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Front cover Photo: **OMV Aktiengesellschaft,
Vienna**

View on the filter separation unit Baumgarten
natural gas hub in Austria.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 154 International News
- 203 News / Products
- 204 Calendar

Field Development

- 159 **The Maari Challenge: OMV's Field Development Success, Offshore New Zealand**
By W. J. LEEB and C. MILLS

Drilling

- 166 **Implementing a New Technology: CASING DRILLING™ Field Test on Mittelplate A22**
By T. FLEMMING
- 172 **Rotary-Shouldered Connections Make-up Torque Calculation Considering the Effect of Contact Pressure on Thread Compound's Friction Coefficient**
By C. TEODORIU

Oil/Gas Production

- 178 **Fuzzy Logic Prediction of Dew Point Pressure of Selected Iranian Gas Condensate Reservoirs**
By S. NOWROOZI, M. RANJBAR, H. HASHEMIPOUR and M. SCHAFFIE
- 181 **Nonlinear Approach for Oil Field Optimization Based on Gas Lift Optimization**
By E. KHAMEHCHI, F. RASHIDI, B. KARIMI and P. POURAFSHARY

Reservoir Engineering

- 169 **A new Correlation for Predicting CO₂ Minimum Miscibility Pressure**
By A. ELZWI and L. GANZER

Refining

- 187 **Effect of Middle Distillates' Properties on their Reactivity in Ultra Low Hydrodesulfurization**
By D. STRATIEV
- 191 **Steamcracking – State of the Art**
By H. ZIMMERMANN

Gas Transport

- 196 **Combining Economical and Environmental Aspects in a Long-Distance Gas Transmission System**
By S. CIERNIAK, J. GROENNER and D. HOEHNER

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Front cover Photo: **Rohoel-Aufsuchungs AG
(RAG), Vienna**

The cover photo shows the modern RAG drilling
rig E 200, built by German BENTEC, on location
"Oberholz-001", Austria.

Technical details:

Hook load capacity	250 t
Drilling capacity	5000 m
BENTEC drawwork	E 1250 HP, AC
AC	gas/diesel driven, 3000 KW
Top drive	MH 500 t/800 HP
Mud pump	2 x Wirth TPK 1300 AC
Iron roughneck	ST 80
Pick up lay down pipe handling	
Mud tank capacity	120 m ³

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Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 106 International News
- 140 New Products / Processes / Literature
- 142 Calendar
- 143 **Buyers' Guide**

Drilling

- 114 Usage of Radial Drilling by RAG *By M. SEYWALD
and C. MARSCHALL*

Oil Production

- 117 Use of Ultra-Fine Barite for Horizontal Sections Presented by the
Example of the Well Mittelplate MP A19a
By W. MÜLLER and M. KARAD
- 121 Production Optimization in Thin-oil Column with Horizontal Well
Placement *By S. I. ONWUKWE
and B. OBAH*

Natural Gas Production

- 124 Foamer Applications at EMPG *By M. ZINTERL
and D. MILL*

Oilfield Equipment

- 127 Multiphase and Heavy Crude Transport Services – Twin-Screw Pumps
Help Improving Oil Recovery in Mature Fields and Transfer Heavy Crude
Oil over Long Distances *By D. MÜLLER-LINK, G. ROHLFING
and H. SPELTER*

Natural Gas Transport

- 132 Safety, Availability, Efficiency – A Survey of Gas Infrastructure
Innovations *By G. LINKE*

Geology

- 135 Organic Geochemical Characterization of Terrestrial Source Rocks of
the Triassic Madygen Formation (Southern Tien Shan, Kyrgyzstan)
*By U. BERNER, G. SCHEEDER, J. KUS,
S. VOIGT and J. W. SCHNEIDER*

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Front cover Foto: **TNK-BP**

Exploration well drilling in the Samotlor field

The Russian-British company TNK-BP is going to invest \$1 billion by 2012 into development of the Samotlor field for maintaining oil production at a level of around 30 million t/a.
(see News on page 60)

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INTERNATIONAL EDITION OF
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Contents

Oil & Gas News

- 58 International News
- 101 New Products / Processes / Literature
- 104 Calendar

Aspects

- 62 **New U.S. SEC Rules on Oil and Gas Disclosure May Increase Reserves Significantly**
By W. E. SCHOLLNBERGER

Geology

- 67 **Investment Risk Assessment of Potential Hydrocarbon Discoveries in a Mature Basin – Case Study from the Bjelovar Sub-Basin, Croatia**
By T. MALVIC and I. RUSAN

Reservoir Engineering

- 74 **Effect of Pressure and Temperature on Petrophysical Characteristics in the Case of Carbonate Reservoirs**
By M. M. AMRO and M. S. BENZAGOUTA
- 79 **A New Method for Upscaling of Reservoir Permeability Based on Fluid Dynamics in Porous Media**
By H. MATA-LIMA

Refining

- 86 **Energy Integrated Refinery of the Future**
By Z. MILOSEVIC and A. RUDMAN
- 90 **Effect of Middle Distillates' Properties on their Reactivity in Ultra Low Hydrodesulfurization**
By D. STRATIEV

Gas Separation

- 94 **Gas Desulfurization by Supported Ionic Liquid Membranes (SILMs)**
By A. SEEBERGER, C. KERN and A. JESS

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Front cover Foto: **OMV Aktiengesellschaft,
Vienna**

The cover photo shows offshore installa-
tions of the **Ashtart oil field, Tunisia**.
OMV first became active in Tunisia in the
early 1970s. The most prolific of its produ-
cing oilfields is the Ashtart field.

OMV currently has interests in two explo-
ration and five production licenses in Tuni-
sia. Its current production in Tunisia
amounts to approximately 9,000 boe/d.
OMV operates the Jenein Sud exploration
block which is situated in the Tunisian ex-
tension of the Ghadames basin. In April
2008, OMV acquired an 80% operated
share in the Sidi Mansour exploration
area.

