

★中国核心期刊 (遴选) 数据库收录期刊
★中国学术期刊综合评价数据库 (CAJCED) 统计源期刊

ISSN 1008-2263
CN 11-3945/TE

OIL DEPOT AND GAS STATION

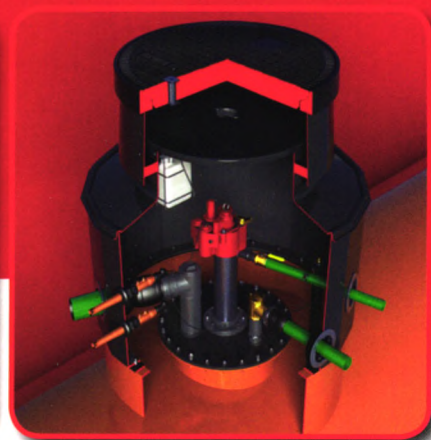
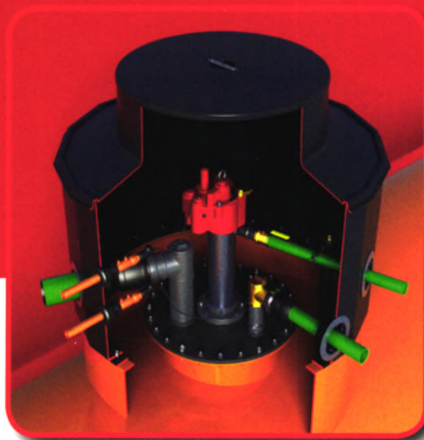
石油库与加油站

SHIYOUKU YU JIAYOUZHAN

Leading The Way in Fueling Innovation Worldwide



—— 油站安全环保设备专家



www.opwglobal.com.cn

优必得石油设备(苏州)有限公司 | 中国工厂 电话: 0512-62745328 | 上海分公司 电话: 021-24112600 | 北京分公司 电话: 010-85235573 | 广州分公司 电话: 020-28865786

ISSN 1008-2263



9 771008 226006



中国石化销售有限公司主办

2015 第 5 期

第24卷 总第141期

Vol.24 Total No.141



石油库与加油站

SHI YOU KU YU JIA YOU ZHAN

1992年创刊(双月刊)
第24卷 第5期
总第141期
2015年10月20日出版

编委会名誉主任:李春光 张海潮
编委会主任:左兴凯
副主任:郭飞鸿 王文联 王维民
王 靓

特邀顾问:吕 品 柴志明

委员:

张秀来 王洪川 徐福斌 张紫傲
冯培育 李玉杏 芮继强 陈必文
尹超明 任士宪 杜予斌 杨计明
黄河 李一庆 郑京华 贾约鹏
罗开勇 阎 华 黄炳利 柳湘滨
张天明 罗统华 牛竞民 王津培
韩庆跃 刘华斌 王 敏 韩 杰
夏凤梧 王 安 戴福俊 周雪洪
徐江桥 刘 胜 何 明 张 毅
卜文平 高劲松 杜道林 沈青祁
杜红岩 周家祥 韩 钧 金万刚

