

TRENCHLESS WORKS

TRENCHLESS WORKS IS THE ON-LINE NEWS AND INFORMATION SERVICE FOR THE TRENCHLESS INDUSTRY ENDORSED BY BOTH THE UNITED KINGDOM SOCIETY FOR TRENCHLESS TECHNOLOGY (UKSTT) AND THE INTERNATIONAL SOCIETY FOR TRENCHLESS TECHNOLOGY (ISTT)



ISSUE 48

AUGUST 2010

SPONSORS LINKS
Click Name for website access



A MAJOR PIPE BURSTING PROJECT IN GENEVA

Click for [link](#) to story

FOR INDIVIDUAL NEWS SECTIONS THIS ISSUE:

CONTENTS PAGE [click here](#)

INDUSTRY, COMPANY AND INSTITUTION [click here](#)

PIPE JACKING & MICROTUNNELS ETC [click here](#)

PIPELINE REHABILITATION [click here](#)

HORIZONTAL DIRECTIONAL DRILLING [click here](#)

PIPELINE ONLINE REPLACEMENT [click here](#)

SUPPORT EQUIPMENT AND ACCESSORIES [click here](#)

EVENTS AND MEETINGS [click here](#)

For the latest



NEWS [click here](#)



C J KELLY
ASSOCIATES

[C J Kelly Associates](#)

Independent pipeline renovation consultant and UK representative for [Sartex](#), [KOB](#), [MC Chemicals](#) and [Terra](#)



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[AkerSolutions](#)



U Mole

Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBUs and Accessories

CURRENT ISSUE CONTENTS

(A full index of previous articles is available online click [here](#))



ARTICLES BY NEWS/TECHNOLOGY SUBSECTION	PAGE
INDUSTRY, COMPANY AND INSTITUTION NEWS	
Top Safety Accreditation for S&D Services link	3
Mankato Awards First CIPP Project to Insituform link	4
NoDig websites hit the 100,000 visitor mark link	4
PIPE JACKING, MICROTUNNELLING, TUNNELLING & AUGER BORING	
First planned curved microtunnel successfully completed in the USA link	5
PIPELINE REHABILITATION	
Workers On Track To Repair Ageing Sewer link	8
HORIZONTAL DIRECTIONAL DRILLING	
Manor Farm Harvests Geothermal Heat link	9
Next Generation GPR Technology At National Grid Cable Avoidance Day link	11
ONLINE PIPE REPLACEMENT	
A Major Pipe Bursting Project In Geneva link	12
SUPPORT EQUIPMENT AND ACCESSORIES	
McElroy's PitBull 26 is Unleashed link	14
Cutting It Fine At Water Treatment Works link	15
UKSTT NEWSLETTER	
Please Get Out Your Diaries link	16
UKSTT Awards Dinner – 2010 link	16
EVENTS	
International No-Dig Singapore link	17
No-Dig Live 2010 link	18
Trenchless Live 2010 Online Registration Open link	19
International No-Dig 2010 Exhibition expands to accommodate demand link	19
EVENTS DIARY link	20

SPONSORS LINKS

Click Name for website access



[C J Kelly Associates](#)

Independent pipeline renovation consultant and UK representative for [Saertex](#), [KOB](#), [MC Chemicals](#) and [Terra](#)



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering



[AkerSolutions](#)

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



[U Mole](#)

Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBUs and Accessories

To submit editorial for Trenchless Works Issue 49
please email copy and pictures to:
ian@nodigmedia.co.uk by 10 September, 2010
For TW Sponsorship and advertising rates click [here](#)

INDUSTRY, COMPANY AND INSTITUTION NEWS AND RESEARCH



TOP SAFETY ACCREDITATION FOR S&D SERVICES

S&D Services, the trading name of SWD Ltd, is one of the latest group of successful companies to join a leading edge scheme designed to help industry improve its safety record.

The South West company, based in Chard, Somerset recently received accreditation from SAFEcontractor, a programme which recognises very high standards of Health & Safety practice amongst UK companies.

Employing ten people, S&D Services is principally involved in specialised drainage works ranging from simple emergency blockage clearance and drain cleaning through to detailed CCTV surveys of underground drainage systems and, if required, the use of innovative methods to permanently resolve problems for their clients. Wherever possible, environmentally friendly No-Dig systems, such as CIPP pipe lining and pipe replacement by bursting, are employed. When excavation is the only option, for example for the installation of new drainage, S&D Services also offers this. The company is qualified for works in the highway and is recognised by Wessex Water. It also undertakes a full range of associated works including confined space operations, tank and gully emptying and cleaning together with many others.

Specialising in serving the very demanding public sector as well as major construction and industrial concerns, S&D Services is still easily able to deal with private households and bring to projects its wealth of knowledge and experience gained over 25 years.

Some of the company's most recent clients include ROK, Morgan Sindall, Somerset & Dorset County Councils together with several local councils and Primary Care Trusts. All these have the same requirement for the very highest quality of work and standards of Health & Safety.

The company's application for SAFEcontractor accreditation was driven by the need for a uniform standard across the business.

Steve Sampson, S&D managing director, said: "Over the 25 years I have been in this industry I have seen many changes. Amongst the most significant of these has been in the attitude towards Health & Safety. This is now paramount when working in the commercial sector and clients are insisting on using only the most qualified and competent contractors. It is easy for me to say that we are amongst the best, but I am biased, so it is important to be able to demonstrate our commitment through an independent accreditation which is why we chose SAFEcontractor. Not only do they demand that the highest standards are demonstrated but also work with participating companies to achieve them."

SAFEcontractor accreditation is expected to enhance the company's ability to attract new contracts and its commitment to safety will be viewed positively by its insurers when the company's liability policy is up for renewal.

John King, Head of Risk at SAFEcontractor said: "Major organisations can no longer run the risk of employing contractors that are not able to prove that they have sound health and safety policies. More companies need to understand the importance of adopting good risk management in the way that S&D Services has done. The company's high standard has set an example which hopefully will be followed by other companies within the sector."

Under the SAFEcontractor system, businesses undergo a vetting process which examines health and safety procedures and their track record for safe practices. Those companies meeting the high standard are included on a data base which is accessible to registered users only via the website:

www.safecontractor.com.

Employer organisations which sign up for the scheme can access the database which enables them to vet potential contractors before they even set foot on site. These employers agree that as users of the scheme they will engage only those who have received accreditation.

Over one hundred and twenty major nation wide businesses from several key sectors have signed up to use the scheme when selecting contractors for services such as building, cleaning, maintenance, refurbishment or electrical and mechanical services and others. Website:

www.sanddservices.co.uk



The S&D Services team proudly display their recent SAFEcontractor award.

