

FirstSubsea

Pipeline Recovery Tool

First Subsea's Ballgrab® Pipeline Recovery Tool (PRT) is utilised for the laying, commissioning and recovery of subsea pipelines. The PRT ranges typically from 2 inch to 48 inch to meet project demands. The modular design of the PRT can be fully customised to incorporate components e.g. pig catchers and dewatering systems. For this reason, they can be used to seal and dewater pipelines to assist in retrieval, and as a result they have found wide use both as contingency and in actual emergency situations. Every PRT is subject to rigorous testing prior to shipment from First Subsea's offices, Lancaster, UK.

First Subsea also carry a large PRT fleet ranging from size 2 inch to 48 inch which are available off the shelf at the clients request.

Ball and Taper

First Subsea's Ballgrab® connectors have a proven history with over 700 systems being supplied into a multitude of markets for subsea mooring, case running, pipe recovery, internal lifting, riser connections and tendon lift tools. Our class leading connectors are based on ball and taper technology, which ensures their suitability for any application involving gripping, pulling and holding connections under load.

Ball and taper connection technology, in its simplest form, is the action of balls held securely in tapers machined into the connector's mandrel. The balls are free to move up and down the taper, however when the balls grip the item to be held, they grasp it in direct proportion to the load applied.

Features

- Pipe size: 2 Inch to 48 Inch (Bespoke sizes available)
- Twin seal dewatering, pig catchers and check valve systems
- ROV detachable deployment arm
- DNV 2.7-1 / EN 12079 dedicated cargo basket or handling skid
- No water depth limitations
- Bespoke tools made to order, 6 to 8 weeks ARO
- Field proven for multiple lifts or recoveries



6 Inch Pipeline Recovery Tool With Deployment Arm



30" Inch White Rose Pile Lift Tool

Size (")	WLL (T)	Proof Load (T)	Working Range (mm)	Working Range (Max)	Mandrel Length (mm)	Actuation
30	300	386	680	735.6	1000	Hydraulic
24	278	360	563	585.5	2528	Hydraulic
20	90	198	450	486.2	796	Paddle
18	1000	1220	390	439.7	2880	Hydraulic
16	200	264	352	378	1026	Paddle
14	145	196.9	337	369.9	1983	Hydraulic
12	120	166.4	282	306.7	1472	Hydraulic
10	327	419	215	256.7	2643	Hydraulic
8	48	96	172	199.5	2344	Paddle
6	230	300	134	171.4	1235	Paddle
5	42.5	299.89	117	128	1799	Paddle
4	37.7	46	94.6	106.8	599	Spring
3.5	39	68	79	90	869	Spring
2.5	15	46	62	66.5	748	Spring

Design Code	DNV Standard for Certification No. 2.22 Lifting Appliances
Working Load Limit	Limit from 15T to in excess of 1000T
Proof Load Test	In accordance with DNV Standards typically WLL x 1.22
Maximum Water Depth	No water depth limitation
Operation	Primary Ballgrab ® Secondary cam paddle, spring or hydraulic hotstab
Sealing	Twin seal polyurethane through hot stab actuation, 75 bar G standard rating

Bespoke tools made to order typically 6 - 8 weeks ARO



6 Inch PRT with Deployment Arm



6 Inch PRT at 3642ft GoM Boomvang



30 Inch Tool Pile Deployment

Options



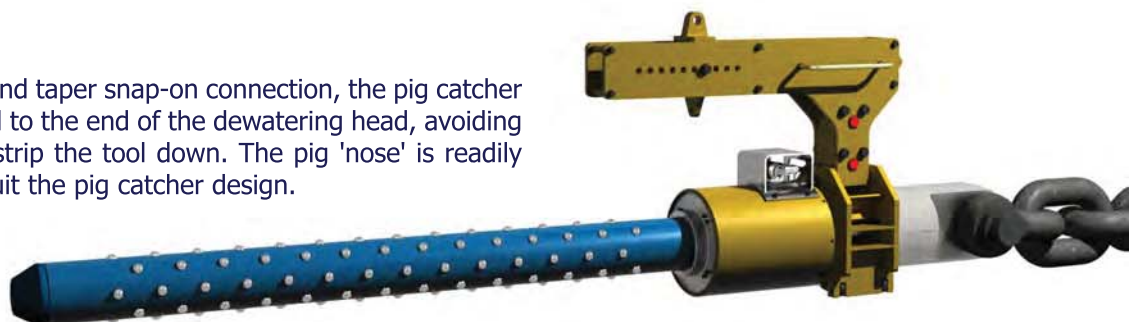
Twin Seal
Dewatering System

Bolted on the end of the tool, the dewatering seal interfaces with the internal pipe surface. When activated by ROV hydraulic pressure or hydrostatic pressure difference, it provides a water tight seal with a typical purge pressure of 12 bar. They are designed typically to accommodate API 5L and DNV 450 pipe tolerances.



Pig Catcher

Using a ball and taper snap-on connection, the pig catcher is easily fitted to the end of the dewatering head, avoiding the need to strip the tool down. The pig 'nose' is readily adapted to suit the pig catcher design.



The simplicity of the ball and taper mechanism and its speed of deployment, ease of use and versatility, make it ideally suited to pipeline recovery. Our class leading products are tried, tested and proven in service in a wide range of applications meaning there is always a Ballgrab® for you.

FirstSubsea

First Subsea Ltd, Engineering House, Lune Industrial Estate, New Quay Road, Lancaster, LA1 5QP, UK.
Tel: +44 (0)1524 387777 Fax: +44 (0)1524 387778 Email: sales@firstsubsea.com
Website: www.firstsubsea.com

First Subsea Ltd, Subsea Sdn Bhd, Suite F803, Phileo Damansara 1, Off Jalan Damansara
46350 Petaling Jaya, Selangor, Malaysia. Tel: +60 3 7956 0494 Fax: + 60 3 7958 8033

