



# Record-breaking subsea boosting project

Delivery of two MultiBooster pumps to BP's King field in the Gulf of Mexico. The pumps are operating at 1 700 metres (5 600 feet) water depth, 24 kilometres (15 miles) from the Marlin platform. The pumps will enhance oil production by an average of 20 percent.

<b>Project name:</b>	<b>King MultiBooster</b>
<b>Customer:</b>	BP
<b>Area / Region:</b>	Gulf of Mexico
<b>Type:</b>	Aker Solutions' MultiBooster pump
<b>Water depth:</b>	1 700 metres (5 600 feet)
<b>Step-out:</b>	24 kilometres (15 miles)
<b>Installation:</b>	2007
<b>Flow:</b>	Performance test with water
<b>Power:</b>	Performance test with water; 330 m <sup>3</sup> /h, 1100 kW at 1800 RPM, 50 bar, 70% GVF
<b>Scope of work:</b>	Two complete subsea pump systems and one spare pump



# King MultiBooster project

Production at the King field reached peak production in 2004. Looking to get more out of their reservoir, BP required a powerful subsea pump that could meet the challenges associated with deepwater and long step-out. After several months of selection and definition studies, BP was convinced of the MultiBooster's capabilities and awarded Aker Solutions a contract to deliver two complete subsea pump stations, plus one spare pump, in 2005.

The pumps were manufactured and extensively tested at Aker Solutions' facility in Tranby, Norway, and then shipped to the Gulf of Mexico in June 2007. The pump stations, measuring 7 meters (23 feet), 9 meters (30 feet) long and 4 meters (13 feet) wide, and weighing 90 tonnes, were installed by Aker Solutions' subsidiary Aker Marine Contractors in a single lift.

Operational since late November 2007, the two pumps will enhance production at the King field by an average of 20 percent and allow a seven percent increase in recovery, extending the economic life-of-the-field by five years.

## Characteristics

- Aker Solutions' MultiBooster increases the distance over which the wellstream can be transported. It enables longer step-out distances between subsea assets and host facilities by adding energy to the wellstream.
- Modular design of the MultiBooster allows for easier subsea installations and retrieval. For any maintenance or repairs, parts of the system can be separately retrieved.
- A condition monitoring system is built into the control system in order to detect variations in performance at an early stage.
- Twin-screw technology enables the MultiBooster to pump oil and gas streams with a wide range of gas content.
- Can pump oil, water, gas and some sand without the need to separate or do any subsea processing at all.
- Unitised pump and motor housing, 5 000 psi internal pressure rating, 3 000 meters (10 000 feet) water depth rating.

## For further information please contact:

Tom-Erik Dahl  
Subsea processing and boosting  
Aker Solutions  
Tel: +47 67 82 60 00  
E-mail: tom-erik.dahl@akersolutions.com  
Web: www.akersolutions.com/subsea

