



**FLOWPLANT®**

Engineering excellence in high-pressure  
pump systems

# DUCT DESILTING BROCHURE

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Cable duct desilting is the process of using a high pressure water jet connected to a long flexible hose which gently clears hard silt from inside cable ducts. The technique was pioneered by Flowplant in the 1980's and since then it has been used to unblock thousands of kilometres of underground ductwork.

# BACKGROUND

Desilting is an important part of the process of installing new fibre optic cables into old/original ductwork. In some cases ducts may have been installed many years ago, but due to water and silt ingress which can be caused by ground movement or subsidence, they have then become completely blocked with silt.



The telecommunication industry relies on a vast network of underground ducts.

Big problems occur when they become blocked with silt carried deep into the system by rainwater.

Ducts can be crowded with existing cables so the cleaning method must be gentle but powerful.

Working for years with network providers and contractors, Flowplant has developed a **unique desilting system**, able to meet all these requirements.

Designed for the telecom industry the Harben Desilter's unique high pressure water technology gives engineers the

method to unblock, clean and rope ducts in one seamless process.

Traditional cleaning methods such as duct rods and vacuum tankers, are often unable to break through the blockages, leaving no alternative other than dig up and replacement. Obviously, this not only causes severe delays to the installation programme for new super fast fibre, but it causes traffic disruption and incurs traffic management costs.



# BENEFITS

Clearing the way for new fibre optic networks. Ducts can be cleared without digging, reducing the time getting cables through blocked ducts. Slashing costs, and reducing the need for traffic management, all with one machine.

Get in touch today on [sales@flowplant.com](mailto:sales@flowplant.com) or call 01722 325424 today.



**REDUCED COSTS** - Ducts can be cleared without digging, reducing the need for excavation and traffic management.



**NO RISK TO CABLES** - The Harben Desilter uses pressures which do not risk cable damage.



**SPEED** - Operators have cleaned more than 500m from a single entry point. The combination of Harben pump, Jump jet and low friction hose is impossible to beat.



**CIVILS AVOIDANCE** - The Flowplant Desilting system has a proven track record, clearing blockages in thousands of ducts where the only alternative would have been road closure and excavation.



**CUSTOMISABLE** - Developed in partnership with the engineers who use our Desilters every day we can offer a range of accessories to make the working day even more productive.

# HOW IT WORKS

Duct desilting is a tough challenge. In situ cables must not be damaged, hard blockages must be cleared and long distances must be cleaned.

Scan the QR code to find out more about our Duct Desilter Units.



Ducts can often be cleared in a matter of minutes so the cost savings achieved by using the Harben Desilter system often run into thousands of pounds on a single job...



The solution comes in the form of a pulsing water jet created by the Harben Jump Jet™ system. The pulsations flex a special lightweight hose helping it to travel hundreds of meters into the duct, clearing silt as it goes. Unlike any other cleaning system the Harben Desilter works at pressures which do not risk cable damage but unbelievably it can still clean vast lengths, with a small amount of water.

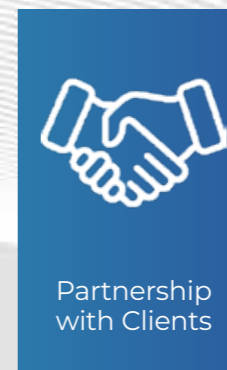
The Flowplant cable duct desilting technique uses the Harben pump and unique jump jet system. This has three major advantages over less advanced water jetting methods.



## INNOVATION INTEGRITY EXCELLENCE

**WE** are an innovative and focused engineering company.  
**WE** encourage open and honest partnerships in all our activities.  
**WE** care deeply about what our customers think of our products.  
**WE** work hard to ensure that the projects entrusted to us are delivered in a safe and environmentally aware manner which exceeds expectations.

- 1** Lower water pressures can be used, just 140 bar, so damage to existing cables is extremely unlikely.
- 2** The jump jet system pulses the cleaning nozzle through the toughest blockages and allows cleaning over extreme distances.
- 3** Water usage is less than any other system, so cleaning distances are maximised.



Partnership with Clients



Safety & Quality



Reliable & Consistent

# DESILTER TRAILER

The Flowplant desilter trailer is based on the Harben 'P' type radial piston pump. The Harben pump uses a high pressure diaphragm which has the unique ability to pulse the high pressure water outlet. We call this system the 'Jump Jet' and no other pump can work like this...



...The Jump Jet pulses the desilting hose reducing the friction of the hose against the wall of the cable duct. This allows the desilting nozzle to travel long distances into the duct, unblocking as it goes.

