

Securely Lifting Flexibles

Angel is the smart and reliable Lifting Solution

Angel is a unique multipurpose subsea lifting system. Perfect for flexible risers, umbilicals, flowlines, and cables.

The system is designed to handle a wide range of pipeline scenarios and configurations, whether for the installation of new pipelines and ancillary infrastructure, or the decommissioning of old ones.



The flexible Angel

The robust and reliable design allows for safe lifting of delicate flexibles without jeopardizing pipeline integrity.

The Angel tool can be delivered with several running interfaces to accommodate the exact specifications of the product to be lifted. It can also handle a wide variety of loads, product dimensions and water depths.

Angel may even be used for lifting rigid pipes making it the ultimate all-round tool for subsea lifting.

Key features

- Covers wide range of pipe diameters from 50 mm – 500 mm (may be extended)
- Lifting loads from 1 Te to 150 Te (may be extended)
- Designed to handle internal friction capacity & external pressure capacity
- Flexible lifting angles from 90° to 0° (alignment)
- Hydraulic Setting, Mechanical securing with 360° load transfer for safe lifts
- Designed for flexibles and cables, but can also be used on rigid pipe

Key benefits

- Adaptable to Flexible’s limitations regarding collapse & internal friction
- One Angel tool can be adapted to cover a wide variation in pipe dimensions
- Robust design, tries and tested technology with excellent track record
- Easy to operate. Standard ROV interfaces – no need for specialist supervisor or crew with associated cost
- Rapid deployment and connection for safe and efficient lifting



The Core of IK Subsea Lifting Solutions

We have decades of subsea experience, and Angel forms the core of our pipeline handling solutions. It ensures safety, reliability, and precision in every operation.

DATASHEET

Typical Angel Dimensions

- Load transfer to tool:

Load capacity:

Tool setting:

Bolts setting:

Documentation:
- The Angel has 360° mechanical loading.

Based on the minimum internal friction capacity.

Mechanical by setting bolts.

Standard ROV torque tools, Class 4 and Class 5.

User manual with instructions and technical data.

Test certificate & Design report for the actual operation(s).

DESCRIPTION	30 TE TOOL	60 TE TOOL	100 TE TOOL	150 TE TOOL	NOTES
Max lifting load	294 kN	588 kN	980 kN	1470 kN	1, 2
Flexible spans	50 - 250 mm	100 - 400 mm	200 - 500 mm	300 - 600 mm	3
Tool length	1200 mm	1800 mm	2700 mm	3000 mm	
Tool width	1000 mm	1150 mm	1300 mm	1500 mm	
Tool height	1100 mm	1300 mm	1400 mm	1600 mm	
Tool weight	1500 kg	3000 kg	6000 kg	8000 kg	

Notes

1. The max load is the maximum dynamic load.

2. The load capacity needs to be checked for each flexible, considering the OD, the internal friction in the flexible and the external crush capacity.

3. The tool(s) to be delivered with dimensional sets to cover any flexible OD in the defined tool ranges, these sets to be defined for each delivery.

4. Length is dependant on allowable external pressure for the product to be lifted.



Subsea Lifting & Handling

IK Subsea designs and manufactures a wide range of handling and lifting tools.

Our domain expertise translates into practical, safe and efficient solutions. They lead the way in recovery tools, clamps, hold-back clamps for caissons, and various piping solutions alongside internal and external lifting tools.

The tools vary from light weight ROV operated midline handling lugs to heavy duty lifting tools with several hundred tons of capacity.

Managing Risk

With over 30 years of experience, we excel in maximizing production potential and streamlining processes in all phases of offshore projects. To deliver the perfect solution to a specific challenge, we manage risk in a controlled manner.

Lifting Tool Portfolio

- Angel – friction lifting tool for flexibles, cables and umbilicals
- Lifting tools for midline connection onto products to be lifted
- Internal Pipeline Recovery Tool (PRT) for pipeline end lifting
- External PRT for heavy duty / deep water lifting
- Penetrating Pin Through Tool for pipe end lifting



Powered by IK Group

Brilliant Solutions

IK Subsea delivers bespoke engineering solutions to the toughest challenges. Innovation is our DNA.

Our portfolio spans commissioning to decommissioning, showcasing our expertise in every phase of offshore projects. We ensure asset integrity, extend subsea assets life, and facilitate safe decommissioning – with minimal environmental impact.

IK SUBSEA

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