SPONSORS LINKS

Click Name for website access



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



[McElroy](#)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

INDUSTRY, COMPANY AND INSTITUTION NEWS AND RESEARCH



MANKATO AWARDS FIRST CIPP PROJECT TO INSITUFORM

Insituform Technologies, Inc. recently announced that it has been awarded the first cured-in-place pipe project in the history of the city of Mankato, Minnesota, USA. This \$US5.1 million contract award will allow Insituform to rehabilitate 3048 m (10,000 ft) of 1,066 mm (42 in) diameter sanitary sewer pipelines in the commercial and historic downtown areas of Mankato.

"Insituform first introduced CIPP nearly 40 years ago and we are pleased to now use this trenchless technology to rehabilitate nearly two miles of pipelines in Mankato. We are confident that we will exceed the City's expectations as we complete this project," said Bobby O'Dell, General Manager for Insituform's Central Region.

It is expected that Insituform crews will begin to install Insituform® CIPP in September 2010 and will complete the project, which runs along the Minnesota River, in twelve months.

Public Works Director for the City of Mankato, Mark Knoff, said, "The City of Mankato is pleased to work with Insituform, low bidder of the city's \$US5.1 million sanitary sewer rehabilitation project. Insituform provides a trenchless cured-in-place pipe solution that reduces traffic and environmental impacts and will ultimately reduce future capital, operations and maintenance expenses."

Insituform will manage locally owned subcontractors throughout the project to provide cleaning and closed-circuit television inspection, manhole replacement and rehabilitation. Website: www.insituform.com

NODIG WEBSITES HIT THE 100,000 VISITOR MARK

In July 2010 the Internet portals for pipeline engineering and trenchless technologies 'nodig-bau.de' and 'nodig-construction.com' were visited by more than 100,000 trade visitors altogether for the first time. This is an accumulated number of 1 million website visitors per year.

When the Internet portal nodig-bau.de was launched in 2002, followed by the English version nodig-construction.com in 2003, both websites recorded only 3,000 hits per month.

Over the years both websites continuously advanced, soon becoming a respected meeting point on the Internet. Time and again existing services and features were amended and improved to meet with the users' growing requirements and wishes.

Today both portals provide up-to-date daily news in the form of branch information, jobsite reports and videos. On the market place trade books can be purchased, used machines can be sold, jobs can be searched for or offered and tenders and bids can be reviewed and selected. In the Knowledge Database information on different subjects such as 'Building-ground', 'Estate drainage' or 'Trenchless installation techniques' is to be found.

The German version of the website nodig-bau.de provides an industry guide with more than 14,000 addresses which are updated daily.

The service of the portals is completed by the new community 'Trenchless & Pipeline People' where you can find interesting people, establish new business contacts, generate new business and orders or discuss and solve problems with other experts in a forum.

The team behind the portals are certain that the experts in the pipeline engineering branch, whether clients, planners, suppliers or contractors, will use the Internet more and more for their business.

Further projects to make the nodig websites even more beneficial are already in the pipeline. Website: www.nodig-construction.com



Home page of the Nodig Construction website which can be accessed using the hyperlink below.

SPONSORS LINKS

Click Name for website access



[Perforator Ltd](http://www.perforator.com)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



[ONSITE/PERCO](http://www.onsiteperco.com)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Augerboring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



[McElroy](http://www.mcelroy.com)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

PIPE JACKING, MICROTUNNELLING, TUNNELLING & AUGER BORING

For General Information on Pipe Jacking, Microtunnelling & Auger Boring [click here](#)



FIRST PLANNED CURVED MICROTUNNEL SUCCESSFULLY COMPLETED IN THE USA

To the best knowledge of the contractor, the first curved microtunnel to be planned in the United States has just been successfully completed.

On May 19, 2010 The Metropolitan District Commission, Northeast Remsco Construction, the designers AECOM and the Tunnel Guidance Specialist VMT GmbH celebrated the breakthrough of this major project for the U.S. tunnelling industry in Hartford, Connecticut, USA.

The first curved Microtunnel was part of the \$US1.6 billion 'Clean Water Project' currently well underway in Hartford, the capital of the State of Connecticut. The project includes three basic elements:

- Reduction of combined sewer overflows (CSO's) with the Hartford central sewer system
- Elimination of sanitary sewer overflows (SSO's) in the sanitary sewers of Wethersfield, West Hartford, Windsor, Rocky Hill and Newington
- Nitrogen reductions

Although much of the project involved trenchless technology, this section had originally been planned as a trenched installation. However, the density of other utility services in the vicinity of this section encouraged the contractor, Northeast Remsco, to suggest the alternative method of microtunnelling for the drive between shafts MHD and MHK. Detailed study of the obstacles on route necessitated that the drive would need to be curved. Such was the complexity of these obstacles that the precise alignment was modified several times until the most suitable course was finalised.

The machine used for this drive was the company-owned Herrenknecht AVND 1800AB MTBM equipped with a SLS Microtunnelling LT guidance system supplied by VMT GmbH.

NAVIGATION

For a curved drive the choice of guidance system is either a Laser Total Station based system or a Gyro Navigation System. VMT offers both. To achieve the accuracy of 25 mm (1 in) in both horizontal and vertical required a Laser Total Station System, for this VMT's SLS-Microtunnelling LT system chosen.

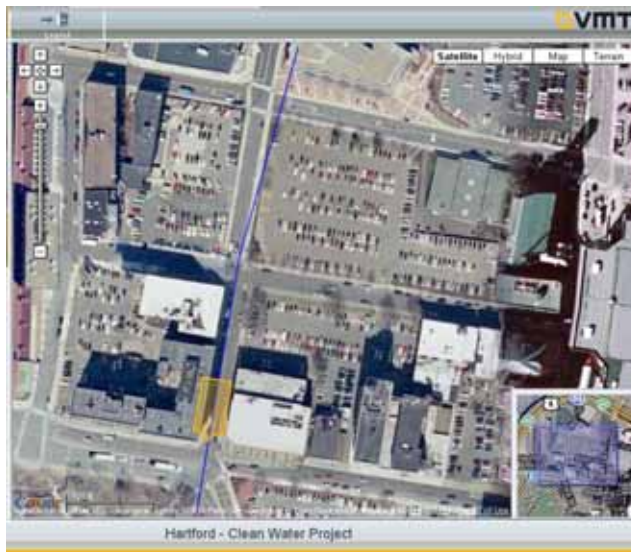
This system is designed for the guidance of long distance and curved pipe jacking applications for pipe diameters above 1,000 mm (40 in). The main component of the system is a servo motorised Laser Total Station which is mounted inside the tunnel on a special bracket and moves along together with the pipeline. The actual position of the laser total station is continuously calculated with help of the known as-built position of the already installed pipes.



Even TBM drift is recognised and will not influence the accuracy of the system calculations. As the complete hardware of the SLS-Microtunnelling LT System is installed in the front part of the tunnel (in the 90 m or 300 ft) refraction does not influence the measurements for the vertical TBM position.

