

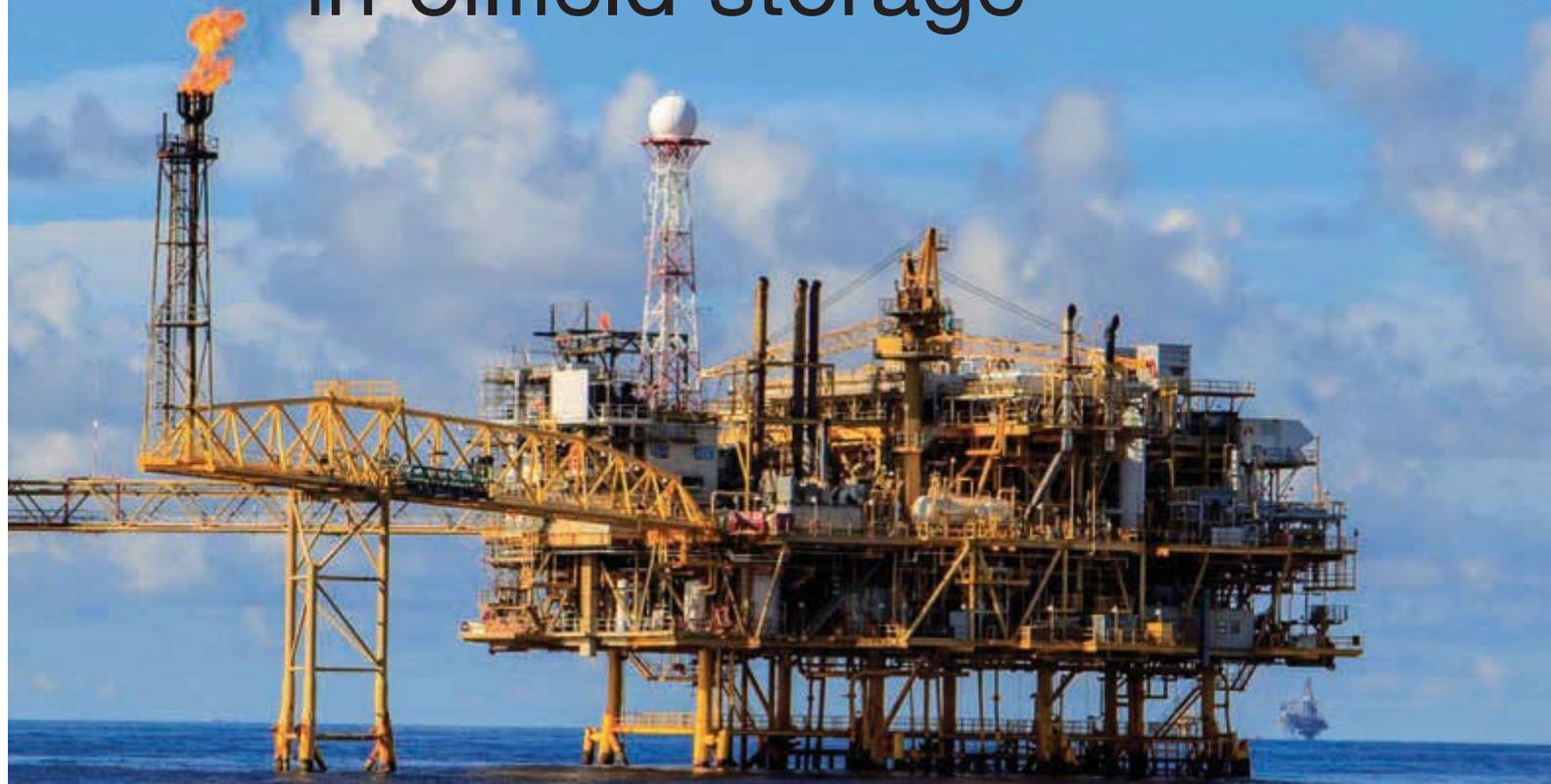
# WORLD PUMPS

THE INTERNATIONAL MAGAZINE FOR PUMP USERS

Number 598 January 2017

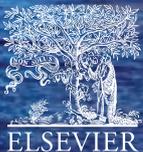
## Oil & gas

### Effective vapour recovery in oilfield storage



#### Also:

- Energy efficiency
- Water & wastewater
- Mining & dewatering



*in liaison with*



Connect with us



[www.worldpumps.com](http://www.worldpumps.com)

# WORLD PUMPS

8 **Product news**

14 **Oil & gas**

18 **HVAC**

## Contents

- Business news 6
- Product news 8
- Applications 14
- Features 24
- Frequently asked questions 42
- Product finder 44
- Diary dates 48

World Pumps January 2017 edition.  
Cover image courtesy of noomcpkstic /Shutterstock.



## Oil & gas

**Ensuring effective vapour recovery in oilfield storage** 14  
An increase in oilfield activity has also led to an increase in the amount of emitted vapours and the use of vapour-recovery units at oilfield storage sites. This article shows how the proper installation of a VRU skid assembly for in-the-field use optimizes VRU performance.