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In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 2 International News
- 43 New Products / Processes / Literature
- 56 Calendar

Reservoir Engineering / Modelling

- 6 **A Model for Multiphase Flow in Porous Media: The Relevance of Capillary Pressure for the Concept of Relative Permeability**
By W. LITTMANN
- 14 **Example Comparison of Minimum Miscibility Pressure Correlations**
By A. ELZWI
- 20 **Perspectives of Geomechanical Reservoir Models – Why Stress is Important**
By A. HENK

Gasification / Synthetic Fuels

- 25 **Coal Processing and Fuels from Coal** By R. ABRAHAM
- 31 **Fixed and Entrained Flow Gasifiers – Examples**

Renewables

- 33 **Phenols from Cashew Nut Shell Oil as a Feedstock for Making Resins and Chemicals**
By J. TALBIERSKY, J. POLACZEK,
RAJARAMAN RAMAMOORTY, and O. SHISHLOV

Petrochemistry

- 40 **Catalytic Transformation of Triglycerides in Refineries – a Promising Route to Clean Fuels and Feedstocks for Petrochemicals**
By D. KUBICKA, J. LEDERER,
and Z. BELOHLAV

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Front cover Foto: **Wintershall AG, Kassel**

In November BASF and Russia's OAO Gazprom
officially launched natural gas production at the
joint venture ZAO Achimgaz in Siberia.
The German-Russian joint venture produces
natural gas and condensate from the Achimov
Formation, from which it also gets its name, in
the Urengoy deposit. (see p. 170)

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INTERNATIONAL EDITION OF
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Contents

Oil & Gas News

- 169 International News
- 210 New Products / Processes / Literature
- 212 Calendar

Aspects

- 166 Energy for a Sustainable World – A Look at Some Misconceptions and Half-Truths
By W. SCHOLLNBERGER

Market Survey

- 176 CEE Region Offers Ample Value Proposition
By P. GAWENDA and H. DOBROVA

Offshore Gas Storage

- 182 UK Offshore Salt Cavern Gas Storage Development
By A. STACEY

Oil / Gas Production

- 190 Textural Characterization of Silica Gel from Adsorption Columns of the Natural Gas Production
By R. ROCKMANN, U. MESSOW, W. KLEINITZ and G. KALIES
- 194 Numerical Simulation of Slug Flow Phenomena in Horizontal and Inclined Pipelines
By A. RAGAB, W. BRANDSTAETTER and S. SHALABY
- 209 Wireless solutions improve wellhead monitoring at BP Wytch Farm

Refining

- 199 Investigation on Residual Fuel Oil Stability
By D. STRATIEV, Z. BELCHEV, P. PETKOV and K. KIRILOV
- 204 The Regular Calcinate Market in a Changing Oil Processing Environment – Commercial Incentives for the Production of High Quality Petroleum Coke Calcinate
By H. PREDEL

Fuel Additives

- 206 Contribution to Qualify Biodiesel Stabilisers for Use in Diesel Engines
By C. KORMANN, E. FEHR, H. BOEHNKE, G. SCHÄPER, J.-C. FRÖHLING, J. HAUPT, and J. FISCHER

Maintenance

- 208 Systems for Pipeline Drainage and Drying: Pigs Pass with Flying Colors – Robust Polyurethane Elastomer Materials for Made-to-Measure, Abrasion Resistant Pipeline Pigs
By D. ELS and D. PASSMANN

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Front cover Foto: **MAN Turbo AG, Oberhausen/
Germany**

MAN Turbo pipeline compressors have been
proven reliable and highly efficient in numerous
operating hours ensuring a defined pressure
level of gas pipelines.
This RV080 type compressor is driven by a MAN
Turbo industrial steam turbine DK 63/130 utilis-
ing the exhaust heat of the installed FT8r MAN
Turbo gas turbines at the Mallnow compressor
station of WINGAS TRANSPORT GmbH & Co.
KG. Thus the combined cycle concept of
Mallnow sets a new benchmark for the efficient
transport of natural gas.

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Buyers' Guide
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Contents

Oil & Gas News

- 106 International News
- 152 New Products / Processes / Literature
- 164 Calendar
- 153 **Buyers' Guide**

Pipelines

- 110 Pipeline Technology Today and Tomorrow *By T. CALLAN*
- 116 Direct Pipe®: Latest Innovation in Pipeline Construction –
Technology & References *By D. PFEFF*
- 122 NoPig: An Above-Ground Inspection Technique for Non-Piggable
Pipelines *By G. S. KRIVOI*

Environmental Protection

- 126 Natural Attenuation of Hydrocarbons as a Complement to
In Situ Remediation Methods *By J. SIWCZYK*

Geology

- 131 Climate Modeling: A Tool for the Assessment of the Paleo-Distribution
of Source and Reservoir Rocks
By M. ROSCHER, U. BERNER and J. W. SCHNEIDER
- 138 New Insights into the Oligocene to Miocene Geological Evolution of
the Molasse Basin of Austria *By R. HINSCH*

Reservoir Engineering

- 143 Reducing Uncertainty in Reservoir Modelling Through Efficient
History Matching *By H. MATA-LIMA*

Natural Gas Production

- 149 Estimation of Methanol Vaporization Loss and Solubility in
Hydrocarbon Liquid Phase
*By A. BAHADORI, H. B. VUTHALURU
and S. MOKHATAB*

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Front cover Foto: **Joh. Heinr. Bornemann GmbH, Obernkirchen/Germany**

Multiphase Pump System during factory acceptance test at Joh. Heinr. Bornemann GmbH in Obernkirchen.

The core part of the system consists of two multiphase pumps of the type MPC 400 with a drive power up to 2.8 MW. The turn-key supply also includes control and transformer containers, air-cooled liquid chillers as well as a comprehensive fire detection and fire fighting system with highest safety levels.

Due to the dimensions of the entire system the multiphase pumps and the associated piping with remote operated ball valves are installed on separate skids.

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Contents

Oil & Gas News

- 54 International News
- 100 New Products / Processes / Literature
- 104 Calendar

Multiphase Production

- 60 Flaring Down Project for Algeria By S. BIENEK

Reservoir Engineering / Modeling

- 64 Consideration of 3D Rock Data for Improved Analysis of Stability and Sanding By R. BRAUN
- 69 Prediction of Diffusion Coefficients of Hydrocarbon Gases in Hydrocarbon Liquids at High Pressure and Temperature By M. JAMIALAHMADI, M. EMADI and H. MÜLLER-STEINHAGEN
- 78 Prediction of Calcium Carbonate Precipitation in Oilfields Based on a Fuzzy Solubility Model By H. R. KHATAMI, M. RANJBAR, M. SCHAFFIE and M. A. EMADI

Gas Transport / Networks

- 61 Flexible, Efficient and With a High Degree of Availability: Direct Electric Drives for China's West-East Pipeline
- 84 Transient Gas Network Simulation and Reconstruction with PSIGanesi By B. BÖHME, D. SCHEIBE and W. TERLAU

Refining

- 89 Conversion of Heavy Aromatic Hydrocarbons to Valuable Synthetic Feed for Steamcrackers By A. CESANA, L. DALLORO, F. RIVETTI and R. BUZZONI
- 95 Energy Efficiency of the Cold Train of an Ethylene Cracker By K. M. VAN GEEM, G. B. MARIN, N. HEDEBOUW and J. GROOTJANS
- 99 Comments on the article "A new Correlation Predicts Viscosity Blends Containing Residual Oils", published in the 1/2008 issue

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Detailed view of the OATS plant at the Vohburg
refinery site.

