



Inside this issue:

**North Sea
Project Report**

**ThinJack Service —
Saves Time & Money**

**ThinJack coming
to an
Offshore Exhibition
near you**

WHAT IS THINJACKTM?

- ThinJack is a TIG-welded 2mm thick grade 316L steel envelope.
- ThinJack works by inflating the envelope with hydraulic oil pressure.
- ThinJack expands by up to 10-15 mm by inflation and exerts hundreds of tonnes of force.
- ThinJack is the ideal solution to separating and jacking problems in hazardous, difficult to access or restricted areas.
- ThinJack increases productivity through faster operations, and it reduces costs ~ less time and resources are needed.
- ThinJack improves safety ~ no sparks from welding, cutting or hammer tools
- ISI provides a full service package of offshore-certified field technicians with all the ThinJacks, energizing systems, tools and spares required for international on- and offshore flange separation projects.
- ThinJack is CE marked and designed for use in Ex zones.

Another North Sea success....

In October 2009, a major North Sea Operator, called in ISI to use ThinJack to lift the christmas tree from a well in the North Sea.

Significant rust and corrosion was preventing the flange from being pulled apart resulting in delays to the XMT refurbishment and the workover programme. Before the ThinJacks were inserted rust was removed between the outer edge of the flanges and the ring gasket by pressure washing, creating an initial gap of 5mm. ThinJacks were made according to API6A specifications for a 13 5/8" 10,000 psi flange.

2. After first ring of ThinJacks is inflated, and removed, the extent of the rust is visible around the studs



1. Initial gap of 5mm with ThinJack inserted.



3



In a series of 5 separate ThinJack operations, which took the team of 2 Technicians a total of only 8 hours, the gap was increased to 45mm and 13 ThinJacks were used. The ThinJacks separated the flange from the

initial gap of 5mm (Photo 1) to around 45mm (Photo 3). Thereafter the flange was worked up the studs with conventional hydraulic flange spreaders (Photo 4) and finally lifted with 10,000 lb pull by a gantry crane. The forces applied by ThinJack started at approximately 350,000 lb and the last ring of ThinJacks only required 72,000 lb. There were total forces in excess of 950,000 lbs available from each ring of three ThinJacks, if

4



they had been required. The equipment for the project was all easily contained and shipped in a series of 13 site portable transit cases (Photo 5). The whole online job took only 8 hours including use of the hydraulic flange spreaders.

Upon successful conclusion of the project, the satisfied customer kindly wrote: "Thank you for a job well done!"

5



ThinJackTM Separates Stuck Flanges...FAST!!

ThinJack Service - the complete solution

ISI provides a 24/7, one-stop solution to getting those seized flanges separated ... FAST!!

From performing the initial survey of the problem flanges to achieving a separation where other methods have failed, ISI provides a fast, economic and successful solution. Preparation is the key:



ThinJack™:

- Simple engineering concept
- Sound technical solution
- Applies force exactly where it is needed
- Delivers significant savings
- CE & Ex Certified

ThinJack™ is made in a wide range of sizes and thickness to all API 6A flange specifications, as well as individual sizes for custom applications

THIN JACK™



©2010 Industrial Solutions International Ltd
All Rights Reserved

ThinJack field technicians are trained to examine the seized flanges and to identify accurately the exact measurements of the ThinJacks required to ensure a 100% success rate. Arriving on site with only a dozen cases containing all the tools, ThinJacks, ThinShims and the ThinFlate energizing systems, the field technicians remove sufficient rust, corrosion and debris to insert the ThinJacks between the flanges, outside of the bolt holes. Hydraulic inflation of the ThinJacks may then begin and typically takes 2 to 8 hours before the flange is separated. The project time saved by using ThinJack to separate the seized flanges compared to pulling with the drill string [if available] is often measured in tens of hours. The overall project costs saved are considerable. **ThinJack operations are typically accomplished in only 25% of the average time of traditional methods, with a 75% reduction in lost production revenues, together with an infinite improvement in safety and reduced likelihood of damage to key well and drilling equipment.** Based on its global experience gained in using ThinJack to solve a great variety of technical challenges in separating seized flanges, ISI's **consultancy advice** in this specialized sector can help you save time and money on your projects. By being involved in advance of any workover, well servicing or maintenance program, ISI can deliver to you considerable project time and cost savings. ISI has offices located strategically around the world and our expert technicians are only a phone call away. See the contacts page on our website.



ISI had a very successful **Offshore Europe 2009**, held in Aberdeen from September 8-11, 2009. A constant stream of European and International visitors, both old and new friends, ensured that the stand was busy and the large volume of enquiries on ThinJack made this a very worthwhile first time



presence at Offshore Europe. In keeping with our policy of expanding our global offices, ThinJack next exhibited in the U.S.A , at **LAGCOE**, Lafayette, Louisiana in October in the good company of our U.S. Gulf of Mexico representatives Francis Torque Service. Another highly successful show followed in Aberdeen at the November **SPE Well Intervention Technology Conference** which generated much interest and reports in the media. Looking into 2010, we will be at the **Australasian Oil & Gas Expo** in Perth from **March 24 -26, 2010**. **SEE YOU THERE !!!!!**

More information.....

If you would like any further information on ThinJack™ and ISI's range of flange separation services and consultancy, please contact us via the website or call us direct. We welcome any enquiry and feedback from our customers.

We look forward to providing you with our practical solutions to your flange separation problems, both on- and offshore.

Industrial Solutions International Ltd
Unit 6, Westhill Business Centre
Arnhall Business Park
WESTHILL
Aberdeenshire, AB32 6UF, Scotland
Tel: +44.1224.330645
www.thinjack.co.uk

ThinJack™, ThinShim™ and ThinFlate™ technologies, associated systems, operations, and services are protected by international patents, trademarks, design rights and copyright.