

# Underground Technology Solutions

2011

UNDERGROUND TECHNOLOGY SOLUTIONS



Manufacturers and suppliers of high pressure water jetting equipment



**GADMON**  
INDUSTRIES



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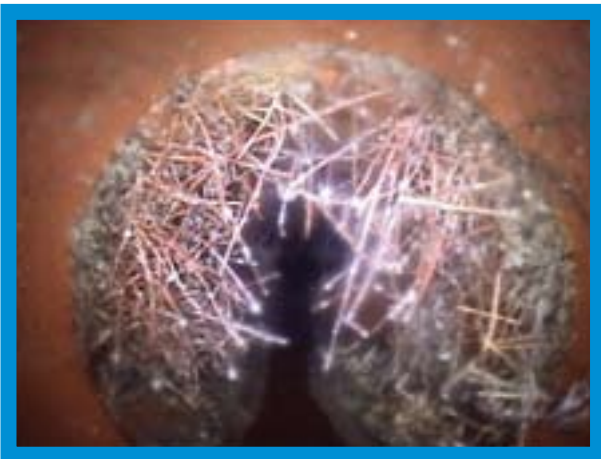
## *The root of the problem...*

Buried pipes are subjected to various forces, the most predominant being ground movement, chemical attack and accidental overloading. Due to one of the above factors a crack might appear in a pipe. Effluent leaks out of the crack and erodes the soil surrounding the pipe.

Most pipes depend on the soil for structural support and for the uniform distribution of overburden loads. The erosion alters the equilibrium and causes the development of eccentric point loads. These point loads cause further deterioration of the pipe, which may give rise to fractures. The fractures allow further washout and a vicious cycle of deterioration is set up.

Eventually the pipe collapses.

*Root Infestation*



*Displaced Joint*



*Broken Pipe*



*Cracked / Fractured Pipe*



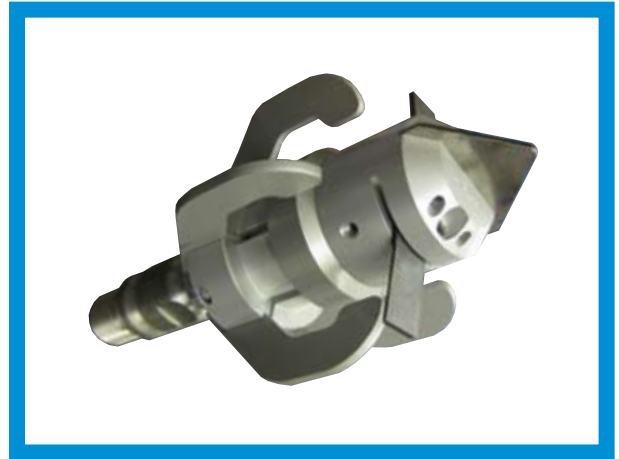
## *Clearing the problem...*

Before commencing any repair work, it is generally good practice and usually necessary to remove any obstructions or damage to the pipe. Various techniques can be used to achieve this, depending on the fault. Below are some examples of the equipment we can supply, to hire or buy.

*Root Cutter*



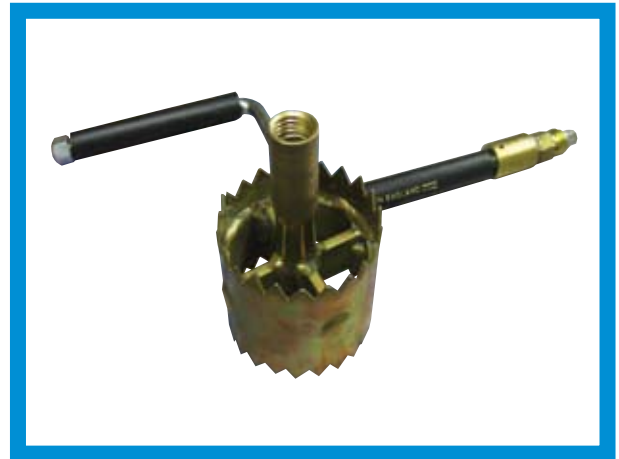
*Piranha*



*Warthog*



*Crown Root Cutter*



*Pathfinder*



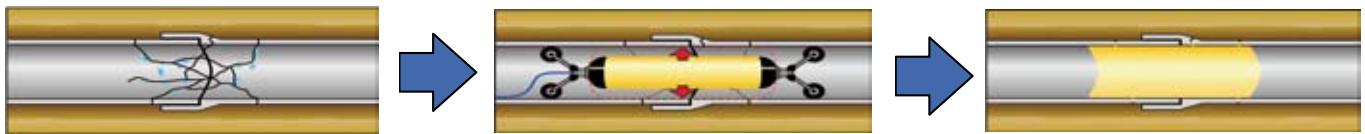
*Crossfire*



## Remote Repair Systems

The philosophy behind most insitu methods is to repair the pipes at an early stage, at a lower expense, than the cost of digging up a collapsed pipe. The true cost of a collapse is not limited to the excavation cost, it may also involve other indirect costs such as insurance claims for flooded basements, cost of traffic disruption to the general public, compensation claims to commercial traders etc.