社长:左兴凯

副社长:郭飞鸿 王文联

主编:王维民

副主编:金万刚

责任编辑:张 玉

主管:中国石油化工集团公司

主办:中国石化销售有限公司

编辑出版:《石油库与加油站》杂志社

国内发行:《石油库与加油站》杂志社

地址:北京市东城区广渠家园6号楼
303室

邮编:100022

电话:(010)67006041;67006042

传真:(010)67006043

E-mail:sykjyz@vip.sina.com

国外发行:中国图书进出口总公司

国外发行代号:2263BM

印刷:廊坊飞腾印刷包装有限公司

厂址:廊坊市安次区永华道25号

邮编:065000

标准连续出版物号:ISSN 1008-2263
CN 11-3945/TE

广告许可证号:京东工商广字第8033号

国内定价:每册12元,全年72元

本刊对所登图文拥有
版权,未经允许,不得转载
或复制,本刊保留追究的
权利。

目 次

储运技术

1 成品油铁路接卸工艺的设计选用 刘小明

加气站

5 CNG加气子站设备的选型方法
..... 唐广宇 江 宁 赵雯晴 张健中

油气管道

8 九江一樟树成品油管道停输后压力下降分析 邱 东

安全技术

11 储油洞库及覆土立式油罐的消防设计
..... 江迅建 阮先军 王伯轩

14 加油机滤芯对油品静电起电的影响 张云朋

信息技术

16 石化销售企业培训管理信息化建设 徐 博

数质量管理

20 关于杯盒温度计在汽柴油立式罐中测温平衡时间的探讨
..... 董 蔚

23 变性燃料乙醇中钠元素的测定方法 朱 静

25 浅谈如何做好油库油料计量管理工作
..... 梁军磊 张 恒 李哲学

27 浅析加油站油品损耗的原因及管理措施 青志杰

30 加油机自校与强制检定差异分析探讨 吕 英

安全管理

34 浅谈新形势下驻城市油库的安全管理 詹 军

经营管理

36 加油站非全日制用工形式的探讨 蒋兆雨 林鑫聚

39 大数据时代加快自助加油推广的建议和措施
... 王 剑 胡 珣 李 辉 张五洲 李海燕 张国勇 石锦献

报道及其他

[后插1] 《石油库与加油站》投稿须知

4 2015年第5期广告目次

29 我国正抓紧制定国6燃油标准

35 国务院召开安全生产大检查综合督查汇报会

44 2016年《石油库与加油站》杂志征订启事



OIL DEPOT AND GAS STATION

Bimonthly, Started
Publication in 1992
Vol. 24, No. 5
No. 141 totally
Oct 20, 2015

Honorary Chairman of Editorial Committee: Li Chunguang, Zhang Haichao

Chairman of Editorial Committee: Zuo Xingkai

Vice Chairman of Editorial Committee: Guo Feihong, Wang Wenlian, Wang Weimin, Wang Liang

Special Consultants: Lu Pin, Chai Zhiming

Members: Zhang Xiulai, Wang Hongchuan, Xu Fubin, Zhang ziao, Feng Peiyu, Li Yuxing, Rui Jiqiang, Chen Biwen, Yin Chaoming, Ren Shixian, Du Yubin, Yang Jiming, Huang He, Li Yiqing, Zheng Jinghua, Jia Yuepeng, Luo Kaiyong, Yan Hua, Huang bingli, Liu Xiangbin, Zhang Tianming, Luo Tonghua, Niu Jingmin, Wang Jinpei, Han Qingyue, Liu Huabin, Wang Min, Han Jie, Xia Fengwu, Wang An, Dai Fujun, Zhou Xuehong, Xu Jiangqiao, Liu Sheng, He Ming, Zhang Yi, Bu Wenping, Gao Jinsong, Du Daolin, Shen Qingqi, Du Hongyan, Zhou Jiexiang, Han Jun, Jin Wangang

Director: Zuo Xingkai

Vice Director: Guo Feihong, Wang Wenlian

Editor-in-Chief: Wang Weimin

Vice Editor-in-Chief: Jin Wangang

Editor-in-Charge: Zhang Yu

Responsible Department: China Petrochemical Corporation (SINOPEC)

Sponsor: SINOPEC Sales Company

Publisher: Editorial Office of Oil Depots and Oil Stations

Distributor (Domestic): Editorial Office of Oil Depots and Oil Stations

Address: Building No. 6, Guangqujiayuan, Dongcheng District, Beijing

Postcode: 100022

Tel: (010) 67006041; 67006042

Fax: (010) 67006043

E-mail: sykjyz@vip.sina.com

Distributor (Abroad): China National Publication Import & Export Corporation

Printer: Fei Teng Printing Co. Ltd of Langfang

Address: No. 25, Yonghua Dao Ave Langfang

Postcode: 065000

ISSN 1008—2263; **CN**11—3945/TE

No. of Ad. License: 8033, Dongcheng District, Beijing

Domestic Price: RMB72 per year

Copyright for all originally published reports.

Contents and Abstracts

STORAGE TECHNOLOGIES

1 Discussion on Railway Oil Unloading Process and Design Selection. Liu Xiaoming.

Abstract: Three kinds of processes mainly adopted in product oil railway unloading are introduced briefly in this paper, namely vacuum unloading, centrifugal pump unloading assisted by positive displacement pump, and submersible pump unloading. And the working principle and the advantages and disadvantages of three kinds of processes were compared and analyzed. At the same time, the matters needing attention about the design and selection of oil tank wagon unloading processes are pointed out.

