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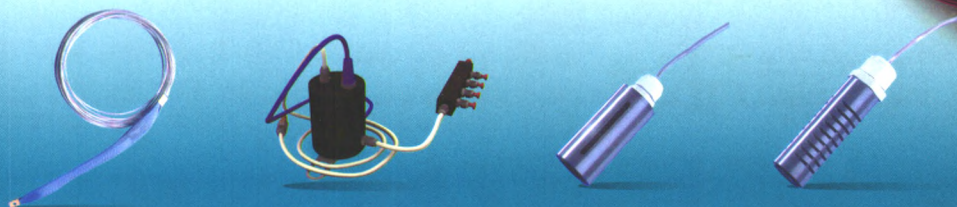
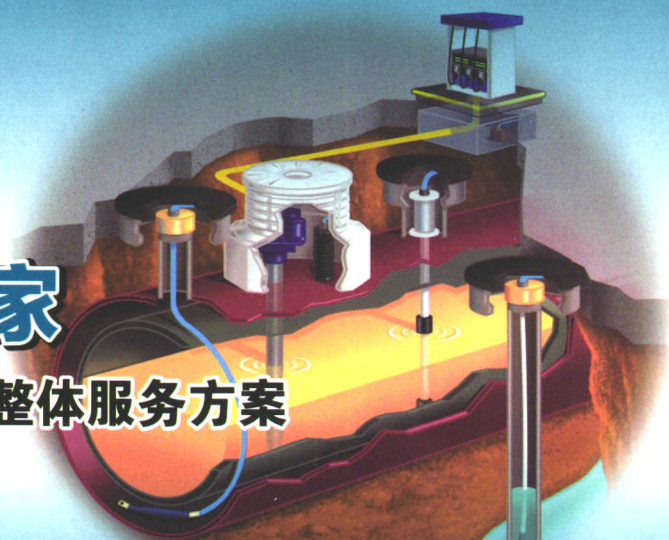
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目 次

加气站

1 加气站 LNG 低温储罐液位计的比选及优化方案 何才宁

油气管道

5 成品油管道混油量的工程设计计算 张加成 刘 艺 刘 超

8 成品油管输油品界面准确跟踪的分析 花柏新

11 武汉—信阳成品油管道顺序输送中的压力变化和控制方法
..... 李鑫伟 赵 勇

信息技术

16 计算机虚拟化技术在企业中的应用 刘 茜 秦燕滨

22 基于物联网技术的仪器设备管理系统研究 王海燕

数质量管理

24 加油机计量精度测试装置的研发
..... 赵雯晴 周金广 丁莉丽 王振中

27 国际石油贸易中的损耗管理与控制 俞刚良

30 销售企业成品油质量的节点控制 韦德灯

安全管理

33 落实好新《安全生产法》的思考 程 艳

36 “梅雨”期加油站安全隐患分析与应对措施 张 蓉

经营管理

38 美国加油站的特点与启示 张远良

42 片区经理在加油站管理中的作用 黄乃文

报道及其他

[后插1] 《石油库与加油站》杂志投稿须知

21 企业安全生产责任体系五落实五到位规定发布

32 中国石化油品销售企业2014年度地市公司经理、书记双“十佳”评
选揭晓

35 《石油库与加油站》杂志2014年度合订本征订启事

44 2015年第2期广告目次



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Contents and Abstracts

GAS REFUELING STATION

1 Selection and Optimization Scheme of Liquidometer for Low Temperature LNG Storage Tank in Gas Refueling Station. He Caining.

Abstract: Aiming at the situation that the differential pressure type liquidometer can not accurately measure the liquid level in LNG refueling station, the option to solve the problem was explored. The measuring principle and structure of a variety of liquidometers adapt to the low temperature medium LNG were introduced, and the probe type, instrument installation method, matters needing attention, and advantages and shortcomings for various liquidometers were compared. As the result, the processing scheme of installing servo liquidometer in LNG storage tank was finally proposed, by which the accurate measurement and safe operation of LNG storage tank could be realized.

Keywords: LNG refueling station, low temperature storage tank, liquidometer, selection, scheme.

OIL AND GAS PIPELINE

5 Calculation on Mixed Oil Quantity of Oil Product Pipeline for Engineering Design. Zhang Jiacheng, Liu Yi, Liu Chao.

Abstract: For the oil product pipeline by way of sequential transport of various oil products, the mixed oil quantity requires to be calculated for engineering design, in order to determine a reasonable pipeline design parameters and the mixed oil processing scheme. Based on the mixed oil generating mechanism, the main factors influencing the mixed oil quantity are analyzed, the calculation methods of mixed oil quantity of different types of oil product pipeline in engineering design are presented, and through the actual operation data analysis on domestic oil product pipeline, the formula correction system is introduced.

Keywords: oil product pipeline, sequential transport, mixed oil quantity, equivalent length; correction coefficient.

8 Analysis on Accurate Interface Tracking in Oil Product Pipeline. Hua Baixin

Abstract: The status quo of interface tracking in oil product pipeline for sequential transport of various oils was introduced, the main problems in mixed oil interface tracking were pointed out, and the main factors influencing the accurate tracking of mixed oil interface were analyzed, which were the changes of temperature and pressure. In order to accurately track the mixed oil interface, it was proposed that the effect of temperature and pressure on the oil volume and the effect of pressure on pipe capacity should be corrected.

Keywords: oil product pipeline, mixed oil interface tracking, analysis.

11 The Pressure Changes in Wuhan—Xinyang Oil Product Pipeline of Sequential Transportation and Control Method. Li Xinwei, Zhao Yong.