## HVAC

**Variable-speed drives boost hotel hot water supply** 18  
When the Daresbury Park Hotel & Spa in Warrington in the UK was acquired by the Britannia Hotel Group in 2015, the existing pumping system, which supplies the hotel's hot water needs, was in need of an overhaul. VSDs from an international industrial technology supplier saw a 53% cut in the system's energy use.

## Water & wastewater

**Pumping station improves port drainage** 20  
The Port of Immingham in the UK is a huge site and surface water build up has always been removed by a tidal flap (valve) that drained into the Humber Estuary. However, recurrent blockages had port engineers searching for an alternative.

## Mining & dewatering

**The dewatering process in Turkish copper ore mine** 22  
The Küre copper mine in the northern part of the Turkish province of Kastamonu in Anatolia is 980 m deep. The mine operator removes around 1.1 million tonnes of copper ore from the mine per year. Forming the backbone of the dewatering system are 182 electric submersible pumps, moving up to 2440 litres per minute.

## Intelligent control and protection system

ITT's PRO Services brand has launched PumpSmart PS220, an intelligent pump control and protection solution for single and multiple pumps.

The PS220 provides variable speed pump control and technology that protects against upset conditions such as dry run, minimum flow and cavitation, resulting in improved reliability and safety of the pump systems.

It also has Advanced Sensorless algorithms that determine critical performance parameters and provide valuable process insight and diagnostic data. Other

features include six-pump Multi-pump Control, a Flow Totalizer, Intelligent Sleep, Flow Economy and minimum flow bypass valve control.

[www.itt.com](http://www.itt.com)



ITT's Pumpsmart PS220 Family.

## Young Woman Engineers of the Year celebrated at IET awards ceremony

Three young female engineers have been recognised at the Institution of Engineering and Technology's (IET) Young Woman Engineer of the Year Awards for their original work in engineering.

The IET Young Woman Engineer of the Year was awarded to Jenni Sidey, a lecturer in the Department of Engineering at the University of Cambridge, currently working on the development of the latest low emission combustion devices for use in the transport and energy sectors.

Gemma Dalziel received the IET Mary George Memorial Prize for Apprentices. Gemma is an apprentice network consulting

engineer at Cisco, working on network technologies and network security.

Finally, the Women's Engineering Society (WES) Award went to Bethan Murray, a manufacturing systems lead at Rolls-Royce plc, working on the systems that aid the manufacture of the latest aircraft components.

All three winners will play an ambassadorial role for the engineering and technology professions in the forthcoming months, promoting engineering careers to girls and young people.

[www.theiet.org](http://www.theiet.org)

*The IET's Young Woman Engineers of the Year.*

*(Left to right) Gemma Dalziel, Jenni Sidey and Bethan Murray.*



## New in-line series for building services

KSB Aktiengesellschaft, Germany has released a new in-line pump series called Etaline L, which complements its existing range.

The small close-coupled pumps in in-line design are available in 12 hydraulic sizes and their motor rating ranges from 0.12 to 3.0 kW. The pump series covers flow rates of up to 95 m<sup>3</sup> and discharge heads of up to 21 m.

The cast casings and the mechanical seals are designed for oper-

ating pressures of up to 10 bar. The connections at the suction nozzle and discharge nozzle can be either flanged or threaded, depending on the size. A confined O-ring reliably seals the casing, also in fluctuating operating conditions.

The pumps are fitted with mechanical seals selected for a maximum operating temperature of 120°C. They can be supplied in a large range of different materials. Depending on the application and size, the impellers with their good suction behaviour can be made of grey cast iron, bronze or polysulphone.

[www.ksb.com](http://www.ksb.com)



*The new in-line pumps of the Etaline L series complement the lower end of KSB's range of close-coupled pumps.*

## Expansion of electric borehole range

Italian pump manufacturer, Rovatti Pompe, presented new additions to its range of electric borehole pumps at the recent EIMA 2016 exhibition in Bologna, Italy.

The exhibition took place in November and Rovatti Pompe introduced new mixed-flow lines 8E-85 and 10E-240 (8 and 10 inch pumps respectively), the 14E-650 and 16E-1000 (14 and 16 inch pumps) and the new radial line 10ER-70. The new range uses stainless steel investment casting impellers which are dynamically and hydraulically balanced. This ensures reliability because of the very thick structure which avoids welding joints together and so gives a smooth surface, which improves hydraulic efficiency.



*Italy's Rovatti Pompe has added to its electric borehole range.*

In addition to this, all pumps in the 8E-85 and 10E-240 range are cathaphoresis-treated in order to considerably increase resistance to wear and corrosion. Rovatti's cathaphoresis treatment is characterized by a high adhesion to surfaces and uniformity of the coating also in the inner cavities of the component.

[www.rovatti.it](http://www.rovatti.it)