The OATS™ process is an alternative route for
the desulphurisation of mainly light fractions
from FCC units without using hydrogen.

(see article on pages 28–30)

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INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 2 International News
- 50 New Products / Processes / Literature
- 52 Calendar

Geology

- 10 **Geochemical and Microbiological Surface Investigation in Northern Germany Indicates Interesting Hydrocarbon Potential**
*By M. BAUM, M. SCHMITT, M. WAGNER
and C. WESTERLAGE*

Petrochemistry

- 15 **Opportunities and Challenges at the Interface between Petrochemistry and Refinery – The OMV View**
By J. LICHTSCHEIDL
- 22 **Aspects of Petrochemistry in a Fuels Refinery**
By J. ESSER and C. J. MIELICKE

Refining

- 28 **Catalyst Innovation Improves Commercial Application of the OATS™ Process**
*By W. WACHE, C. SCHUNK, N. BOTZ, G. KARL
and R. BRAUN*
- 31 **A new Correlation Predicts Viscosity of Blends Containing Heavy Residual Oils**
*By D. STRATIEV, Z. BELCHEV, P. PETKOV
and K. KIRILOV*

Oil Production

- 34 **CFD-Simulation of Multiphase Flows in Horizontal and Inclined Pipelines**
*By A. RAGAB, W. BRANDSTAETTER
and S. SHALABY*
- 41 **Buyers' Guide**

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LNG Storage Nievenheim

The Nievenheim Liquid Natural Gas Storage
serves to secure the natural gas supply in the
area of Cologne providing about 23.000 m³
liquefied gas at -165 °C for balancing seasonal
peaks in demand.
Initially developed in 1973 as future technology,
in 2003 the refurbishment starts to prove the
equipment thoroughly and to implement state of
the art safety equipment. In the season 2007/
2008 Nievenheim will be commissioned for its
"second life time".

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 154 International News
- 196 New Products / Processes / Literature
- 200 Calendar

Liquefied Natural Gas – LNG

- 162 Trends and Innovations in LNG Technology
By S. CIERNIAK and J. GRÖNNER

Natural Gas Production

- 168 Application of PCPs for Gas Well Deliquification – A Change of RAG's
Production System and its Operational Challenges
By M. SEYWALD and CHR. BURGSTALLER

Geology

- 172 Stratigraphic Trap Exploration in a Mature Basin: Examples for New
Concepts from the Austrian Molasse Basin
By R. HINSCH, S. HUBBARD and N. KOFLER
- 177 Organic Matter Distribution in the Ypresian Transtension Basin,
Central-Northern Tunisia
By A. ARFAOUI and M. MONTACER

Reservoir Engineering

- 179 Perspectives of European Improved Oil Recovery
By G. PUSCH

Processing

- 187 Investigation of Catalytic Hydrocracking of Fischer-Tropsch Wax for the
Production of Transportation Fuels
*By M. OLSCHAR, M. ENDISCH, TH. DIMMIG
and TH. KUCHLING*
- 194 "Worry-Free and Safe" Activation of Hydroprocessing Catalysts –
Arkema's Dimethyl Disulfide-Evolution and ISO Certified Careflex
Service

Maintenance & Repair

- 195 Pipeline Cleaning with Compressed Air to a Lower Explosion Level
of Zero

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Front cover Foto: **OMV Aktiengesellschaft,
Vienna, Austria**

With more than 1500 km of underground pipe-
lines, Austria plays a key role in the European
natural gas network.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 102 International News
- 139 New Products / Processes / Literature
- 142 Calendar
- 143 **Buyers' Guide**

Market Analysis / Natural Gas

- 110 **The New Supply Highways – Natural Gas for Europe from the East**
By K. HOMANN and F. LINDNER

Pipelines

- 118 **Filling the Emerging Gas Gap: Nord Stream – Gas Transport Corridor Under the Baltic Sea (Technical Planning in the Early Stage of the Project)**
By W. ROTT

Safety / BioFuels

- 124 **Safety Characteristics of Ethanol / Automotive Petrol Mixtures – Additional Information**
By E. BRANDES, D.-H. FROBESSE and M. MITU

Drilling

- 126 **Sensor Data Quality Control – A Challenge for Real-Time (Rig) Data Transmission and Usage**
By W. MATHIS and G. THONHAUSER
- 132 **KCA DEUTAG's Highly Mobile Desert Rig: The NOMAD Rig Class**

Oil Production

- 135 **Mittelplate A 20 – First Application of Intelligent Well Completion Technology in Germany's Most Productive Oilfield**
By C. KOCH and M. DÖHLER

OIL GAS European Magazine was first published in 1974 as an original international edition of **ERDÖL ERDGAS KOHLE**.

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Sparks flew in the cold winter air as work
started on the Russian onshore section of the
Nord Stream in Babayev, 800 km east of
St. Petersburg.
The pipeline link connects the planned Nord
Stream pipeline through the Baltic Sea with
the existing gas pipelines from Siberia.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 54 International News
- 97 New Products / Processes / Literature
- 100 Calendar

Pipelines

- 61 Latest Developments for the Trenchless Construction of Pipelines
By E. ADAMS
- 68 Development and Production of Large-Diameter Line Pipe for Offshore Applications
By H.-G. HILLENBRAND and A. LIESSEM
- 73 What are the Real Challenges in Pipeline Inspection?
By K. REBER and W. SCHMIDT
- 76 Neural Networks Can Enhance Fuzzy Corrosion Modelling
By Y. HAJIZADEH

Reservoir Engineering

- 79 A Commonly Neglected Factor in Rock Mass and Borehole Stability
By R. BRAUN
- 83 Experimental and Numerical Evaluation of the Feasibility of Nitrogen Injection into a Mature Layered Light-Oil Reservoir
By T. BABADAGLI, A. AL-BEMANI, F. BOUKADI and A. W. IYOHO

Processing

- 88 From R&D to a Successful Scale-Up: The Eni/IFP/Axens GTL Technology
By R. ZENARO
- 92 Lurgi MegaMethanol Technology – Delivering the Building Blocks for the Future Fuel and Monomer Demand
By T. WURZEL

