

石油库的加油站

SHI YOU KU YU JIA YOU ZHAN

1992 年创刊(双月刊) 第 19 卷 第 6 期 总第 112 期 2010 年 12 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 牛竞民 特邀顾问:吕 品 赵永明 夏于飞 柴志明 委员: 刘怀义 王洪川 徐福斌 张紫傲 冯培育 李玉杏 芮继强 刘成勇 罗春平 郭松峰 焦德才 李绍清 郭晋和 张松华 林 东 贾约鹏 罗开勇 囯 华 杨元顺 吴劲松 陈金春 李旦杰 黄流雄 马安生 陈肃何明刘唱宫敬 陈保东 卢世红 周家祥 韩 钧 张 毅 宋 伟 张建才 宁军功 卜文平 金万刚 社长: 左兴凯 副社长:郭飞鸿 主编: 牛竞民 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:北京市朝阳区静安里 12 号楼 邮编:100028 电话:(010)64618538 传真:(010)64668601 E - mail: sykjyz@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:廊坊市光达胶印厂 厂址:廊坊市光明东道4号 邮编:065000

标准连续出版物号: <u>ISSN 1008-2263</u> CN 11-3945/TE 广告许可证号:京朝工商广字第 0135 号 国内定价:每册 10 元,全年 60 元

本刊对所載图文語有

目 次

经	写官埋		
1	利用 SAP 系统控制企业经营风险 ······	周兆	丛林
4	成品油管道设备管理信息系统的设计与实现	•••••	•••
	范 峰 周 浩		
7	加油站设备管理初探 ······	赵	骏
安全管理[深入开展"我要安全"主题活动专栏]			
10	深化未遂事故管理的探讨	鲁信	椿
12	油库安全事故中的人为差错分析 张培春	崔在	棒
16	联合站安全问题分析及对策 吴彦东 高秋华	吴王	国
安全技术[深入开展"我要安全"主题活动专栏]			
19	油库安全间距分析 王春涛	赵嘉	斤颖
23	海底原油管道泄漏检测技术	刘	欣
储运技术			
27	提高成品油库自动化信息化水平的探讨	徐	舒
29	油库公路发油技术的选择	闰徒	林
33	节能液压式 CNG 汽车加气子站的应用		•••
	雷建平 周三平	李	珊
35	加油站油气回收处理设备选型之我见 程佳成	折恕	字
环境保护			
38	加油站对水体污染的防控	胡-	平
40	基于制冷技术的油气回收过程 李少华	刘宝	Ł
报	直及其他		
3	中国石油化工集团公司安全生产禁令(试行)		
9	中国石化销售企业岗位练兵和技术比武取得可喜成绩		
`15	2010 年第 6 期广告目次		
26	中国石化销售企业安全纪律(试行)		
32	《石油库与加油站》杂志 2010 年度合订本征订启事		
37	2011年《石油库与加油站》杂志征订启事		
42			



OIL DEPOT AND GAS STATION

Bimonthly, Started Publication in 1992 Vol. 19, No. 6 No. 112 totally Dec 20, 2010

Honorary Chairman of Editorial Committee: Li Chunguang, Zhang Haichao

Chairman of Editorial Committee: Zuo Xingkai Vice Chairman of Editorial Committee: Guo Feihong, Niu Jingmin

Special Consultants: Lu Pin, Zhao Yongming, Xia Yufei, Chai zhiming

Members: Liu Huaiyi, Wang Hongchuan, Xu Fubin, Zhang Ziao, Feng Peiyu, Li Yuxing, Rui Jiqiang, Liu Chengyong, Luo Chunping, Guo Songfeng, Jiao Decai, Li Shaoqing, Guo Jinhe, Zhang Songhua, Lin Dong, Jia Yuepeng, Luo Kaiyong, Yan Hua, Yang Yuanshun, Wu Jinsong, Chen Jinchun, Li Danjie, Huang Liuxiong, Ma Ansheng, Chen Su, He Ming, Liu Chang, Gong Jing, Chen Baodong, Lu Shihong, Zhou Jiaxiang, Han Jun, Zhang Yi, Song Wei, Zhang Jiancai, Ning Jungong, Bu Wenping, Jin Wangang

