

GREAT MABRUK - LIBYA

# CRUDE OIL POWER PLANT



SUPPLIED IN 2005 FOR



**TOTAL**

COMPAGNIE DES PETROLES TOTAL LIBYE

BY



**BWSC** 

Burmeister & Wain Scandinavian Contractor A/S

## New Diesel Generators for Great Mabruk Oil Field

The Compagnie des Pétroles Total Lybie (CPTL) extended the Great Mabruk Oil Field for new oil production. This necessitated extra demand for electrical power produced from crude oil to ensure the new production capacity. BWSC was responsible for the equipment design, engineering and supply including units, tanks, piping, engines and generators, the supervision of the installation and test and commissioning of the entire plant. The equipment was delivered to Misuratah port 7 months after the date of signing of the contract. MAN was responsible for the supply and commissioning of the crude oil engine generator sets.



### Summary

#### Contract

Type ..... M+E, Supply, Test & Commissioning  
Contract award ..... July 2004  
Handing over ..... February 2005  
Commissioned ..... November 2006

### Technical Data for each Site

#### Diesel Engines

Make ..... MAN Diesel SE, Augsburg, Germany  
Type ..... 2 x 18V32/40, 4-stroke  
Speed ..... 750 rpm

#### Synchronous Alternators

Make ..... ABB, Finland  
Type ..... 2 x AMG 1120 MR08 DSE  
Rating ..... 10.530 KVA (at 50°C)  
Voltage/frequency ..... 6,6 kV / 50 Hz  
Output at 100% load ... 2 x 7.745 kWe at Pf 0.8 & 50°C

#### Main Unit

Builder ..... Pipecon, Denmark/Poland

#### Lube Oil Treatment

Make ..... Alfa Laval, Denmark  
Type ..... 2 x SU 836  
Rated capacity ..... 2 x 2.85 m<sup>3</sup>/h

#### Radiator Coolers

Make ..... GEA, France  
Type ..... Induced draught  
Cooling capacity .. HT+LT: 2 x 3217 kW + 2 x 2373 kW

#### Stacks

VL staal ..... 2 x 25 m  
Flue gas liner diameter ..... 1,1m



MAN Diesel SE  
Stadtbachstrasse 1 • 86135 Augsburg, Germany  
Phone: +49 821 322 3239 • Fax: +49 821 322 1460  
E-mail: powerplants@manbw.de • www.manbw.com



Burmeister & Wain Scandinavian Contractor A/S  
Gydevang 35 • P.O. Box 235 • DK-3450 Allerød, Denmark  
Phone: +45 48 14 00 22 • Fax: +45 48 14 01 50  
E-mail: sales@bwsc.dk • www.bwsc.dk