

OFFSHORE PIPELINE PILE EXTRACTION

EASINGTON, ENGLAND (2005)



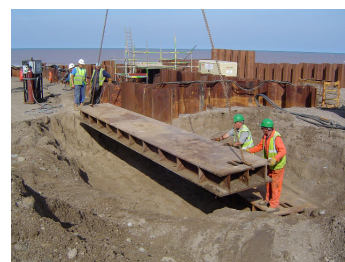
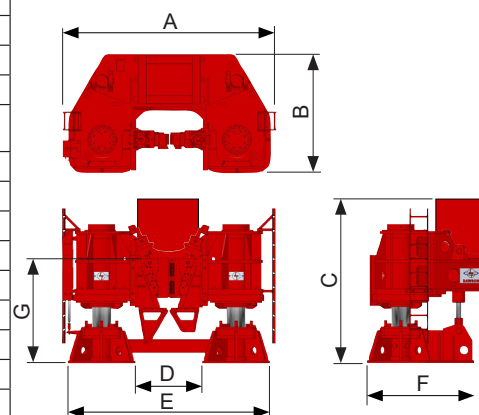
Main contractor Jan De Nul carried out construction works for a gas pipeline landfall at Easington. The offshore pipeline runs for over 1200 km, making it the worlds longest.

The steel piling included several beach cofferdams and two parallel lines running out to sea. All the piles required extraction after the pipe was laid; the longest were AZ36-630 crimped pairs at 24m, driven to refusal with a Dawson HPH 6500 impact hammer.

The X1000 operated for several months, its ability to apply up to 1000t of static pull force ensured it successfully extracted all the required piles, even where a PTC 100HD vibrator (2630kN centrifugal force) failed.

Technical Specifications

	X1000	
MAXIMUM EXTRACTION FORCE	9700kN	1090t (US)
RAM SPEED	3m/min	118"/min
MAXIMUM HYDRAULIC OIL PRESSURE	350bar	5075psi
MAXIMUM HYDRAULIC OIL FLOW		106gpm (US)
EXTRACTION DISTANCE (EACH STROKE)	500mm	19.7"
DIMENSION A	3780mm	148.8"
DIMENSION B	2100mm	82.7"
DIMENSION C - RETRACTED	2650mm	104"
DIMENSION C - EXTENDED	3150mm	124"
DIMENSION D	1180mm	46.5"
DIMENSION E	3580mm	141.1"
DIMENSION F	1900mm	74.8"
DIMENSION G	1524mm	60"
TOTAL WEIGHT	26500kg	58400lbs



ADVANTAGES OF USING X1000 EXTRACTOR

- Quiet and vibration-less hydraulic pile extraction system
- 400 tonne to 1000 tonne extraction force
- Can extract 'H' piles, 'U' and 'Z' profile sheets. With modification it can be used to extract tubular piles.
- Typical extraction rate: 3m/min (118"/min)
- Uses the ground as reaction (as opposed to other piles) hence stand alone piles can be extracted.
- Safer than extracting piles using a vibrator or pulling with a crane.