The advantage in the use of the Laser Total Station guidance system is the ability

Overview of the microtunnel launch site.



Project overview showing the rout of the curved bore.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[AkerSolutions](#)



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



U Mole
Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBU and Accessories

PIPE JACKING, MICROTUNNELLING, TUNNELLING & AUGER BORING

For General Information on Pipe Jacking, Microtunnelling & Auger Boring [click here](#)

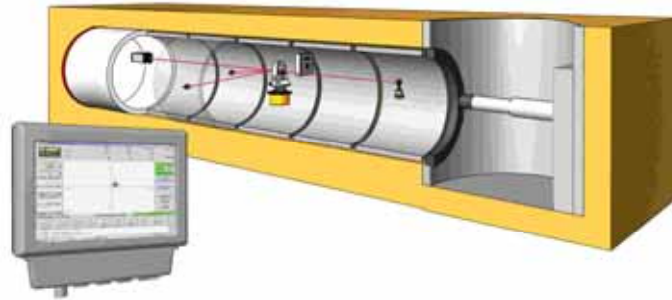


to determine continually the Tunnel Boring Machines' current position independent of drift or refraction. The robust and tunnel-proven hardware, easy to handle and user-friendly software with permanent recording of all important drive data, allows quick familiarisation with the handling of the system.

The combination of a precise and reliable automatic Navigation System and proper survey measurements guarantee that from the start to the finish, the tolerance will be achieved.

In addition to the guidance system VMT supplied an experienced engineer to oversee the guidance of the machine which completed the 183 m (600 ft) drive in just 9 days whilst undertaking a curve of 414 m (1,359 ft) radius for a length of 49 m (160 ft) to complete this complex project.

The VMT InternetViewer, a feature to provide remote visualisation of navigation and machine data via the internet was supplied. All data of the actual TBM position, the TBM history, the TBM Position in Google Maps and available machine data from the TBM were displayed in the internet browser and frequently updated. For such a challenging project this feature was a good solution for disseminating relevant information to all companies involved. The machine and navigation data can also be displayed in web charts to analyse the jacking process.



Schematic of the VMT SLS-Microtunnelling LT System.

THE DRIVE

From the moment the TBM commenced boring on the 10 May, 2010 it was guided by VMT's SLS-Microtunnelling LT system. Initially in the starting phase (Phase 1), the laser station (VMT's standard Leica TCA 1203plus motorised total station which includes an integrated diode laser mounted parallel to the visual axis and a sensor system allowing automatic targeting of prisms) was mounted between the push rams on a purpose built measurement pillar. For reference measurement a further pillar with a survey prism was installed with a reference prism outside the shaft.

During excavation the laser beam is continuously maintained on the ELS target and follows the TBM during the advance. The calculated values of position are displayed on screen of the system PC and stored in the database. The three-dimensional co-ordinates of the axis point in the ELS Target unit plane are saved as the course of the TBM.

The TBM itself produces a tunnel that determines, with relatively good accuracy, the position and level of the following pipes. This means that the positions measured for the TBM at a particular tunnel station will not change significantly for the following pipes, the position and level of all further pipes will be determined by the tunnel produced by the TBM. This assumption is called invariance of the pipeline and is the basis of all calculations in the SLS-Microtunnelling LT.



The system normally remains in phase 1 until the laser can no longer activate the target unit either due to distance or line of sight limitations. On this project this situation was reached after only 2 days when the tunnel reached a drive length of 64 m (210 ft). At this point it was already 12 m (40 ft) into the curve and was approaching the position where the laser would no longer activate the target.

The VMT engineer then mounted the Laser Total Station inside the tunnel to move along with the pipeline and continued the project in Phase 2. A bracket for the laser station with automatic tribrach and inclinometer was mounted directly onto pipe No.10 approximately 36.5 m (120 ft) behind the target, thus guaranteeing a

The bored bore at Hartford.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[AkerSolutions](#)



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



U Mole
Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBUs and Accessories

PIPE JACKING, MICROTUNNELLING, TUNNELLING & AUGER BORING

For General Information on Pipe Jacking, Microtunnelling & Auger Boring [click here](#)



line of sight to the target unit at all times. The automatic tribrach is used to eliminate roll at the laser station and maintains the Total Station permanently in a horizontal position - any lateral inclination caused by the roll of the pipe is detected by an inclinometer positioned at the laser station and included in the calculations.

Two additional brackets for the reference prisms were mounted 5 pipes ahead of the laser station. Their purpose is to allow measurement of the actual position of the advancing tunnel as directly in front of the laser station as possible, so that any variance between the pipes measured position and that of the theoretical position of the TBM at the same station can be determined. Finally the backsight reference prism was mounted on the measurement pillar in the shaft. As the laser station advances with the progress of the pipe, its position is known from the previously stored reference points, which are indexed via the chainage and corrected for any minor variation due to pipe roll pitch and yaw.

Due to the very rapid advance rate on this project the interval for the full measurement cycle to check the positions of all the reference prisms was set at 1 m.

A single interjack station was installed after the laser station, this was a contingency in case jacking pressures became too high. It was, however, not utilised on the drive.

In phase 2, because of the fixed backsight target, the chainage of the laser position was to be ascertained independently of the inter-jack stations, and thus give a more precise co-ordination of the reference points with respect to the longitudinal measurement.

When the drive reached 123 m (405 ft) the backsight prism could no longer be measured from the laser station so the backsight prism was mounted in the tunnel together with its attendant inclinometer to allow roll of the pipes to be included in the computation and the system commenced operation in Phase 3. To ensure that an accurate chainage of the TBM is maintained a distance measurement wheel is mounted on the pipes in the shaft.

The guidance system was now running self-sufficiently under common conditions for the rest of the drive. Normally a full control measurement is carried out every 91 m (300 ft) to ensure that any accumulated errors are removed. But due to the fact of the very small tolerance of 25 mm (1 in) and the fast advance speed, a quick measurement of the system area, from the TBM to the backsight prism, was done on a daily basis. This measurement was carried out whilst the tunnel crew were adding a pipe and as such no delays were experienced.

On day 9 of the drive, the TBM scratched the receiving shaft and was recovered the next day. The breakthrough accuracy was less than 12 mm (½ in) in both horizontal and vertical planes. Thus was completed a very successful first in North America. Website: [VMT GmbH](#)



The tunnelling crew celebrates the final breakthrough.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[AkerSolutions](#)



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



U Mole

Trenchless Technology

[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBUs and Accessories

To submit editorial for Trenchless Works Issue 49 please email copy and pictures to: ian@nodigmedia.co.uk by 10 September, 2010

For TW Sponsorship and advertising rates click [here](#)

PIPELINE REHABILITATION

For General Information on Pipeline Rehabilitation [click here](#)



WORKERS ON TRACK TO REPAIR AGEING SEWER

A 1960s sewer which runs alongside the Bristol to London railway line has been repaired using no dig technology.

