

Gripping News



A regular quarterly newsletter
Informing and Entertaining !

June 2008

We hope you will celebrate with us our 45th year serving the offshore oil/gas and the shipyard industries. Bardex has provided almost a half-century of engineering excellence and achievement.



Just two examples of industry-changing inventions that Bardex have made are the "Gripper Jack" and "Chain Jack". The Gripper Jack combines a hydraulic gripper (instead of a mechanical locking device) and jacking cylinder for skidding drilling rigs and other heavy loads and can be remotely controlled from an operator's console. The Chain Jack is a compact linear chain puller, which we first introduced for shipyard, shiplift applications, we later transferred this technology to the offshore industry for tensioning chain for mooring, SCR and pipeline pull-in and other heavy load applications.

2008 Exhibitions



The OTC at the start of May was a huge success and reflected the high level of business throughout the whole of the offshore industry. This year the organisers recorded an attendance of over 75,000 – the largest for 26 years. The photo, at right, shows Art Langlois our Vice President, Sales and Marketing ready to greet visitors to the Bardex booth which was centrally located in the Reliant Center.



Our next show is in Stavanger for ONS2008, Europe's largest offshore event which is held between 26th – 29th August. We will have Stand H854 in the USA Pavilion, so please come and visit us there.

Hydraulic Power Units

Earlier this year, we completed two large HPUs each designed with 3 x 150 hp electric motor driven pumps, plus several auxiliary motor pumps, for use on a floating semi-submersible drilling/production platform. Bardex is presently storing them in the Goleta plant of manufacture until our customer is ready to install the HPUs - expected to be sometime later this year.

This photo shows one of the two air-cooled HPUs, with an operating weight of 25,600 lbs, destined for the Gulf of Mexico.



In addition, in May we completed the building and factory acceptance testing of a further two central HPUs for use on fixed platform drilling rigs offshore Brazil. These two HPUs are fully enclosed and are designed with 3 x 100 hp main electric motor driven pumps with additional motor-pumps for various auxiliary uses.



The picture above shows the two sea-water cooled HPUs ready to be shipped to Brazil and a view of the controls of one of them with the end doors open.

Bardex Supplementary Mooring Systems

The need for supplementary mooring systems is evaluated where the original mooring system design is considered inadequate and therefore needs strengthening. This situation might arise because the vessel use or specification has changed, where the vessel is moving to a different location and local weather conditions are more severe than the original mooring system was designed to accommodate, or perhaps where new recommended practices or standards are introduced for safety or for vessel classification. Bardex has designed and supplied supplemental mooring systems covering the first two of these situations and so, with the introduction of API's new recommended practice covering mooring applications in the Gulf of Mexico, we are a supplier of choice for the major offshore drilling contractors working in the Gulf of Mexico for upgrade of their mooring systems to meet the new regulations.

The picture shows a semi-submersible, originally designed as a drilling unit, but which has been modified and re-equipped and is now working as a production unit in the Gulf of Mexico. In the change-over from drilling to production vessel, the operator had to upgrade the original eight mooring winches by installing larger diameter wireline, but this alone was not enough and Bardex was asked to design suitable chain jacks to provide the extra mooring integrity needed. You can see from the picture the very small size of the Bardex chain jacks compared with the existing mooring winches, nevertheless the chain jacks will hold a mooring line tension equal to the break strength of the chain – in excess of 600 tonnes – and this far exceeds the holding capacity of the upgraded winches.

We were later approached to design and supply a mooring system upgrade to Transocean's Jack Bates semi-submersible drilling rig, which although operating in South East Asia, was due to move to the Gulf of Mexico and so needed to be modified to withstand high-category hurricanes. To meet this challenge, Bardex supplied four chain jacks each arranged to provide a pre-tension of up to 272 tonnes and each will hold the break strength of the 3 9/16" ORQ+20% studlink chain – well over 600 tonnes. It now looks like the Jack Bates will remain in South East Asia and so will not now need this supplementary mooring system, but Transocean can use the same design and equipment on other MODUs in their fleet and they are actively considering on which vessel it will be installed and indeed the need for further similar systems.

Bardex is presently discussing upgrade of mooring systems with many of the worlds largest offshore drilling contractors who recognise our engineering experience and expertise. Please do contact us for further details - we welcome the opportunity to work closely with our customers in finding efficient cost effective and dependable solutions.



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