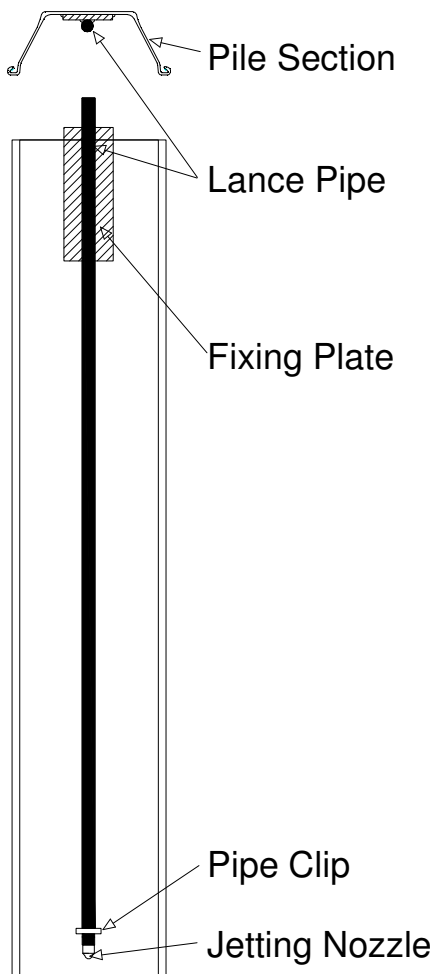


WATER JETTING

Water Jetting



Water jetting is the injection of water at pressure, with the maximum being 150bar, to liquefy temporarily and locally, the granular ground conditions permitting the passage of the sheet pile through the liquefied ground with a minimum of force. As the water pressure dissipates the soil regains its original consistency and the returning water lubricates the face of the sheet pile.

As we generally water jet with a 6mm diameter nozzle the effective water pressure at any distance from the nozzle can be seen to be rapidly reducing. As a practical point the water pressure used is kept to the minimum necessary to achieve effective penetration of the piles, and this will be down to the experience of the Operator.

Water Lubrication

In cohesive soils liquefaction is not a practical option. It is sufficient to lubricate the face of the sheet piles practically leaving the resistance to pressing in as a function only of end resistance. End resistance in London Clay is not generally a significant factor. Lubrication is only effective when the water is introduced at the toe of the pile hence the system used is that utilised during Water Jetting, except that the pump is run at the lowest possible revolutions generating a gentle flow of water up the face of the pile.

The operator will control the pressure, and as it will be necessary to penetrate the gravels underlying the topsoil, the water will be on from the start of piling, but kept to a minimum to prevent the nozzle blocking.



**Sheet Piling, Construction
& Professional Design
Services**

Unit 7,
The Oaks Business Village
Revenge Road,
Lordswood,
Kent,
ME5 8LF

TEL: 01622 794460
FAX: 01634 863016
Enquiries@berryrange.com
www.berryrange.com