Abstract: Taking the Wuhan—Xinyang oil product pipeline as an example, the pressure changes in large - fall pipeline of sequential transportation and control method were analyzed. The hydraulic characteristics were calculated using hydraulic formula, and the pressure changes at the entrance and exit of stations were analyzed. Combining with the example, the change law of pressure along pipeline during alternating of different oils in the large - fall pipeline was analyzed qualitatively and quantitatively, and the pressure control measures at the mixed oil interface crossing point was proposed to ensure safe, stable, efficient operation of pipeline.

Keywords: sequential transportation, large - fall pipeline, hydraulic calculation, pressure control.

INFORMATION TECHNOLOGY

16 Application of Virtualization Technology in Enterprise. Liu Qian, Qin Yanbin.

Abstract: The virtualization technology is introduced, which development is becoming increasingly mature, from propose of virtualization technology to current cloud computing services, and the VMware, Hyper - V in the respective virtualization layer have

realized the virtualization of CPU, memory, server, data and desktop. The application examples of computer virtualization technology in enterprise indicated that it could not only liberate IT personnel from complex repetitive work, save more information resources, break through the limitation of physical boundaries, improve the utilization rate of resources, but also reduce greatly the hardware and software system cost and the maintenance cost, and allocate flexibly resources, which made the IT more adapt to business changes demand.

Keywords: computer, virtualization technology, cloud computing, VMware, Hyper - V.

22 Research on Equipment Management System Based on Internet of Things. Wang Haiyan.

Abstract: Based on the analysis of defects existing in the traditional management mode of instrument and equipment for oil supervision, the concept of IoT (internet of things) was introduced, the preliminary idea for building equipment management system based on IoT technology was proposed, and the application advantage was prospected.

Keywords: internet of things, instrument and equipment, management system.

QUANTITY AND QUALITY MANAGEMENT

24 Experimental Study on Measurement Accuracy of Refueling Machine. Zhao Wenqing, Zhou Jinguang, Ding Lili, Wang Zhenzhong.

Abstract: Aiming at the test requirements of measuring performance of refueling machine under long period application, a refueling machine flowmeter aging test and measurement accuracy testing device were developed, which consisted of intelligent control system, calibration and measurement device, and the test liquid circulation system. By setting the refueling machine aging amount, staged accumulation of aging amount, single refueling volume, and intermittent time and other parameters, the long period aging test and accuracy verification of refueling machine were realized. The refueling machines from two manufacturers were tested by aging experiment, after the refueling amount of 500000 L, the flowmeter still maintained a good measure accuracy. The test results showed that by the experiment platform,

the flowmeter aging and the accuracy of testing process could be implemented with the valid and reliable data obtained.

Keywords: refueling machine, flowmeter, measurement accuracy, test.

27 The Oil Loss Management in International Trade. Yu Gangliang.

Abstract: Starting from the international operation pattern of Sinopec (Hongkong) Co., Ltd., the current situation and difficulties of custody transfer metering in the international oil trade were analyzed. According to the loss generated in the process of oil storage and transportation, the measures to control and reduce the losses for oil trade enterprises were presented.

Keywords: international oil trade, oil loss, control measures.

30 The Node Control of Oil Product Quality in Sales Enterprise. Wei Dedeng.

Abstract: In order to practice the concept of “all – staff, whole – process, all – round oil quality management” in the SINOPEC sales enterprise, the method for oil product quality management was introduced by taking measures to strengthen management and effective control of the ten key links (nodes) (purchasing, depot entry, storage in depot, delivery from depot, transportation, delivery into station, storage in station, sales, customer service, and emergency treatment), and thus make the various links independent and interdependent each other.

Keywords: oil products, quality, node control.

SAFETY MANAGEMENT

33 Thoughts on the Implementing the New “Production Safety Law”. Cheng Yan.

Abstract: The main changes and features of newly revised “Production Safety Law” implemented in December 1, 2014 were briefly introduced, such as the more prominent core legislation idea of “people – oriented, safe development”, the more concrete demand of enterprise to bear main body liability of production safety, which solved problem of supervision department to enforcement law difficultly, increased personal responsibility, and intensified the punishment. The impact of the new law on production safe-

ty management of enterprise was analyzed, and the suggestion to implement the new law and strengthen the management of production safety in enterprise was presented.

Keywords: “Production Safety Law”, production safety, liability, suggestion.

36 Analysis on the Safety Risk of Gas Station in Rainy Season and Countermeasures. Zhang Rong

Abstract: Aiming at the safety management problems faced by gas station in the rainy season, four kinds of safety risks existing in the gas stations in rainy season, such as geology, lightning, oil and gas, and the detained people and cars were analyzed, and the corresponding safety precautions were proposed based on the characteristics of safety risks.

Keywords: gas station, rainy season, safety risk, preventive measures.

OPERATION MANAGEMENT

38 Characteristics of American Gas Stations and Enlightenment. Zhang Yuanliang

Abstract: This paper briefly introduced the American gas station business characteristics including the business model, brand management, appearance and image, refueling card management, price management, and information system, and combining the domestic gas station development situation, provided references to the domestic gas station management, such as the details management, information technology, innovation of network development mode, self – service refueling, innovation in the business model.

Keywords: American gas station, characteristic, enlightenment.

42 Analysis on the role of district manager in gas station management. Huang Naiwen.

Abstract: The role of district manager in the management of gas stations are described from the aspects of duty positioning, characteristics of gas station management, responsibilities of district managers, and performing measures of district manager. By setting the management area of district manager reasonably, defining duty positioning and working process, the district manager could focus on the site management of gas station.

Keywords: gas station, district manager, role.

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