Keywords: product oil, railway unloading process, design selection.

GAS REFUELING STATION

5 Equipment Selection Method for CNG Refueling Substation. Tang Guangyu, Jiang Ning, Zhao Wenqing, Zhang Jianzhong.

Abstract: Aiming at the mechanical/hydraulic piston type CNG refueling substation, according to the design conditions of gas refueling station, the main equipment selection method for CNG refueling substation is given. The reasonable and effective allocation of CNG refueling substation equipment is of great importance for improving the operation efficiency and economic benefit.

Keywords: CNG refueling substation, gas storage facilities, selection method.

OIL AND GAS PIPELINE

8 Analysis on Pressure Drop of Jiujiang - Zhangshu Oil Product Pipeline upon Shutdown. Qiu Dong.

Abstract: Taking the phenomenon of sharp pressure

drop of the Jiujiang - Zhangshu oil product pipeline after shutdown as an example, the influence of oil temperature change on the pressure of pipeline upon shutdown is analyzed and discussed through theoretical calculation combined with the actual data. The pressure change values of the steel pipes with different specifications at the gasoline or diesel temperature variation of 1 °C are presented through calculation, which provides a reference for the pressure maintaining solution upon transportation shutdown.

Key words: oil product pipeline, transportation shutdown, temperature, pressure drop.

SAFETY TECHNOLOGY

11 The Fire Prevention Design of Oil Storage Cavern and Soil Covering Vertical Oil Tank. Jiang Xunjian, Ruan Xianjun, Wang Boxuan

Abstract: Most of the oil depots of military and national material reserve system usually bear the long-term oil reserves task, so most of the type of depots are located in the mountains, and the construction forms of the tanks are mainly caverns and soil covering vertical oil tanks. There are some differences in construction mode between the two types of oil tanks and the ground vertical oil tanks, so the fire prevention design should be treated differently.

Keywords: cavern depot storage tank, soil covering vertical oil tank, fire prevention design.

14 The Effect of Filter Element of Refueling Machine on Static Electrification of Oil. Zhang Yunpeng

Abstract: The effect of the ordinary filter elements used in the refueling machine on the static electrification of oil is studied. The results show that filter elements can significantly affect the oil static electrification characteristics: the smaller the pore diameter of filter element is, the larger the charge amount of oil electrostatic is; under the same conditions, the electrostatic hazard of gasoline is higher than that of diesel; the effect of waterproof filter elements on the static electricity of the oil is slightly larger than that of the ordinary filter elements. Gas station should select filter elements according to the characteristics of

oil, and when necessary, reduce the oil flow rate to reduce the electrostatic risk.

Keywords: refueling machine, filter element, oil product, electrostatic.

INFORMATION TECHNOLOGY

16 Information Construction of Training Management for Petrochemical Sales Enterprises. Xu Bo.

Abstract: The content of training management information construction of petrochemical sales enterprises is briefly introduced, which using the method of computer technology, network technology and database technology, can manage the training in sales enterprises, achieve the integration of training resources, reduce training costs, speed up the transfer of knowledge in enterprise so that the employees can accept the knowledge and skills required by the enterprise anytime, anywhere, and then enhance the overall competitiveness of enterprises.

Key words: Petrochemical sales enterprises, training management, information, competitiveness.

QUANTITY AND QUALITY MANAGEMENT

20 Discussion on Temperature Measuring Time of Gasoline and Diesel in Vertical Tank Using Cup Case Thermometer. Dong Wei

Abstract: Through the discussion of temperature measuring time of gasoline and diesel in vertical tank using cup case thermometer, it is hoped that under the premise of non-effect on the measuring precision, considering all the factors, setting reasonably the ideal temperature measuring time range, the aim of reducing labor intensity and improving work efficiency could be achieved.

Key words: vertical oil tank, temperature measurement, balance time.

23 Determining Method of Sodium Content in Modified Fuel Ethanol. Zhu Jing.

Abstract: A method for the determination of sodium elements in modified ethanol was established. Using atomic absorption spectrophotometry, through the direct injection of sample, the sodium content in modified ethanol could be determined directly according

to the standard curve. The working conditions of atomic absorption spectrometer were selected for the analysis of organic phase sample. The correlation coefficient of standard curve is less than 0.999, the recovery rate of standard addition is 93%, and the standard deviation is 0.18%—0.51%. The method was suitable for the determination of sodium content in modified fuel ethanol.