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The photo shows a polymer production complex
built by Uhde in the Middle East. Another plant
for the production of high-quality polymers is
now to be erected in Egypt, 170 km north-east
of Cairo. Uhde GmbH, part of the Technologies
segment of the ThyssenKrupp Group, has been
commissioned by Egyptian Propylene & Poly-
propylene Co. to build a new turnkey petrochem-
ical complex consisting of a propylene and poly-
propylene plant with an annual production ca-
pacity of 350,000 t. This first ever commercial-
scale application of Uhde's **STAR process®** for
the production of propylene will use propane
from Egyptian natural gas deposits as feedstock.
(More details see p. OG 41)

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Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 2 International News
- 41 New Products / Processes / Literature
- 44 Calendar
- 45 **Buyers' Guide**

Geology

- 9 Middle East Salt Deposits – Distribution and Potential Use
By ST. FOLLE
- 15 Petroleum Biomarkers as Environment and Maturity Indicators for
Crude Oils from the Central Gulf of Suez, Egypt
*By M. A. YOUNES, A. H. HEGAZI, M. SH. EL-GAYAR
and J. T. ANDERSSON*

Reservoir Engineering

- 22 Optimal Injection Strategies for CO₂ and Flue Gas Sequestration
during Tertiary Oil Recovery
By J. J. TRIVEDI and T. BABADAGLI
- 27 Experimental and Theoretical Investigation of the Asphaltene
Precipitation in the Iranian Kupal Field *By M. JAMSHIDNEZHAD*

Synthetic Fuels

- 31 Synthesis Gas from Biomass – Problems and Solutions en route to
Technical Realization
By N. DAHMEN, E. DINJUS and E. HENRICH
- 35 Fischer-Tropsch Synthesis in a Two-Phase Reactor with Presaturation
By W. WACHE, L. B. DATSEVICH and A. JESS

Maintenance

- 39 A sphere of specialization: Spherical Tank Servicing – a Complex Job

Plant Operations

- 40 “Smart Wireless” to Capture Information from Assets Previously out
of Reach

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INTERNATIONAL EDITION OF
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Contents

Oil & Gas News

- 162 International News
- 205 New Products / Processes / Literature
- 208 Calendar

Reservoir Engineering

- 170 **Selecting Optimal Cases for Uncertainty Quantification and History Matching**
By O. HAASE, R. SCHULZE-RIEGERT, H. JUNKER and L. PLAS
- 176 **Automatic Generation of 3D Reservoir Simulation Input Files Directly from a Fracture Simulation Model**
By J. R. SHAOUL, A. BEHR and G. MTCHEDLISHVILI
- 184 **Field Application of Phenol Formaldehyde Gel in Oil Reservoir Matrix for Water Shut-Off Purposes**
By R. BANERJEE, B. GHOSH, K. C. KHILAR, F. BOUKADI and A. BEMANI

Oil Production

- 187 **Advanced Sucker Rod Pumping System Provides a Solution to the Problem of Classic Failures Successful Application of "Concentric Tubing Pumping System" (CTPS)**
By A. J. REINGRUBER und M. KASS

Oil Treatment

- 190 **Processing Emulsions from Desalting of Crude Oil using Centrifuges**
By W. STEIGER, F. WESTENTHANNER and J. REICHL

Pipelines

- 193 **State-of-the-Art in Leak Detection and Localization**
By G. GEIGER

Safety

- 199 **Safety Characteristics of Ethanol / Automotive Fuel Mixtures**
By E. BRANDES, D.-H. FROBESSE and M. MITU

Petrochemistry

- 203 **Synthesis Gas Chemistry – DGMK/SCI International Conference, October 4–6, 2006 in Dresden, Germany**
By M. HARTMANN

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Front cover Foto: **UGS GmbH, Mittenwalde/
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Mobile drilling and workover rig IRI Franks 900 /
T12 (hook load capacity: 1731 kN) while drilling
the new cavern well K 103 for the extension of
cavern storage field Kraak in northern Germany.
After leaching a cavern volume from more than
500,000 m³ could already be realised.

Technical specification of the well:

Contractor: E.ON Hanse AG – Hamburg
Planning and Realisation: UGS GmbH –
Mittenwalde
Final depth: 1320 m (measured depth)
1236 m (true vertical depth)
308 m vertical section.

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Contents

Oil & Gas News

- 106 International News
- 149 New Products / Processes / Literature
- 151 Calendar

Buyers' Guide

Natural Gas Storage

- 111 Conceptual Design of Storage Caverns for Future LNG Receiving Terminals in Europe
By F. CROTOGINO, V. KÖCKRITZ and S. REINHOLD
- 118 CARE – Computer Aided Reservoir Engineering – An Integrated Approach for a Computer Assisted Underground Gas Storage Management System
By J. ZEMKE, C. BOOR, G. LENK and H.-W. SCHMIDT

Reservoir Engineering

- 124 Predicting Production Induced Changes in Reservoirs
By R. BRAUN

Field Compression

- 130 Electrical High-Speed Drives for Compressors – Experiences and Trends
By J. BESSER and P. KNOPP

Drilling

- 136 Casing While Drilling – an Alternative Approach in Drilling Operations for Arabian Formations
By M. M. HOSSAIN and M. M. AMRO

Petrochemistry

- 141 Novel Pd Catalysts with Improved Performance for Vapour Phase Acetoxylation of Toluene
By A. BENHMID, B. LÜCKE, V. NARAYANA KALEVARU, A. MARTIN and U. DINGERDISSEN
- 145 Selective Oxidation of i-Butane and i-Butene to Methacrolein and Methacrylic Acid over Keggin-type Polyoxometalate and MoVTenBO_x Catalysts – A Comparative Catalytic and In Situ Spectroscopic Study
By U. BENTRUP, A. BRÜCKNER, M. KANT, S. KOLF, U. DINGERDISSEN, S. JANSEN, D. MASCHMEYER, H. SIEGERT and H. W. ZANTHOFF

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(See report on page 66)

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 58 International News
- 99 New Products / Processes / Literature
- 104 Calendar

Oil Production

- 62 Material Balance and Separator Pressure Optimization for Maximum Oil Recovery in a Production Unit
By A. BAHADORI and K. ZEIDAN

Pipelines

- 66 Case Study: Successful Opening of Romanian Offshore Pipeline

Geology

- 68 Paleo-Overpressure Formation and Dissipation in Reservoir Rocks
*By C. HILGERS, S. NOLLET, J. SCHÖNHERR
and J. L. URAI*

Refining

- 74 Alternative Upgrading of C₄ Ethylene Plant Stream
*By D. STRATIEV, I. SHISHKOVA, G. ARGIROV
and T. TZINGOV*

