

TECHNOLOGY

Introduction

Welcome to this, our first newsletter as part of the THERMIE hydrocarbons information dissemination programme. It is being issued to coincide with the European Community's first appearance at Offshore Europe.

THERMIE has been in operation since 1990 with the aim of promoting energy technologies once they are developed in order to facilitate their introduction into the market. The stand at Offshore Europe, preceded by stands at DOT and OTC, is a perfect example of the programme, offering the opportunity for six EC supported technologies to be displayed at Europe's premier hydrocarbons exhibition.

A range of other activities is planned for the 1991-92 programme, some of which are outlined in the following news section.

News

- * European energy technology for the oil and gas sector will be the subject of a symposium to be held in Berlin in November 1992. Both EC supported technology and that from the private and government sectors will be presented.
- * As part of the THERMIE programme, the Community recently granted support to 25 projects promoting energy technology in the field of hydrocarbons.
- * For the 1992 budgetary exercise of THERMIE application, an invitation to submit projects was launched on 11 July 1991. Project proposals must be presented before 31 October 1991. In the field of hydrocarbons, THERMIE will support techniques for exploration, production and transport by

pipelines (see OJC). An information brochure can be obtained from the Directorate General for Energy.

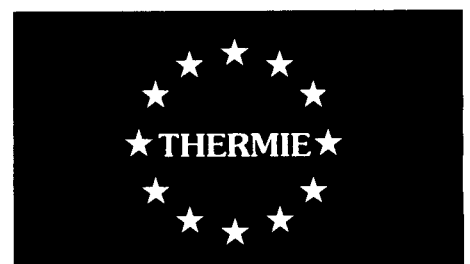
- * As part of the 1991-92 dissemination programme, the OPET organisation (explained below) will be carrying out a series of market assessments in six key areas. It will also be organising a number of technology specific workshops to which members of the appropriate target markets will be invited.
- * Other exhibitions at which the EC will be represented over the next 12 months included Deep Offshore Technology, Mediterranean Offshore Exhibition, 4th Petroleum Geologists Conference of NW Europe, Offshore Technology Conference and Offshore Northern Seas.

The OPET Network for the Promotion of Energy Technology

The Commission of the European Communities, within the THERMIE programme, has set up a network of 35 European OPET (Organisations for the Promotion of Energy Technologies) to carry out the dissemination activity.

For the hydrocarbons sector, the first stage of the programme employed five OPET. The activities carried out include the establishment of mailing lists, production of documentation on successful hydrocarbon projects, participation in promotional events and market assessments on specific technologies.

Commission of the European Communities
Directorate General for Energy



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For further information on the THERMIE programme, contact the OPET network.

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A Tension-Leg-Platform For Deep Waters

AGIP is in the final stage of a development project for a Tension-Leg-Platform.

This new and unique concept aims at anchoring a semi-submersible hull to the seabed with tensioned steel, tubular tendons which give the platform the required flexibility to withstand the forces created by the marine environment.

Such a platform is particularly suited for deep water application - 1,000m or more. Steel tubular sections of the tendons are joined using an automatic welding process inside the four platform columns and it is performed on the platform during installation.

Due to operative restrictions, welding and quality control of the four tethers has to be performed within a limited time; 20 minutes for welding and 20 minutes for NDT.

For this purpose, a remote controlled robotic system has been developed. It handles, welds and tests the tendon sections when laid vertically. Full scale prototypes of the welding machine, NDT system, internal clamping and 1/2.5 anchor connector have been built and tested. Successful tests at Cortemaggiore for simulation of an anchoring operation with a fully integrated system have been achieved. The system is presently under optimisation.

Compact Gas Treatment Process

The Institut Français du Pétrole (IFP) has developed, with the support of the Community, a new integrated process for the treatment of gas known as the IFPEXOL Process (Integrated Function Process Expertise). It involves two main steps which may be used independently, one from the other.

The first concerns condensable hydrocarbons and water removal while the second aims at acid gas removal, with both using the same solvent. The Community supported project has enabled the system to be proven in a 5,000 standard cubic metre per day flow.

The IFPEXOL process is particularly cost effective both in investment and operating costs. It has been designed for offshore use, being smaller and lighter than other systems.

The first industrial demonstration is by PETROCANADA which is using the system in a water and condensate removal plant treating a gas flow of 800,000 cubic metres per day. Implementation began in August 1991.

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