The ageing asbestos cement (AC) sewer, operated by Wessex Water, had suffered a number of fractures and was relined using a Cured-In-Place-Pipe (CIPP) system to safeguard it for the future.

The project involved inserting a preformed Polyester lining saturated with Polyester resins and specialist additives to provide the finished liner with greater strain capacity. The liner was inserted with low 'head' and cured in place using hot water.



Installing a CIPP lining alongside the active Bristol to London railway line.

Barry Burtenshaw, an engineer with Wessex Water, said: "Repairing the 375 mm diameter sewer in Corsham, Wiltshire, using a no dig method had many advantages. Without the use of this technology it would have been impossible to repair the sewer without closing this busy section of railway line which would have been extremely disruptive and costly. In addition, it meant that we could safely make improvements to support the pipe's structure without the risk of compromising the asbestos cement pipe's integrity."

A CCTV investigation of the sewer revealed that it had lost structural strength due to decalcification and sections expose to the elements had caused exfoliation of the outside surface leading to a number of ring fractures, which are a common problem for AC sewers.

Before the relining work took place the sewer was cleaned using a Weirdermann 1000 Recycler, which has over 400 m of reach and is one of the quietest machines of its kind in the country. Wessex Water chose to use the Weirdermann 1000 Recycler to minimise disruption to residents in the area.

Once the cleaning was complete the sewer was relined in two runs using liners measuring 325 m and 323 m in length.

Mr Burtenshaw said: "These were unusually long liners for us to fit in one of the only sewers in our region located next to a railway line. Before our contractor Onsite was able to complete the work the crews had to go through an intense two day training course and full medical check so they could safely complete work near the railway line without supervision from National Rail. As an additional safety precaution most of the work was completed at night when very few trains use the Bristol to London line."

The sewer was built next to the railway line in the 1960s, which runs in a 'cut in' at between 6 and 10 m below properties in the area. This unusual location was chosen to avoid the need for a tunnel more than 600 m long through the land adjacent to the railway line. With its new liner installed the sewer is now expected to continue providing a safe, reliable service for more than 50 years.

Website: www.wessexwater.co.uk

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



C J KELLY ASSOCIATES

[C J Kelly Associates](#)

Independent pipeline renovation consultant and UK representative for [Saertex](#), [KOB](#), [MC Chemicals](#) and [Terra](#)



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



[McElroy](#)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

To submit editorial for Trenchless Works Issue 49
please email copy and pictures to:
ian@nodigmedia.co.uk by 10 September, 2010

For TW Sponsorship and advertising rates click [here](#)

HORIZONTAL DIRECTIONAL DRILLING

For General Information on Horizontal Directional Drilling [click here](#)



MANOR FARM HARVESTS GEOTHERMAL HEAT

Manor Farm is situated on some of the most fertile planes in rural Bedfordshire, UK. It is located on the edge of the beautiful village of Eyeworth and was constructed in 1865. Traditional arable and livestock farming methods were the order of the day on this once busy farm.

In 1859, Thomas Aveling self propelled a Clayton & Shuttleworth portable engine to form the very first traction engine. By the end of the 1860's the traction engine had evolved and marked a significant change in farming methods, particularly at harvest time. Manor Farm was worked to its full potential but little did anyone realise a lucrative hidden crop lay undisturbed under that same land eventually to be harvested for the first time 150 years later.

This delightful Georgian-style farmhouse and buildings were recently purchased by Charles and Karen Sterling as a family home, together they drew up a sympathetic detailed restoration and modernisation plan of the building. This incorporated under floor heating and with CO₂ emissions, operational efficiency and lowest running costs in mind, they opted for a Ground Source Heat Pump to provide heating and hot water. So would begin the harvesting of sustainable Geothermal Energy whenever required, significantly reducing their heating costs.

Following careful consideration of the Heat Well's design and in conjunction with ground water drillers and geothermal heat well specialists, Warren Ecological, the Geothermal Radial Drilling (GRD) method was chosen.

Bob Evans, Warren's Managing Director, said: "GRD provides a completely integrated drilling technique and solutions to a number of issues with this type of retrofit project. Warren was working with Roland Amey Renewables, the warm side designer, to install the NIBE Ground Source Heat Pump.

GRD TECHNOLOGY

GRD is the innovative geothermal slant drilling system from manufacturer TT-UK (GRD) Ltd, part of the TT Group. GRD is designed to search out the most rewarding geology maximising heat well efficiency. Use of all land within the plot boundary can be considered without affecting its future use. Importantly it is also quite simple to increase the heat well capacity at a later date if for example the property is increased in size.

The project called for a total heat requirement of 30 kW, 10 x 50 m long bore holes would be drilled, radially spaced to avoid borehole interference, at varying angles between 65° and 35° down, over a radius of just 180°.

The site set up was rapid due to careful planning by Warren; the GRD 4R rig, just 1.5 m wide, weighing 2,700 kg, was tracked and connected to its pre-positioned drill chamber for the whole of the drilling process. This completely avoids any potential damage to the immediate environment and garden. The integral drill rod and casings lifting hoist was then erected and the HSE safety platform connected, this reduces the rigs spindle rotation to a safe max 10 rpm when connecting and disconnecting all drill rods and casings to one another.

A Geological Survey indicated a mixture of clay, silt and sand, so water flushing using a conventional three winged drag bit, constant displacement pump and three settlement tanks were used. The Geology

Bob Evans, Warren Ecological, handing over the completed GRD Heat Well to Charles Sterling.



The Geodrill 4R rig positioned on the drilling chamber with Power Unit.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[AkerSolutions](#)

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



HORIZONTAL DIRECTIONAL DRILLING

For General Information on Horizontal Directional Drilling [click here](#)



SPONSORS LINKS

Click Name for website access



[McElroy](#)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

Report turned out to be reasonably accurate; geology was recorded rod by rod from the first bore to prove the drill plans and heat extraction values. The Geology remained the same throughout. The last 31 m of every bore hole was green sand. This was cut and flushed out using a drag bit, constant displacement pump and a three settlement tank water recycling method. All borehole cuttings were returned into the settlement tanks avoiding ground or airborne overspill, leaving a clean and tidy site. TT-UK (GRD) has also developed a single container (skip) water loss method, where the pump recycles the flushing fluid which collects the cuttings and deposits them in a skip displacing the water. When full the skip is removed and a replacement provided if required.