Petrochemistry

- 77 TS-1 and propylene oxide, 20 years later
By M. G. CLERICI
- 83 Selective Oxidations in Micro-Structured Catalytic Reactors – A Review and an Overview of Own Work on Fuel Processing for Fuel Cells
*By V. HESSEL, G. KOLB, V. COMINOS, H. LÖWE, G. NIKOLAIDIS,
R. ZAPF, A. ZIOGAS, J. C. SCHOUTEN, E. R. DELSMAN,
M. H. J. M. DE CROON, J. SANTAMARIA, O. DE LA IGLESIA
and R. MALLADA*
- 94 Simulation of a Reactor for the Partial Oxidation of o-Xylene to Phthalic Anhydride Packed with Ceramic Foam Monoliths
*By A. REITZMANN, A. BAREISS
and B. KRAUSHAAR-CZARNETZKI*

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MiRO refinery in Karlsruhe, Germany. – Partners
in Germany's largest refinery (16 million t/a) are
Shell Deutschland Oil GmbH (32.25%), Esso
Deutschland GmbH (25%), Ruhr Oel GmbH
(24%) and ConocoPhillips Continental Holding
GmbH (18.75%).
www.miro-ka.de

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 2 International News
- 45 New Products / Processes / Literature
- 48 Calendar

- 49 **Buyers' Guide**

Aspects

- 8 **From Scarcity to Plenty – Who Shapes the Future Mix of Primary Energy? What Might It Be?**
By W. E. SCHOLLNBERGER

Market Analysis / Geology

- 22 **Chances and Risks in the Future E&P of Eastern-Central Europe (ECE)**
By H. DOBROVA, E. KOLLY and U. SCHMITZ

Gas Transport

- 27 **High-Pressure Natural Gas Measurement: Chinese Gas Industry on its Way to European Standard**
By H.-U. TSCHAETSCH

Processing

- 30 **Modified Claus Process Probabilistic Model**
By R. LARRAZ MORA

Synfuels

- 34 **Synthetic Fuels and Biofuels for the Transportation Sector – Principles and Perspectives**
By G. SCHAUB

Safety

- 39 **Towards a Review of Computational Fluid Dynamic Models for Safety Assessment of Vapour-Cloud Explosions**
By C. NIEMANN-DELIUS and E. OKAFOR

Pipelines

- 43 **Defects in Insulation Coating of Pipes and their Mineralization**
By F. MIČKO, V. PLISKA and S. DORDA

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Front cover Foto: **BASF AG**

Gas pipeline in Tierra del Fuego, Argentina

The world's most southerly natural gas pipeline
was put into operation in June 2005 by the con-
sortium partners Wintershall Energía SA, Total
Austral SA and Pan American Energy L.L.C. to
transport natural gas produced from the Carina
and Aries offshore fields

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 158 International News
- 206 New Products / Processes / Literature
- 208 Calendar

Reservoir Modelling

- 163 An Integrated Approach to Net Pay Determination
By T. DOSE, J. STROBEL and J. MCLENNAN

Drilling

- 172 Buttress Connection Resistance under Extreme Axial Compression
By C. TEODORIU

Gas Production

- 176 Alleviation of Liquid Loading in Wells and Pipelines in Mature European Gas Fields Using Chemicals
By S. RAMACHANDRAN, J. G. R. EYLANDER, C. WITTFELD, E. R. BAKKER and P. SCHORLING

Lubricants

- 180 Thunder Energy Optimizes Reciprocating Compressor Productivity and Improves Processed Gas Quality: New Lubricant Strategy Prevents Rust, Minimizes Maintenance Cost and Reduces Power Consumption
By J. SHINGLETON and L. FLETCHER

Plant Equipment

- 183 Repair, Revamp or Replacement of Natural Gas Reciprocating Compressors for Underground Storage
By S. CIERNIAK and T. KNEBEL

Tight Gas

- 187 Integrated Research Contributions for Screening the Tight Gas Potential in the Rotliegendes Formation of North-Germany
By G. PUSCH, R. GAUPP and N. LIERMANN

Geology

- 194 Modeling Petroleum Generation and Geochemistry of Crude Oils in Ras Budran Field, Northern Gulf of Suez, Egypt: Implications for Prospectivity
By M. A. YOUNES
- 201 Syn-tectonic Generation of Potential Reservoir Sandstones in Arid Low-gradient Depositional Systems – The Lower Triassic Middle Buntsandstein at the Western Margin of the Ems Trough, NW Germany
By D. RADIES, H. STOLLHOFEN, G. HOLLMANN and P. KUKLA

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Front cover Foto: **Lurgi AG, Frankfurt/Main**

Lurgi AG built a plant for the production of biodiesel/FAME and pharmaceutical-grade glycerin with an annual capacity of 35,000 t of biodiesel/FAME for its customer Energía Hidroeléctrica de Navarra (EHN) in Caparrosa, Spain. This plant went on stream in April this year after a construction time of around one year and a half. The quality of the biodiesel complies with EN 14214, that of the pharmaceutical-grade glycerine to European/US Pharmacopeia 99.5. As plant feedstock all vegetable oils, in particular from rape seed, palm olein, sunflower seed and soy beans are used and have been proven in operation. Lurgi built this plant under a turnkey contract.

OIL GAS EUROPEAN MAGAZINE

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ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 102 International News
- 143 New Products / Processes / Literature
- 148 Calendar

- 149 **Buyers' Guide**

Market Analysis

- 106 EU Gas Market Liberalisation and Security of Supply – an Antagonism?
By M. KLEI

Drilling

- 110 Testing While Drilling – Comparison of Formation Pressure and Mobility Data derived during Motor Drilling with Production Data and Core Analysis
By M. MEISTER and J. STROBEL
- 118 New Water Based Drilling Mud System with Double Clay Inhibition Shows High Performance at Drilling-Sites in Germany
By R. REINBOTH, H. CRAMER and R. HUELKE
- 124 Application of a Complex Polyol Drilling Fluid in Albania
By A. ISINAK, V. SMITH, F. D'ALESSANDRO and H. DEARING

Production

- 128 New Challenges in Cased Hole Gravel Pack: Walsrode Z5A Case Study
By G. MEISSNER and R. BARBEDO

Reservoir Engineering

- 132 Synergy of Petroleum Recovery Methods
By J. PAPAY

Workover

- 141 Removal of Iron Sulfide Scale – Polish Operator Completes CT Under-reaming Campaign
By R. FRYZOWICZ and K. PATRICK

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Front cover Foto:

Manufacturing milestone for Bentec, 2500 HP drilling rig for the Mittelplate field development

Bentec Drilling & Oilfield Systems, international rig designer and manufacturer unveiled the new 2500 hp rig T-150. It has been building for the Mittelplate Consortium at Bentec's manufacturing facility in Bad Bentheim, Germany.

