbs)
Weight, cutting head	14 kg (29 lbs)
Weight, step units (2x10 kg)	20 kg (44 lbs)
Weight, hydraulic control unit	90 kg (200 lbs)

The smallest mechanised hydrodemolition unit on the market, replaces hand lances.

Jetframe 101 Nalta is designed for:

- Improved operator safety and increased productivity
- Low weight - can be handled by single operator
- Small size - can be brought in through man holes
- Mounts on standard scaffolding tubes
- Handles curved surfaces down with radii down to 400 mm
- Rotor for surface preparation as option
- 2-3 times faster than manual lances

The Widest Range of Equipment for Hydrodemolition