With the first borehole at 50 m long x 65° down, all drill rods were extracted and a Fusion co-axial (pipe inside pipe) collector was installed with grouting tube and pressure tested using a digital datalogger with an analogue pressure gauge back-up. This data is recorded for inclusion in the GRD Heat Well Owner's Manual which also includes the drill plan, geology report, bore hole geology (real time) drill log and property heat requirement calculations.

All borehole collectors were made from one piece PE100 SDR 11 material and connect to the manifold fitted to the inside of the drill chamber.

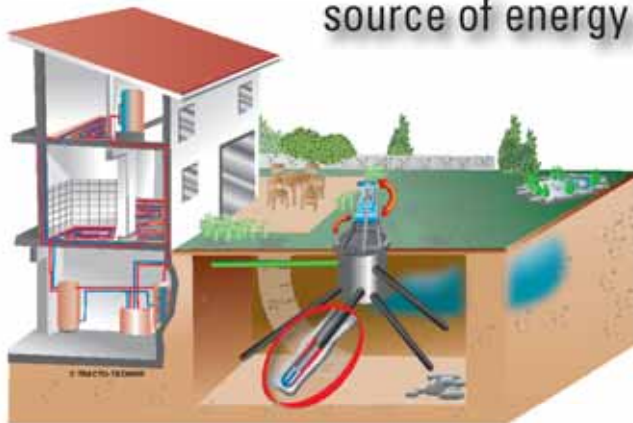
Following satisfactory pressure test results, grouting was carried out using thermal conductive ready mixed grout powder. A small integral hopper is filled with dry grout and mixed with water to the correct viscosity to suit both ground water flow rates and bore hole conditions. This took place from the bottom up by draining the grout pipe as the annulus filled. All drill casings previously supporting the integrity of the bore hole were then removed. Finally, the flow and return pipe connections were made between the drill chamber and plant room with continuous pipe lengths and all manifold connections made.

Evans concluded by saying: "Not only does the GRD method provide an intelligent and assured drilling process, the heat well owner should can increase the heat well size at any time, the drill rig can be re-connected and additional boreholes added, for new property extensions etc."

This GRD heat well has now been in use for nine months; Charles Sterling said the combination of GRD and his Ground Source Heat Pump has been exceptionally efficient, particularly through this past extremely cold winter and he looks forward to this effortless intellectual Geothermal harvesting serving his family for year ahead. Website: www.tracto-technik.com

Intelligent geothermal heat extraction

Make geothermal heat a rewarding source of energy!



The innovative GRD technology:

- High and sustainable heat extraction
- Fast and economic installation of the heat exchangers
- Minimal surface disturbance
- Utilization of all plot dimensions to find the most rewarding geology
- Easily accessible drilling chamber
- Heat well capacity can be increased at a later date

TRACTO-TECHNIK GmbH & Co. KG - 57368 Lennestadt
Email: export@tracto-technik.de - www.tracto-technik.com



Geothermal
Radial Drilling

HORIZONTAL DIRECTIONAL DRILLING

For General Information on Horizontal Directional Drilling [click here](#)



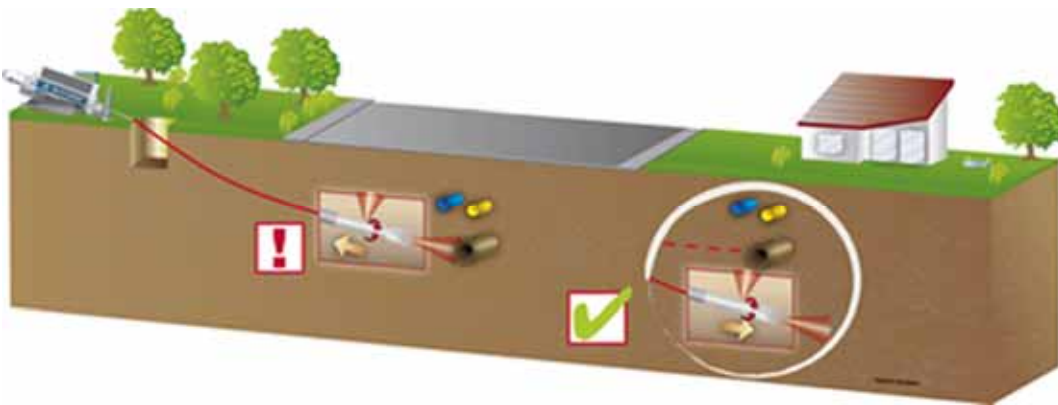
NEXT GENERATION GPR TECHNOLOGY AT NATIONAL GRID CABLE AVOIDANCE DAY

Prominent guests and speakers from the UK construction industry were welcomed to the National Grid Cable Avoidance Day event by Michael Dyke, Director of UK Construction, National Grid, and Mark Fairbairn, Executive Director, Gas Distribution, National Grid.

The new TT Group GPR Horizontal Directional Drilling Bore-head with durable antennas with 'look ahead and look sideways' capability was highlighted and on display at the event.

TT is involved in the ORFEUS project, which is a European Commission funded collaborative research study, with the following three main objectives:

- To prototype an innovative GPR-based real-time obstacle detection system for steerable boreheads of Horizontal Directional Drilling (HDD) pipe and cable laying systems so that they can operate more safely below ground.
- To provide a step change in the depth penetration and spatial resolution of GPR used for surveys carried out from the ground surface.
- To increase knowledge of the electrical behaviour of the ground, by means of in-situ measurements to enhance understanding of the sub-soil electrical environment, and to provide information for scientifically based antenna design.



Schematic of the TT Group GPR Horizontal Directional Drilling Bore head in operation.

This brand new advance in cable and pipe avoidance was just one of the many trenchless or minimal dig techniques on show.

During the inter-active morning and afternoon sessions, VIPs and over 200 guests visited the exhibition stands and TT-UK was able to display its range of the well-known Grundomat Soil Displacement Hammers for accurate and reliable service and mains laying and Grundoburst 400G on-line gas/water pipe replacement systems. The Grundoburst can pull in a variety of replacement pipe including PVC, DIP, ABS, cast iron, fusion welded HDPE and VCP jacking pipe. Pulled by a hydraulic bursting unit, the cutter head's special roller cutting wheels split the host pipe. Six models are available for bursting 50 mm (2 in) through 1,400 mm (54 in) diameter pipes and larger.



Due to the exceptionally fine weather on the launch day, TT-UK was able to demonstrate its new City Sucker 7.5 t Suction Excavator which, when used in city centre environments, greatly reduces the risk of cable strike and inadvertent damage to other third party buried plant in the vicinity. Website: www.tt-uk.com

Top: The TT-UK/RSP New City Sucker Suction Excavator.

