Conroy Group leads the way in horizontal directional drilling. This type of drilling operates from the surface minimising the need for deep excavations and reduces the site to only entry and exit locations, offering maximum environmental and financial savings. Our state-of-the-art rigs are not only versatile, they can also be used where traditional methods are unsuitable, such as under rivers, roads and contaminated land. With a wire line guidance system, fully-trained operators, and years of experience, we're your first choice for installing every kind of pipe and duct.

dinimum Diamentian

Directional drilling underneath the busy A12 dual carriageway in Essex.



Continued Traffic Flow Reduced road closures and divers



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Reservoir crossing using wire linguidance system.



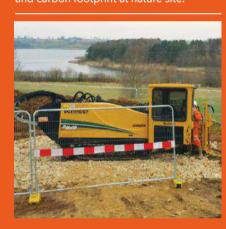
Rail

Installing a water main underneath a rail track - ultimate accuracy with no line closures.



Environmental

Fewer excavations reduce cost, duration and carbon footprint at nature site.



Contaminated land

Dramatic reduction in environmental and commercial costs due to minimised contaminated material tipping.



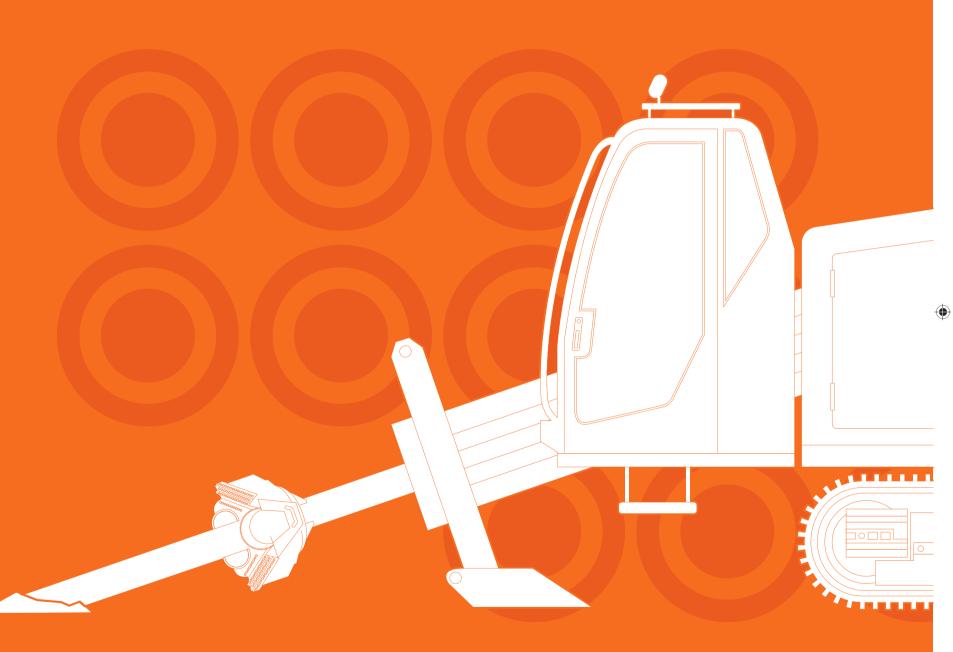
Optimising project commercial and environmental impact

Directional drilling minimises disruption to the public and the environment and is suitable in most ground conditions including rock, sand and cohesive clay.

- plastic MDPE/HPPE, ductile iron and steel pipes can be installed
- diameters of 63-900mm and pipe lengths of 20m to over 1000m
- single or multi ducts installation
- location system with an accuracy of +/- 2%
- wire line guidance for location in areas of restricted access
- ultimate accuracy to enable gravity pipeline installations
- pipe can be steered to avoid underground obstacles including vertically for greater depths

- increased design opportunities for solving problems in challenging environments
- fewer and smaller excavations with no surface encroachment or scarring
- dramatically reduced programme time and excavation costs compared with alternative techniques
- slurry recycling system reduces tankering and environmental costs
- drill profiles and real-time computerised downloads available





For further information, or to see directional drilling at work, please contact us on 01754 766 499. Alternatively visit www.conroygroup.co.uk for our drilling photos, videos and case studies.

Conroy Group Acorn House 85 Wainfleet Roa Skegness PE25 2

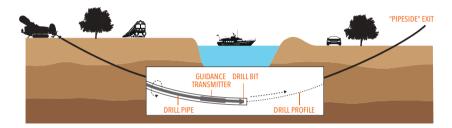
Tel: +44 (0)1754 766 499 Fax: +44 (0)1754 610 556 Email: info@conroysgroup.co. Web: www.conroygroup.co. Specialist pipeline contracting and horizontal directional drilling

Specialist installation of gas mains, water mains, electricity ducts, sewers and any other application where plastic, ductile or steel pipe is used

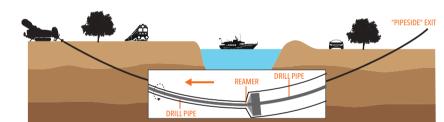
Directional1.indd 1-3

Installing pipes and ducts by horizontal directional drilling.

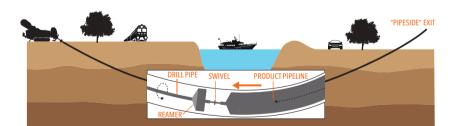
Horizontal directional drilling is capable of 4-way dimensional steering. It allows the operator and tracker to complete the first-stage pilot bore to a pre-determined bore path and drill profile.



The bore is then opened up (known as 'back reaming') to a suitable size to install the product pipe.



Once the reaming has been completed the product pipe is pulled back to the machine to finish the project.



Horizontal directional drilling is carried out by jetting and pumping fluids throughout the process. By adding bentonite substitutes and polymers we remove the cuttings while the hole is being reamed.

The mud flow is managed within our slurry recycling unit to ensure minimum water usage, tankering and waste implications. The bentonite substitutes and polymers also add bore stability and lubrication to enable a smooth pulling of the product pipe.

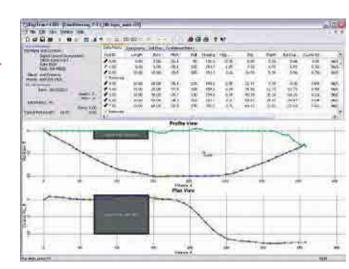
In difficult and inaccessible terrain, we use our wire line guidance system to provide real-time data. This allows us to adjust the drill rig immediately to maintain ultimate accuracy.

- compass heading (azimuth) in 0.1 degree increments
- tool face (roll) in 360 positions

Adjustable angle between 14° - 22°

- inclination (pitch) in 0.1 percent or degree increments
- computed depth up to 90 ft. (27.4m) and lateral position

Interchangeable rod baskets for drill shot



Current equipment includes: Vermeer D36x50

- fully automated rod loading system

- rubber tracks
- 17t thrust and pullback
- 5000ft lb rotation torque
- 70gpm on board mud pump - capable of pipe installation of up to 500mm
- on board 150m automated rod loader



Vermeer D60X90

- 27t thrust and pullback
- 9000ft lb rotation torque