The rig will be operating on the artificial drilling and production island Mittelplate located in the eco-sensitive Tidelands. The rig has been manufactured to an extremely high specification, with a zero spill policy, low noise and reduced emissions.

Bentec has completed this project on schedule and on budget. The award of this contract recognized an exceptional track record in rig design and construction. (see report on p. 59)

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INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 54 International News
- 95 New Products / Processes / Literature
- 100 Calendar

Drilling

- 59 **Germany: Impressive Offshore Rig Built "in the Woods"**
New 2500 hp drilling rig for the Mittelplate field development

Reservoir Modelling

- 61 **Understanding Governing Fluid Flow Mechanisms in a Mature Omani Oil Field – a Case Study**
By F. H. BOUKADI, A. S. BEMANI and T. BABADAGLI

Gas Processing

- 68 **Gas Liquefaction: Adsorptive Processing of Natural Gas**
By K. MICHEL

Petrochemistry

- 70 **High Quality Fuel Components from C₄ Hydrocarbons**
By M. DI GIROLAMO, D. SANFILIPPO; R. PATRINI and M. MARCHIONNA
- 77 **How High Throughput Technology Can Facilitate Better Hydrocarbon Processing**
By S. A. SCHUNK, C. BALTES and J. KLEIN
- 83 **Butenes Dimerisation: From Monophasic Dimersol™ to Biphasic Difasol™**
By F. FAVRE, A. FORESTIÈRE, F. HUGUES, H. OLIVIER-BOURBIGOU, and J. A. CHODORGE
- 92 **Catalysts in Petroleum Refining and Petrochemicals –**
Report of the 14th Saudi-Japan Symposium at King Fahd University of Petroleum & Minerals (KFUPM)

Refining

- 87 **Evaluation of Lukoil Neftochim Bourgas Fluid Catalytic Cracking Feed Hydrotreater Performance in a Mild Hydrocracking Mode**
By D. STRATIEV, A. DONOV and G. STRATIEV

Plant Operations

- 94 **"Smart Machinery Health Management"**

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3D-image in the cave at Norsk Hydro's research
center at Sandsli, Norway

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Buyers' Guide
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Contents

Oil & Gas News

- 2/39 International News
- 40 New Products / Processes / Literature
- 44 Calendar

- 45 **Buyers' Guide**

Refining

- 7 **Effect of Lukoil Neftochim Bourgas FCC Unit Revamp to Vortex Separation System Riser on the Unit Performance**
By D. STRATIEV, G. ARGIROV and M. JELYASKOVA

Petrochemistry

- 11 **Coupling of Separation and Reaction in Zeolite Membrane Reactor for Hydroisomerization of Hydrocarbons**
By L. GORA and J. C. JANSEN
- 16 **Upgrading of C₄-Streams: Present and Future Trends**
By K.-D. WIESE and F. NIERLICH
- 22 **Getting Value from Steam Cracker C₄/C₅ Olefin Streams**
By M. FERRARI, P. POLLESEL and M. A. MANTEGAZZA

Multiphase Production

- 27 **Economic and Ecologic Offshore Oil & Gas Production Using Multiphase Technology**
By I. BRETTHAUER and D. MÜLLER-LINK

Natural Gas Storage

- 31 **Salt Deposits and Gas Cavern Storage in the UK with a Case Study of Salt Exploration from Cheshire**
By TH. BEUTEL and ST. BLACK

Reservoir Modelling

- 36 **Variation of Relative Permeability during Polymer Flooding and Corresponding Simulation Results in a Heavy Oil Reservoir Model**
By HONGJIANG LU

OIL GAS European Magazine was first published in 1974 as an original international edition of **ERDÖL ERDGAS KOHLE**.

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Front cover Foto: **OMV Exploration & Production, Vienna**

OMV Exploration & Production started its activities in Albania in 1991. Through selective acquisitions in promising areas and the purchase of Preussag Energie's portfolio in early 2003, OMV became the leading international E&P company in Albania. In 2002 and 2003 geological studies, seismic surveys, and drilling of exploration wells confirmed the existence of carbonate reservoirs onshore in southern Albania. Exploration and evaluation there is still ongoing. OMV has signed a production sharing contract for exploration and production in a new offshore block in Albania in May 2004. Seismic surveys in the new Block called "Duress" will start early 2005.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 154 International News
- 193 New Products / Processes / Literature
- 196 Calendar

Oil Production

- 158 **Albania: CHOPS – "Cold Heavy Oil Production with Sand" in the Patos-Marinza Oilfield**
By W. SCHUMI

Reservoir Engineering

- 162 **A Correlation Method for Determination of Residual Non-Wetting Saturation**
By J. PÁPAY
- 166 **Gas Flow in Porous Media – Turbulence or Thermodynamics**
By W. LITTMANN

Drilling

- 170 **Using Real-Time Data for Automated Drilling Performance Analysis**
By G. THONHAUSER
- 174 **Industrial Biopolymers for Oilwell Drilling: Xanthan Gum and Scleroglucan – How Both Differ at Elevated Temperatures**
By P. LANGE and G. KEILHOFER

Geology

- 179 **Oil Prospects of the Kom Ombo Basin, Upper Nile Valley, Egypt: A Case Study**
By M. A. YOUNES

Analytical Matters

- 185 **Viscosity-Temperature Correlation for Crude Oils**
By J. SHANSHOOL and E. NIAZI

Refining

- 188 **Effect of Feedstock End Boiling Point on Product Sulphur during Ultra Deep Diesel Hydrodesulphurization**
By D. STRATIEV, A. IVANOV and M. JELYASKOVA

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Front cover Foto: **Crown Minerals,
New Zealand**

Semi-submersible "Ocean Bounty" drilling Pohokura-3 well offshore New Zealand's North Island. In the background the mighty Mount Taranaki.
The country is extremely interested to attract exploration investment (see also article starting on page OG 106).

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 102 International News
- 140 New Products / Processes / Literature
- 144 Calendar
- 145 **Buyers' Guide**

New Zealand

- 106 **New Incentives: Hydrocarbon Exploration in New Zealand – Political and Economic Environment and Geological Framework**
By F. NIEBERDING
- 110 **Refining for New Zealand**
By T. ZENGERLY

Natural Gas

- 116 **Rehden Gas Storage – Well Provided for with the Largest Natural Gas Storage in Western Europe**
By W. WÖLFER and ST. LEUNIG

Drilling

- 124 **New Rig Technology Applied under Arctic Conditions – KCA DEUTAG's T-2000 in Siberia**
By TH. BENDZKO and J. MARX
- 129 **Influence of Initial Ovality on Local Buckling Under External Pressure (Collapse) of Oil Industry Tubulars – Experimental Results**
By A. DUMITRESCU and D. G. ZISOPOL

Reservoir Simulation

- 133 **Numerical Analysis of Cleanup Processes in German Tight-Gas Formations with Fractured Wells**
By T. FRIEDEL, G. MTCHEDLISHVILI, A. BEHR, H.-D. VOIGT and F. HÄFNER

Automation

- 137 **Integrated, Fault-Tolerant and Reliable: Totally Integrated Automation in the Petroleum and Natural Gas Processing Industry**
By A. DIEGNER

OIL GAS European Magazine was first published in 1974 as an original international edition of **ERDÖL ERDGAS KOHLE**.