Bottom: The TT GRUNDOBURST 400G on display with the patented QuickLock (ladder rods) advanced technology.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[AkerSolutions](#)

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy

ONLINE PIPE REPLACEMENT

For General Information on Bursting, Reaming, Cracking, Eating and Pulling [click here](#)



A MAJOR PIPE BURSTING PROJECT IN GENEVA

It was a mammoth task that contractor PIASIO, a daughter company of COLAS SWITZERLAND, had ahead of it in Geneva Meyrin, Switzerland. Applying a GRUNDOBURST 2500 G (250 t pulling force) pipe bursting system to an aged and under-dimensioned 500 mm diameter grey cast iron drinking water transport pipe. This original pipe was to be replaced by a 730 mm diameter concrete pipe with a steel core, made by BONNA.

In Geneva, when extending public traffic routes, as in this case for the road network, it is the normal procedure to check all underground supply networks and, if necessary, renew or repair them. Generally, up to 5 years after completion of work on public roads no-one is allowed to excavate. The aim is to prevent any danger areas, ugly road patchwork and constant repair procedures, which could cause accidents for a foreseeable period.

The supply networks are supervised by the Geneva Public Utility Company (SIG) and cover the water supply, as well as the gas and power supply of the whole city. This arrangement however does allow for an efficient and co-ordinated planning and execution of repair measures.

The choice of pipe materials rests with the SIG with clear requirements:

- Polyethylene for pipes below 300 mm diameter
- Cast iron for pipes from 300 to 400 mm diameter
- Concrete for pipes above 400 mm diameter

The construction technique used was designed to minimise disruption to nearby property and business owners and interrupt traffic as little as possible. This was also one of the reasons for the application of the pipe bursting method, whereby the old pipe is destroyed and the new pipe, which often of a larger diameter, is pulled into the existing pipe path. This method is suitable for most pipe materials. The main advantage being the trenchless installation of a new pipe with a relevant, long service life. In this case the renewal of the pipe stretched over several sections and a total length of 450 m.

“We have been involved with pipe bursting technology since 1998 and have already gained very good experience with the GRUNDOBURST 400 G and 800 G versions.” commented Jean-Michel Balmat, the responsible engineer for No-Dig works at COLAS SWITZERLAND. “This is an extreme advantage for us, especially given the task in hand, which is also a novelty in project terms for us. The challenge lies in the partial section of 125 m length, which has slight bends in it at a depth between 1,7 m and 3 m beneath a petrol station.”

The nearby owners each received brochures in advance, giving them information and an explanation regarding the pipe bursting method and the individual working sections. Numbered signposts were set up on the footpath to indicate the progress of each working step. This measure was highly acclaimed by these owners as exemplary, which they appreciated.

For the GRUNDOBURST 2500 G a pit was excavated with a length of 10 m. With its pulling force of 210 t, old pipes from ND 300 to \leq ND 1000 can be renewed. The GRUNDOBURST rig, even with the highest pulling force demands, still has to be stabilised securely inside the



The GRUNDOBURST with 2,500 kN (250 t) pulling force is the largest pipe burster available from Tracto-Technik.

SPONSORS LINKS



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids
Recycling & Mixing Systems
Moles & Bursters
Digital Location Equipment

[T A Drilling](#)



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



U Mole
Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of:
Vac Ex, Mole & Rammers,
Bursting, Coil Trailers, SBUs
and Accessories



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



Two pipe lengths were welded together.

ONLINE PIPE REPLACEMENT

For General Information on Bursting, Reaming, Cracking, Eating and Pulling [click here](#)



machine pit. A stabiliser made of steel and concrete at the head of the rig was specially produced to secure it.

The proven principle using the QuickLock bursting rods which simply link in place is a major assembly advantage. The lowering and retrieval process of the QuickLock bursting rods was carried out with a special lifting device.

When pulling in the pipes, a pit with a length of 15 m was required on the reception side, with enough space for two pipe lengths, welded together, each with a length of 6.5 m. With two pipe lengths the pipe weight was almost 4 t, which meant a weight of 37.5 t over a length of 125 m. After the welding process, an insulated socket was pulled over the welding seam. The welding work took approximately 2 hours for each pipe and was carried out by a specialist welding company.

After the QuickLock rods had been pushed in through the old pipe, the expander head with the new pipe and a cutting blade were connected.

The bursting process and the pulling-in process of the new pipe were carried out while adding a mixture of Bentonite to decrease any friction. Furthermore, the operator made sure that the pulling force used was kept within that permitted so as not to exceed the recommended values from the pipe manufacturer. After all auxiliary work, the bursting and pipe installation process took just three days.

After completion of the work, numerous representatives from the public utility company were highly satisfied with the technically and economically well planned and executed pipe-bursting assignment. Website: www.tracto-technik.com



Ready for bursting, the pipe length with the 810 mm diameter expander and the 600 mm diameter cutting blades. Inset a section of the new concrete pipe with steel core.

SPONSORS LINKS



www.mcelroy.com
[McElroy](#)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

To submit editorial for Trenchless Works Issue 49
please email copy and pictures to:
ian@nodigmedia.co.uk by 10 September, 2010
For TW Sponsorship and advertising rates click [here](#)

SUPPORT EQUIPMENT, ACCESSORIES & SERVICES

For General Information on Support Equipment & Accessories [click here](#)



MCELROY'S PITBULL 26 IS UNLEASHED

The new PitBull® 26 fusion machine from McElroy has been unleashed. The machine can fuse a variety of pipe sizes in the popular 2 in IPS through 6 in DIPS (63 mm through 180 mm diameter) range.

Due to the growing popularity of the size range, the PitBull 26 was designed to provide contractors a go-to machine for day-to-day fusion operations. The design of the machine is similar to one of McElroy's best-selling machines, the PitBull 14.

"We are a customer-centric company. We knew from market feedback that we had to provide our customers a great fusion machine designed for the demands of this popular pipe size range," said Chip McElroy, president of McElroy.

Much like the PitBull 14 machine, the 26 features McElroy's patented Centerline Guidance System, a semi-automatic locking cam, hard anodised aluminium wear surfaces for corrosion resistance and thrust-bearing-equipped clamp knobs that minimise the torque required to clamp and round the pipe for fusion operations. The unit can also fit on McElroy's Manual Fusion Machine Stand to bring the process to a more comfortable height for the operator.

Three PitBull 26 machine models are available including a 6 in DIPS with a 100 to 120 input voltage requirement, a 6 in DIPS with a 220 to 240 input voltage requirement and a 180 mm unit with 220 to 240 input voltage requirement. Each PitBull 26 machine comes with the fusion machine, facer, heater, insulated heater stand, facer stand, 6 in IPS insert set and a screw/driver kit. Website: www.mcelroy.com



The McElroy PitBull 26 fusion machine at work.

SPONSORS LINKS

Click Name for website access



[TT Group](#)

TT-Group: A leading manufacturer of Trenchless Technologies: Moles, Pipe Rammers, HDD, Pipe Replacement and Auger boring systems and NoDig-equipment



[Herrenknecht](#)

Manufacturer of TBMs, Pipe Jacking, Microtunnelling, HDD and Additional Equipment and Engineering Services.