<b>PRESSURE &amp; FLOW</b>	Up to 140 bar @ 40 lpm with heavy duty "Jump Jet" in operation
<b>PUMP</b>	Harben® 'P' type radial piston diaphragm
<b>ENGINE</b>	Stage 5 emission compliant water cooled diesel
<b>WATER TANK</b>	Twin interconnected water storage tanks with a total capacity of 500 litres (110 gallons)
<b>HOSE REEL</b>	Variable-speed hydraulic-rewind hose reel with 120m high-pressure hose capacity
<b>DIMENSIONS</b>	L x W x Hmm: 3290 x 1690 x 1350 *
<b>RECOMMENDED ACCESSORIES</b>	<ul style="list-style-type: none"> <li>½" lightweight low friction desilter hose</li> <li>High efficiency duct desilting nozzles</li> <li>Tow jet nozzle</li> <li>½" drain jet extension</li> <li>Flowplant suction jet pump</li> </ul>

\* Dimensions are approximate

# 320 VAN PACK

The 320 van mounted desilter is compact and suitable for smaller vehicles whilst the larger DVK has the same desilting performance as our legendary trailer mounted DTK's.



<b>PRESSURE &amp; FLOW</b>	Up to 140 bar @ 30 lpm with heavy duty "Jump Jet" in operation
<b>PUMP</b>	Triplex plunger pump
<b>ENGINE</b>	Stage 5 low emission water cooled diesel
<b>WATER TANK</b>	Single - 400 litres (90 gallons)
<b>HOSE REEL</b>	Variable-speed hydraulic-rewind hose reel with 100m high-pressure hose capacity
<b>DIMENSIONS</b>	L x W x Hmm: 1235 x 1270 x 1195 *
<b>RECOMMENDED ACCESSORIES</b>	<ul style="list-style-type: none"> <li>½" lightweight low friction desilter hose</li> <li>High efficiency duct desilting nozzles</li> <li>Tow jet nozzle</li> <li>½" drain jet extension</li> <li>Flowplant suction jet pump</li> </ul>

\* Dimensions are approximate

# DVK VAN PACK

The DVK400 van mounted desilter has the same features, benefits and desilting power as the trailer mounted model and is suitable for installation into a variety of vehicles



<b>PRESSURE &amp; FLOW</b>	Up to 140 bar @ 40 lpm with heavy duty "Jump Jet" in operation
<b>PUMP</b>	Harben® 'P' type radial piston diaphragm
<b>ENGINE</b>	Stage 5 emission compliant water cooled diesel
<b>WATER TANK</b>	Single - 400 litres (90 gallons) Twin - 800 litres (180 gallons)
<b>HOSE REEL</b>	Variable-speed hydraulic-rewind hose reel with 100m high-pressure hose capacity
<b>DIMENSIONS</b>	L x W x Hmm: 1800 x 1400 x 1520 *
<b>RECOMMENDED ACCESSORIES</b>	<ul style="list-style-type: none"> <li>½" lightweight low friction desilter hose</li> <li>High efficiency duct desilting nozzles</li> <li>Tow jet nozzle</li> <li>½" drain jet extension</li> <li>Flowplant suction jet pump</li> </ul>

\* Dimensions are approximate

# MINI DESILTER

The Flowplant Mini cable duct Desilter is a self contained and fully portable duct unblocking system. A flexible hose with special high pressure water jet gently removes blockages from small bore cable ducts.



The Mini cable duct Desilter has a removable hose reel, safety foot control pedal and 140 litre water tank. All the items are modular and can be ready to use within minutes of arriving on site. They can be transported strapped together or as separately, depending on the space available in your vehicle. The mini desilter is supplied as standard with all the necessary accessories and is purchased as a complete system.

<b>PRESSURE &amp; FLOW</b>	Up to 140 bar @ 10 lpm
<b>PUMP</b>	High efficiency desilter pump
<b>ENGINE</b>	Detachable Honda 4 stroke petrol
<b>WATER TANK</b>	140 litre tank with safety frame and strap anchors
<b>HOSE REEL</b>	<ul style="list-style-type: none"> <li>Main - 33m feed hose with manual rewind reel</li> <li>Desilter - 20m capacity enclosed reel with desilter hose (1/8" BSPM x 1/4" BSPF)</li> </ul>

“We have been using the Flowplant harben De-silt machines in our daily operations throughout Yorkshire for the last 5 years. The feedback from our engineers in this time has been that the machines have proved invaluable in delivering best service to our customers jetting our existing communications network safely. These machines have saved millions in costly civils work within the telecoms arena as well as reducing delay in delivering service to our valued customers and unnecessary excavations in the public highway.”

Adam Steel

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Openreach



Scan the QR to find out more about the Desilter range.

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