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Front Cover Foto: **Linde AG, Gas and
Engineering, Gas Division, Höllriegelskreuth/
Germany**

The industrial process most commonly used
nowadays for the large-scale production of
hydrogen is steam reforming.
Linde has worldwide built numerous steam
reforming plants with capacities ranging from
appr. 1,000 to 100,000 Nm³/h H₂.
At Milazzo, Sicily, Linde supplies the local
refinery with hydrogen from its own large
capacity on-site plant.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 58 International News
- 97 New Products / Processes / Literature
- 100 Calendar

Market Analysis

- 62 Panorama 2004 – The Role and Place of Fossil Fuels

Reservoir Engineering

- 64 Gas Injection Pilot in the Hochleiten Field
*By K. POTSCH, R. RAMBERGER, J. GLANTSCHNIG,
S. BAUMGARTHUBER and F. GÖBNITZER*

Drilling

- 68 Experimental Results for Local Buckling Under External Pressure
(Collapse) of Perfectly Circular Tubes
By D. G. ZISOPOL and A. DUMITRESCU

Natural Gas Production

- 72 Unconventional Well Completions – Solutions for Improved Unloading
of Water in Liquid Loaded Gas Wells
By CHR. BURGSTALLER

Multiphase Pumps

- 76 Voith Turbo designed – New Subsea Variable Speed Drive

Hydrogen Production

- 78 Hydrogen Production Technology – Status and New Developments
By H. RANKE AND N. SCHÖDEL
- 85 Large-Scale Hydrogen Plants – Design and Engineering Experience
By M. MICHEL

Refining

- 89 Hydrodesulphurisation of Diesel Oil Obtained from Thermal Cracking of
Spent Oil Mixed with Crude Oil
By J. MOSIO-MOSIEWSKI, I. MORAWSKI, J. KLIMIEC

Petrochemistry

- 92 Proposal of Process for Removal of Residual Sulfur Compounds from
Light Cracked Benzene and MTBE Using Fixed-Bed Adsorption
By E. AUST and A. B. BRUCCOLINI
- 95 Catalysts in Petroleum Refining & Petrochemicals – 13th Annual
Saudi-Japanese Symposium, Dhahran, Saudi Arabia
By A. M. AITANI

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Front cover Foto: **OMV Aktiengesellschaft,
Vienna, Austria**

Pipelines and storage volumes – unreplaceable connections and buffer between production and demand.

Within OMV's Schwechat Refinery near Vienna several thousand kilometres of pipeline are used to transport products.
(www.omv.com)

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 2 International News
- 45 New Products / Processes / Literature
- 48 Calendar

Market Analysis

- 8 Circum-Mediterranean Gas – Current Trends
By H. G. BABIES and U. SCHMITZ

Pipelines

- 14 Optimization of Pipeline Operation Using Integrated Information Management
By R. HENSEL and R. OELHAF
- 19 Pipeline Simulation at Polish Oil and Gas Company
By P. BUJALSKI and G. WAGNER

Reservoir Engineering

- 24 Capillary Entry Effects During Injection of Oil-Contaminated Oilfield Water
By T. HOFSSÄSS and W. KLEINITZ

Refining

- 29 Prediction of FCC Product Distributions by Means of Feed Parameters
*By J. GMEINBAUER, C. RAMAKRISHNAN
and A. REICHHOLD*

Petrochemistry

- 33 Reduction of Aromatic Hydrocarbons Content in a Petrochemical Solvent
By I. MORAWSKI and J. MOSIO-MOSIEWSKI
- 36 Advances in Propylene Production Routes *By A. M. AITANI*
- 40 Hydroconversion of n-Hexane using Pt/H-MOR and Pt/H-BEA Catalysts with Various Pt Contents and Bimetallic PtPd/H-MOR, PtPd/H-BEA, PtIr/H-MOR and PtIr/H-BEA Catalysts with Various Secondary Metal Contents
*By A. K. ABOUL-GHEIT, S. M. ABDEL-HAMID
and A. E. AWADALLAH*

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Front cover Foto: **Linde AG, Linde Engineering
Division, Hoellriegelskreuth**

Linde are currently building Europe's largest
natural gas liquefaction plant for the Snøhvit
consortium. The plant is located on the Norwe-
gian island of Melkøya near Hammerfest, north
of the Arctic circle. The contract includes the
supply of the key equipment for the liquefaction
process, the development of storage and
offloading facilities, and all engineering, procure-
ment, and supervision of construction. The total
project will have a contract value for Linde of
more than 400 million euro.

The plant should be operational by 2006 and will
have a production capacity of 4.3 million t of
liquid natural gas per annum. The gas will be
processed from the Snøhvit field and from other
gasfields in the Barents Sea.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 166 International News
- 218 New Products / Processes / Literature
- 220 Calendar

Market Analysis/Geology

- 172 E&P Ventures in the Eastern-Central Europe Transformation States after 1989 – a Review of Expectations and Results
By H. DOBROVA, E. KOLLY and U. SCHMITZ

Market Analysis/Refining

- 213 The Oil Refining Industry and Catalyst Market in Western Europe
By R. PRADA SILVY

Data Management

- 183 Optimal Use of Data – The Challenge for an Oil/Gas Company
By M. WILSON and F. WOHLFART

Drilling

- 190 An Introduction to Intelligent Makeup Facilities: Analysis of Torque-Turn Recordings to Makeup Rotary-Shouldered-Connections (RSC)
By C. TEODORIU, P. REICHETSEDER, C. MARX and H. KINZEL

Pipelines

- 195 Dimensioning and Optimisation of Pipeline Transmission Systems with Two International Projects as an Example
By S. BENDEL

Geology

- 200 Geochemical Fingerprints of Crude Oils and Related Source Rock Potentials in the Gindi Basin, Northern Western Desert of Egypt
By M. A. YOUNES

Liquefied Natural Gas

- 206 Natural Gas Trade Routes and Liquefaction Processes
By W. FOERG
- 211 Market Report: Liquid Natural Gas – High Growth Opportunities in North America and Europe

Process Control

- 217 Process Control Audits Improve Profitability at Hungarian Refinery
By G. SZALMÁS and T. VAN LIENDEN

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Front cover Foto: **RWE Dea AG, Hamburg**

The new living quarter of the Mittelplate drilling
and production island being transported by
floating crane 'Samson' through the Wadden
Sea to the artificial island.