[C J Kelly Associates](#)

Independent pipeline renovation consultant and UK representative for [Saertex](#), [KOB](#), [MC Chemicals](#) and [Terra](#)



[VMT GmbH](#)

Supplier of TBM, Microtunnel, Pipe Jacking and Tunnel excavation Navigation & Guidance systems & Services.

Astec Underground & American Augers HDD Rigs Auger Boring Equipment Tooling & Drill Rods



Drilling Fluids Recycling & Mixing Systems Moles & Bursters Digital Location Equipment

[T A Drilling](#)



[U Mole](#)

Trenchless Technology
[U MOLE](#)

Supplier for hire or sale of: Vac Ex, Mole & Rammers, Bursting, Coil Trailers, SBU and Accessories



Detail of the PitBull 26 fusion unit.

DynaMc™

McElroy's new DynaMc fusion machines can revolutionize your pipe fusion operations with unmatched productivity, technology, and capability.

The new DynaMc Autos meet:

- U.K. Gas Industry Specification PL2-3:2006
- U.K. Water Industry Specification 4-32-08

McELROY
THE PIPE FUSION EXPERTS For more information visit www.mcelroy.com

SUPPORT EQUIPMENT, ACCESSORIES & SERVICES

For General Information on Support Equipment & Accessories [click here](#)



CUTTING IT FINE AT WATER TREATMENT WORKS

Severing two 1,200 mm (48 in) diameter steel water mains at a water treatment works in Oxford required specialist cutting expertise from a Steve Vick International Special Contract Services team.

Damar Group Ltd was contracted by Thames Water to replace failing valves on the large pipes feeding contact tanks at the Farmoor Water Treatment Works in Cumnore Road, Oxford. This necessitated cutting around the circumference of the 15 mm wall thickness steel pipes in order to remove the valves and replace them.

Farmoor supplies water to areas including Oxford and Swindon and the contractor was given only a 12 hour window to complete the project.

Damar sub-contracted the cutting operation to Steve Vick International Ltd which used a N600 Keel cutter supplied by South+West Pipe Tools. The hydraulically powered machine automatically tracks around the circumference of the pipe wall whilst the tungsten carbide tipped blade cuts through the metal.



The N600 Keel cutter in action.

The cutter requires just a 200 mm to 250 mm clearance, making it ideal to use in confined areas, and even operates under water which was an advantage at Farmoor where it was not possible to pump out all the water surrounding the mains. As the project involved potable water, only water was used as a coolant.

Each 1,200 mm (48 in) diameter pipe took one and a half hours to cut out, enabling Damar to remove and replace the faulty valves within the given time frame.

Martin Hardy, Damar's on-site foreman, was delighted with the cutting operations and commented: "Steve Vick International carried out the job very quickly and efficiently and I particularly liked the clean edge to the cuts."

South+West Pipe Tools supply two models of the Keel cutter, one for diameters up to 900 mm (36 in) and the N600 which handles pipe up to 1,500 mm (60 in). The machines are capable of cutting a variety of materials including steel, cast iron, ductile iron, asbestos, cement and plastic pipe. A variety of blades are available to suite different materials. The machines are available to buy or hire.

Steve Vick International is a world leader in developing techniques for the minimum-dig repair and replacement of pipes. The company's Special Contract Services teams provide on-site solutions to a wide variety of pipe renewal problems in the gas, water and civil engineering sectors. Website:

www.stevevick.com

SPONSORS LINKS

Click Name for website access



[Perforator Ltd](#)

Sales and Hire of Guided Auger boring and Pipebursting systems and tooling.



[ONSITE/PERCO](#)

No-Dig contractors for: Sewer installation, renovation & maintenance including CIPP, Structural, Infiltration & Connection linings; Patch repairs; CCTV pipe inspection and assessment; pipe cleaning, flow monitoring; Auger boring; HDD; Microtunnelling; Shaft Sinking; Headings; Lateral Cutting; Pipe Bursting; Sliplining & Consultancy



[McElroy](#)

McElroy Manufacturing is the leading manufacturer of polyethylene pipe fusion equipment and provider of customer-driven solutions to PE engineers and contractors worldwide.

To submit editorial for Trenchless Works Issue 49
please email copy and pictures to:
ian@nodigmedia.co.uk by 10 September, 2010

For TW Sponsorship and advertising rates click [here](#)



UKSTT NEWSLETTER



Brought to UKSTT
Members by:



PLEASE GET OUT YOUR DIARIES

It is NEVER too early to start planning. It's early perhaps, but never too early, to start thinking about the UKSTT annual awards programme.

What schemes, projects, innovations or work might you submit for consideration by the independent industry judges? Anything 'in the pipeline' (no pun intended)?

It is definitely time to mark up your diary for this year to identify and prepare who is going to write up and submit the entry forms. Decide the categories your submission might best fit? Can't decide? Well then, enter it in both categories, after all the judges will decide the winners.

Have you got any engineers under 30? Are they involved in trenchless projects? Persuade them to submit an entry for the Chairman's 'Young Engineer' £2,000 travel bursary. The bursary is designed to encourage young engineers to expand their horizons and experience world wide trenchless application of systems and techniques. Winners have been to Australia as well as the Far East using the bursary and the society's international contacts.

UKSTT AWARDS DINNER – 2010

UKSTT had a record number of entries for the awards for 2009 last April with the short listed entries and winners reported in a special edition of the newsletter in July.

The winner of the Young Engineer award was Leanne Ford from Wessex Water seen to the right with Chris Packham and Colin Tickle, UKSTT Chairman.

So make a note! – UKSTT Annual Awards Dinner – 2011. The United Kingdom Society for Trenchless Technology (UKSTT) will be holding its 17th Annual Dinner and Award Ceremony on Friday 15 April, 2011. The event will take place at the Holiday Inn, Birmingham. The evening will again be hosted by the recognised TV personality and naturalist, Chris Packham, supported by last year's very popular 'Pink Strings' quartet and our very own toast master, Norman Brown.

Chris was made an honorary Patron of our society last year and I feel sure he will be making a special effort with his very own type of personal supporting guest star when he opens the evening.

As previously, there are various sponsorship packages open to UKSTT Corporate Members which will secure the Sponsors publicity at the event and press coverage of the Award presentations.

The event celebrates the contributions made by organisations and individuals to the promotion, use and development of Trenchless Technology in 2010. The categories remain the same for 2011, Rehabilitation, New Installation, Small Project, Innovation and Young Engineer. It is never too early to submit an entry. Information on entering the Awards and an application form can be found on the UKSTT website or by emailing UKSTT's offices. Completed forms should be returned by email along with supporting evidence, including photographs by Friday 25 February, 2011.