The repair method is referred to as Soft Lining. This involves the "insitu manufacture" of a secondary fibre reinforced "pipe within a pipe". The strength of the inner pipe being comparable to that of the existing pipe. Soft Lining may be used to structurally support a pipe which has reached fracture stage.



## The Solutions....

We can offer several solutions to damaged pipework, all available from any of our nationwide walk in depots or via mail order.

### 4 in 1 Patch Box

The 4 in 1 Patch Box Kit includes enough materials (wrapped into 4 individual packages), complete with resin and shot hardeners, to complete up to 4 patches.



### Single Silicate Patch Kit

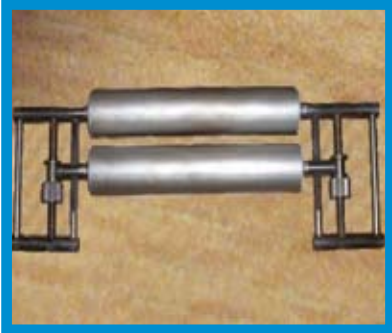
The single silicate patch kit includes all materials for a single job and comes with the 'no smell' silicate.



## CIPP (Cured In Place Pipe)

We can supply all the individual equipment required for a no-dig repair. Listed below are some examples, to hire or buy.

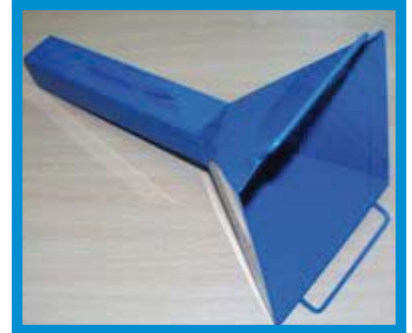
Nip Rollers



Vacuum Pump



Funnel



Liner Clamp



Hot Box



Rodding Ball



Steel Roller



Packers



Inverters



Compressor



Lining Materials



Patch Kits



## Accessories

Wide range of accessories are available for use in conjunction with the no dig equipment.

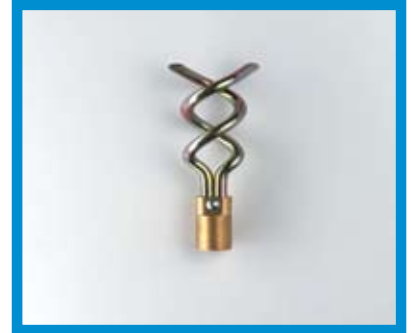
P.P.E.



Drop Scraper



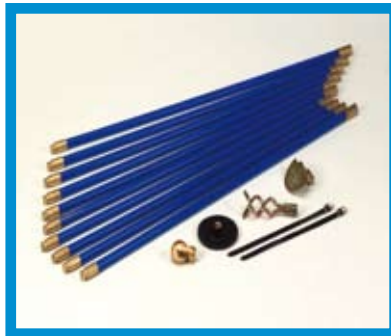
Double Worm Screw



Spear Head



Drain Rods



Silt Breaker



Silicone Lubricant



Boring Tool



Drain Dye



Drain Test Plugs



Pipe Inspection Point



Patch Kits



# Pipe Inspection Point [ P.I.P. ]

## Need to gain access to a pipe?

For quick and easy access to any plastic or cast iron pipes, whether its for CCTV access, drain clearance or removing debris, its the fast and simple solution.



*Suitable for cast iron and plastic pipes*

*Easy to install and refit*

*Economical*

*Aesthetic*

*Secure*



## Training

Training can be provided on site or at any one of our nationwide depots. We offer training in the following :-

- Localised spot repairs, ranging from 100mm - 600mm diameter pipelines
- Full length manhole to manhole lining
- One ended lining inversion
- Ambient and hot cure



Water Jetting Association approved courses are also available.

Prices on request.

# Drain Cleaning Accessories



## Kinetic Water Ram

Compact, lightweight water ram uses a burst of compressed air to produce kinetic transfer of energy through water to break up blockages in pipelines. Works on wash basins, showers, baths, sinks, urinals and drains.

Kit complete with:-

- 1½", 2", 3", 4", (38, 50, 75, 100mm) plugs
- 5 bungs ½" to 3"
- 175mm (7") WC cleaning disc
- water filling & caulking hoses
- Tap connector
- Carry case, instructions & connectors



## Gully Grabs

Hinged bowl cleans out mud, silt, leaves, stones and solid objects from manholes gullies & septic tanks etc. Bowl opens and closes using tee at top of central shaft.

Various bowl sizes & lengths



## Electro-Mechanical Drain Cleaners

Super-Vee for kitchen, bathroom and pipes up to 3" (75mm) Ø. Slide action chuck built in to the grip shield which slides back to grip, allowing the cable to work through a blockage and forward to disengage.

Available in 240v & 110v



## Toilet Auger

Cleans WC pans, gullies & urinals. Spring is flexible and can negotiate tight urinal bends. Various lengths are available.



## Drain Rods

Steel flex rods and also lock fast are available, together with all related accessories.





## Information

For further information please contact your nearest depot.

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