The two modules of the living quarter, which
together weigh 840 tonnes, were built by the
Aker shipyard in Wismar.

In mid-August the Mittelplate Consortium
(RWE Dea AG / Wintershall AG) reported that
the new living quarter had successfully arrived
at the island. The new living quarter is more
spacious and comfortable. Instead of 69 persons
in the past, the new facilities can accommodate
up to 96 persons.

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ERDÖL ERDGAS KOHLE

In this issue:
Buyers' Guide
for the Petroleum Industry

Contents

Oil & Gas News

- 114 International News
- 153 New Products / Processes / Literature
- 156 Calendar

Exploration & Production

- 118 **From Pilot to Complex Onshore/Offshore Operations – Development of Mittelplate Oilfield**
By G. LANGHANS, H.-C. BEUTHAN and F. WESSEL
- 125 **Extended Reach Wells – Drilling Engineering Experience from Dieksand ERD Targeting the Offshore Mittelplate Oilfield**
By U. FRANK, H. HALM and R. KITSCHA
- 136 **Smart Fields – How to Generate More Value from Hydrocarbon Resources**
By K. A. KAPTEIJN and S. MÜSSIG

Refining

- 141 **Exploiting the Synergy between Fluid Catalytic Cracking and Visbreaking to increase the High-Value Product Yields**
By D. STRATIEV, D. MINKOV and G. STRATIEV

Petrochemistry

- 145 **Advances in Propane Ammoxidation Catalyst Technology**
By R. PRADA SILVY and P. GRANGE

Environmental Protection

- 149 **Environmental Risk Assessment – The Spatial Distribution of PHC in Quaternary Sediments Beneath Fuel Stations and Bulk Fuel Storage Sites**
By K. HOLTZMANN

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Front Cover Foto: **Siemens AG, Power Generation**

Having an intake volume flow of approx. 700,000
m³/h, weighing approx. 160 t: Siemens Power
Generation has manufactured the **largest air
compressor** ever for application within an air
separation plant. The compressor unit is being
installed by Sasol at the world's largest air sepa-
ration plant in Secunda, South Africa. The plant,
which was constructed by the French company
Air Liquide, provides oxygen for coal gasifica-
tion. The synthetic gas that is produced is then
converted into sulfur-free fuels. The unit was
manufactured at the headquarters of Siemens
Industrial Applications in Duisburg and has been
shipped to South Africa by sea via Antwerp.
Siemens completed this order in just 13 months,
two months less than usual in the sector. (see p. 83)

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INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 58 International News
- 110 New Products / Processes / Literature
Calendar
- 73 Erratum

Geology

- 64 New Insights from 3D Seismic Data – Deep Marine Sedimentation
and Gas Reservoir Distribution in Upper Austria
By M. J. DE RUIG

Drilling

- 74 New-Technology MWD and LWD Systems Designed for Ultra-Deepwater
Drilling
By P. RADZINSKI, S. MACK, K. BRADY and C. CHEATHAM

Gas Storage

- 80 Optimizing the Adsorption System of an Underground Gas Storage
*By J. SALOMON, M. KUBESSA, H. SCHÜNZEL, R. BÖHM
and O. PROKEŠ*

Gas Processing

- 83 Large-Scale Air Separation Compressor Solutions for GTL Plants
By K. JOPP

Pipelines

- 86 Inline Inspection of a Newly Constructed 40" Crude Oil Pipeline in Ukraine
By J. VAN DER GRAAF and R. MIELKE
- 88 A New Generation: Ultrasonic In-line Inspection Tools for the Metal Loss
and Crack Inspection of Pipelines
- 90 Greater Productivity from Aging or Underrated Pipeline Systems –
Total Pipeline Integrity
By A. KUHN
- 93 SCADA and Telecom System for Oman Gas Company Designed and
Managed by ILF
By A. HAUSMANN

Refining

- 97 Light Naphtha Isomerisation to Meet 21st Century Gasoline
Specifications
By M. J. HUNTER

Market Survey

- 108 World Refining Catalyst Market Update
By R. PRADA SILVY

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Front cover Foto: **Wintershall AG, Kassel/
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Wintershall AG's Production Platform A6-A

After a two-hour helicopter flight, the new crew
members are able to see where they are going
to work for the next two weeks – platform A6-A.

Wintershall AG has operated this steel platform,
located 300 km off the Dutch coast, since the
summer of 2000. It is Wintershall's first natural
gas production platform in the German sector of
the North Sea. Its production capacity of around
1.2 billion m³/a represents approximately 6% of
Germany's overall annual production.

OIL GAS EUROPEAN MAGAZINE

INTERNATIONAL EDITION OF
ERDÖL ERDGAS KOHLE

Contents

Oil & Gas News

- 2 International News
- 47 New Products / Processes / Literature
- 48 Calendar

Market Analysis

- 10 PANORAMA 2003 – Geopolitical Energy Context and World Resources and Accessibility

Offshore Development & Production

- 13 A6-A, the First Gas Produced from the German North Sea
By E. B. MOL

Natural Gas Market

- 21 RWE Gas in the Deregulated Environment of the European Market
By M. SCHOLLE

Natural Gas Logistics

- 25 Automated Core Process from the Planning to the Billing Stage of Fully Integrated Online Gas Control Systems in the Deregulated Market
By H. BAUER

Processing

- 29 Moderate-Speed Reciprocating Compressors for Process Gases
By S. V. CIERNIAK

Petrochemistry

- 33 Improving the Yield of Ethene in the Steamcracker by Recycling of Pyrolysis Gasoline Using Pd-, Pt-, Ir- or Ga-doped Zeolites ZSM-5
By A. RAICHLE, Y. TRAA, F. FUDER, M. RUPP and J. WEITKAMP
- 36 Alkanes as Substitutes for Alkenes in the Manufacture of Petrochemicals – A Continuing Challenge in the Present and the Future
By M. BAERNS, G. GRUBERT, E. V. KONDRATENKO,
D. LINKE, U. RODEMERCK

Catalysts

- 44 Catalysts in Petroleum Refining & Petrochemistry: 12th Saudi-Japan Annual Symposium, Dhahran, Saudi Arabia
By A. M. AITANI