Key words: modified fuel ethanol, sodium element, atomic absorption spectrophotometry.

25 Discussion on the Oil Metering Management in Oil Depot. Liang Junlei, Zhang Heng, Li Zhexue.

Abstract: The methods for management of oil metering in oil depot are introduced from three aspects: on the management, rules and regulations should be strictly implemented; on the technology, measuring instruments should be used normatively; on the construction of personnel, the establishment of personnel and training of staff should be implemented.

Key words: oil depot, oil metering, management.

27 Analysis on Reasons Causing Oil Loss in Gas Station and Management Measures. Qing Zhijie.

Abstract: From the aspects of the dispatch error of dispensers, the accuracy of volume table, the influence of temperature variation and other special circumstances, the subjective and objective reasons causing oil loss in gas station are briefly analyzed. The specific management measures are put forward: strengthening the construction of the staff of the gas station, regulating the verification of measurement apparatus used in gas stations, and increasing inspection and assessment.

Key words: gas station, oil loss, management measures.

30 Analysis on the Difference Between Self Calibration and Compulsory Verification of Refueling Machine. Lü Ying.

Abstract: In view of the major difference between self calibration and compulsory verification results of the refueling machine, the reasons causing the difference are analyzed from the aspects of standard

gauges, test conditions and calculation, and the control methods and suggestions to reduce the difference are put forward.

Key words: refueling machine, self calibration, verification, difference analysis, suggestion.

SAFETY MANAGEMENT

34 Discussion on the Safety Management of Oil Depot in City Under the New Situation. Zhan Jun.

Abstract: Some oil depots are gradually being surrounded by city with the city's expansion, which causes severe, complex safety problems. The corresponding safety countermeasures and suggestions are put forward.

Key words: oil depot, underground oil pipeline, safety management, measures.

OPERATION MANAGEMENT

36 Discussion on Part - Time Employment Form of Gas Station. Jiang Zhaoyu, Lin Xinju.

Abstract: Aiming at the problem of employment in gas station, a part - time employment system, which is based on employing full - time college students, is put forward. At the same time, the existence of the security, service, legal and other aspects of risks is pointed out.

Key words: gas station, employment, part time, effectiveness.

39 Research on the Strategy to Accelerate the Popularization of Self - Service Refueling in the Big Data Era. Wang Jian, Hu Xun, Li Hui, Zhang Wuzhou, Li Haiyan, Zhang Guoyong, Shi Jinxian.

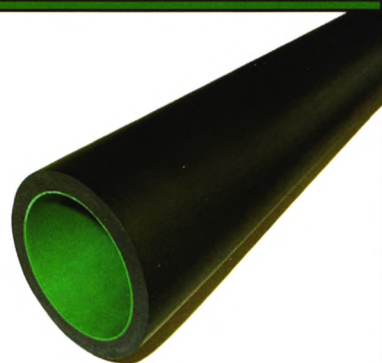
Abstract: Based on the current situation of popularization of self - service refueling, the problems and shortcomings are analyzed. Through the SWOT qualitative analysis, combining with the current trend of the society and the transformation requirement of the SINOPEC Corporation, the ideas, planning and measures to accelerate the popularization of self - service refueling business in the big data era are put forward.

Key words: self - service refueling, SWOT analysis, target, idea.

北京市优捷特石油设备科技有限公司

大事记

- NUPI GECO中国区域总代理
- 在全国拥有二十余家二级代理服务商
- 2014年入围中石化复合管道系统供应商名单
- 2014年全国范围安装NUPI复合管道加油站1100余座
- 2014年成功大范围应用于加油站油气回收改造项目



- 意大利NUPI GECO公司是专业复合管制造商
- 年销售复合管25000km
- 符合EN14125、UL971及GB50156标准
- 设立权威独立第三方实验室
- 真双层系统，多点渗漏检测系统
- 全球联保30年，知名保险公司ACE承保



地址：北京市朝阳区东四环北路6号1号楼1-1602

服务热线：010-56295527

网址：www.youjiete.com