For further information regarding the event, please contact Val Chamberlain on 01926 330935 or admin@ukstt.org.uk or visit website: www.ukstt.org.uk



Exhibition Expands to meet demand

More space is now available to house the growing list of international exhibitors who will showcase the very best in trenchless technology. If you haven't booked yet, contact the organisers soon to secure your space.

[Book your exhibition space – click here for information](#)

2010's World Forum

The spotlight is on Singapore as engineers prepare to gather for ISTT's premier annual event

World Class Conference

International experts from some 22 countries will present papers in the Conference programme

Don't miss out – make a note in your diary

INTERNATIONAL NO-DIG 2010
8-10 November 2010

Suntec Singapore International
Convention & Exhibition Centre



ISTT's 28th International Conference & Exhibition

[For more details please visit www.nodigsingapore.com](http://www.nodigsingapore.com)

Email: trenchless@westrade.co.uk



EVENTS AND MEETINGS



5-7 October 2010
Stoneleigh Park, Near Coventry, UK



Breaking new ground

SHOWCASING TRENCHLESS TECHNOLOGY

Europe's leading showcase featuring innovative no-dig solutions.

SPECTACULAR LIVE DEMONSTRATIONS

See the equipment in action. Demonstrations all day, every day.

FREE BUSINESS BRIEFINGS

Sign up to the early morning briefings on topical industry issues.

REGISTER NOW

Visit the show website to see the latest exhibitor listing, business briefing programme and register for free. www.nodiglive.co.uk

INDUSTRY SUPPORT



REGISTRATION
www.nodiglive.co.uk
NOW OPEN

BOOK YOUR STAND

Call the sales team on 0845 094 8066 Email: trenchless@westrade.co.uk

EVENTS AND MEETINGS



TRENCHLESS LIVE 2010

SPONSORS LINKS

Click Name for website access



Specialising in Articles, PR and Marketing Literature for the Trenchless Technology Industry.
www.nodigmedia.co.uk

TRENCHLESS LIVE 2010 ONLINE REGISTRATION OPEN

Trenchless Live 2010 online registration is now open. The event takes place between 17 and 20 October at the Coffs Harbour Showground in New South Wales, Australia.

Registration as a full delegate, for \$A550, will offer attendance at the Toolbox Sessions, Super Panel, Cocktail Party and the BBQ Dinner and Awards evening.

The Toolbox Sessions will allow full delegates to get an entire overview of a single project by hearing from companies and their contractors, with ample opportunity for questions in a workshop environment. There will be one Toolbox Session held per day between 10.00am and 11.30am. The toolbox sessions will cover:

- Horizontal directional drilling (HDD) – 3 Towns Sewerage Scheme
- Tunnelling – Melbourne Main Sewer Replacement
- Relining – Interflow and Yarra Valley relining project.

SPECIAL GEOTHERMAL SESSION

In addition to the Toolbox Sessions there will be a special seminar on the geothermal industry and the potential this poses for trenchless contractors and service providers. This is included in the registration.

The Super Panel will be made up of trenchless experts in all areas including tunnelling, HDD, relining, condition assessment, pipe bursting and more. The experts, including contractors, engineers, consultants, equipment suppliers and representatives from utilities, will engage the audience in lively discussion of the relative benefits that each technique can offer for the installation and rehabilitation of underground infrastructure. To register online click [link](#)

INTERNATIONAL NO-DIG 2010 EXHIBITION EXPANDS TO ACCOMMODATE DEMAND

Demand for exhibition space at the ISTT's 28th INTERNATIONAL NO-DIG 2010, to be held in Singapore between 8-10 November 2010, is running high and as a result the show has been relocated to a larger hall at the prestigious Suntec Singapore venue.

Some 15 countries are already represented in the exhibitor line up, including a group participation of local companies hosted by the newly formed Singapore Society for Trenchless Technology (SgSTT). The GSTT will also be presenting the 'Made in Germany' Pavilion, while other countries featured are Australia, Japan, UAE, China, India, Malaysia USA, Canada, UK, Denmark and Italy.

"We are delighted with the response to the show." commented exhibition sales director, Paul Harwood. "Visitors to the event are sure to be impressed with the range of products and equipment on display from around the world, with many niche suppliers displaying alongside the major international players."

An integral part of the event is the ISTT's International Conference and the Programme Chairman, Prof Sam Ariaratnam said: "The 2010 conference in Singapore has attracted the highest number of papers for many years and are of outstanding quality. We are looking forward to a very educational and truly international meeting." The opening keynote address will be given by Khoo Teng Chye, Chief Executive of Singapore's national water agency, PUB. Website: www.nodigsingapore.com



To submit editorial for Trenchless Works Issue 49
please email copy and pictures to:
ian@nodigmedia.co.uk by 10 September, 2010

For TW Sponsorship and advertising rates click [here](#)

EVENTS AND MEETINGS



2010

September 13-17

IFAT - Munich, Germany

Details from: www.ifat.de/en/facts

September 14-15

West Midlands HAUC & HSOG Roadshow - Staffordshire Showground, UK

Details from: www.aldercross.com

September 22-24

Breakthroughs in Tunneling - Tunneling Short Course - Golden, USA

Details from: www.tunneling.com

September 27-28

4th European Water & Wastewater Management Conference - Leeds, UK

Details from: www.ewwmconference.com

September 28

Tunnels & Tunnelling Conference - London, UK

Details from: www.tunnelsandtunnellingconference.com

October 5-7

No-Dig Live 2010 - Coventry, UK

Details from: www.nodiglive.co.uk

October 17-20

Trenchless Live 2010 - Coffs Harbour, NSW, Australia

Details from: www.trenchless2010.com

November 8-10

International No-Dig 2010 - Singapore

Details from: www.nodigsingapore.com

November 23-26

Bauma China 2010 - Shanghai, China

Details from: www.bauma-china.com

2011

January 25-27

UCT – Underground Construction Technology International Conference & Exhibition - Houston, USA

Details from: www.uctonline.com

March 1-3

International Conference & Exhibition on Tunnelling & Trenchless Technology - Selangor, Malaysia

Details from: www.iem.org.my

March 27-31

NASTT No-Dig Show - Washington, USA.

Details from: www.nastt.org

May 2-5

International No-Dig 2011 - Berlin, Germany

Details from: www.nodigberlin2011.com

May 24-25

Iran PipeTech 2011 - 3rd Iranian Pipe & Pipeline Conference - Tehran, Iran.

Details from: www.iranpipetech.com

2012

May 14-16

International No Dig Show 2012 - São Paulo, Brazil

Details from: www.nodigshow2012.com (available soon)

If you have an event, course or meeting scheduled for 2009 or 2010 and would like to add it to this listing please forward details to: ian@nodigmedia.co.uk