Director: Zuo Xingkai Vice Director: Guo Feihong Editor-in-Chief: Niu Jingmin 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 De-

pots and Oil Stations

Address: Building No. 12, Jinganli, Chaoyang

District, Beijing

Postcode: 100028

Tel: (010) 64618538 Fax: (010) 64668601

E-mail: sykjyz@sina. com

Distributor (Abroad): China National Publication

Import & Export Corporation

Printer: Guang Da Printing Plant of Langfang Address: No. 4, Guangming Dongdao Ave Langfang

Postcode: 065000 ISSN 1008-2263 CN11-3945/TE

No. of Ad. License: 0135, Chaoyang District,

Beijing

Domestic Price: RMB60 per year

Copyright gor all originally published reports.

· П ·

Contents and Abstracts

OPERATION MANAGEMENT

 Risk Control of Enterprise Operation Using SAP System. Zhou zhaolin

Abstract: According to the common risks in the operation and management of petroleum company, such as the credit risks in oil products sales step, capital risks in exchange settlement, material object risks in oil products storage, and safety risks in oil products handling, taking SAP R/3 system for centralization, various risk control methods were designed and developed, which design ideas and control measures were described. And the comprehensive benefits obtained in risk control were analyzed objectively.

Keyword: petroleum company, operation and management, risk control, measure.

4. Design and Implementation of Equipment Management Information System for Oil Products Pipeline. Fan Feng, Zhou Hao, Yu Bin.

Abstract: Basing on the comprehensive theory of equipment management, starting from the integrated study on equipment management of oil products pipeline, taking the advantages of computer and network information management, through the analysis on the function requirement of oil products pipeline equipment management, a design and solution based on B/S application mode and three layers configuration composed of system user layer, business logic layer and supporting layer was presented, and consequently the information system for oil products pipeline equipment management under the . Net configuration was implemented.

Keyword: oil products pipeline, equipment management information system, design.

7. Preliminary Study on Equipment Management in Gas Station under New Situation. Zhao Jun.

Abstract: The status and major task of equipment management in gas station is introduced, and the approaches to improving equipment management level are discussed as well.

Keyword: gas station, equipment management, discussion.

SAFETY MANAGEMENT

10. Discussion on Deepening Management of NearAccident. Lu Xinchun.

Abstract: The article discussed how to improve the understanding of near – accidents management, debottleneck near – accidents reporting, strengthen statistics and analysis of near – accidents, and share the warning education effect on near – accidents.

Keyword: near - accident, management, discussion.

12. Analysis on Human error in the Oil Depot Safety Accidents. Zhang Peichun Cui Cunmei

Abstract: The reasons causing human errors were analyzed from the perspectives of human's psychological factors, physiological factors and the external factors such as environment. The countermeasures were proposed to improve comprehensively human reliability, minimize the individual errors, and reduce the safety risk of oil depot.

Keyword: oil depot, human error, reason analysis, countermeasure.

 Analysis on Safety Problems of United Stations and Countermeasures. Wu Yandong, Gao Qiuhua, Wu Yuguo.

Abstract: The united station is the important part of oilfield surface gathering and transportation system, which is the place for oil and gas gathering and distribution, and is also the place where high risks exist and concentrate. Based on the analysis of danger factors in the site and medium of united station, the safety management methods in united stations and the safety prevention measures are intro-

duced.

Keyword: united station, safe operation, danger analysis, prevention measure.

SAFETY TECHNOLOGY ...

Analysis on Safety Distance in Oil Depot.
Wang Chuntao, Zhao Xinying.

Abstract: Thermal radiation damage is the main damage mechanism for pool fires in open air. The damage criterion of thermal radiation was discussed and the method to predicting damage radius of pool fires was proposed. Taking an oil depot as example, numerical simulation calculation on the damage radius of probable pool fire was performed, and then the setting of safety distance in oil depot was analyzed. Based on the numerical simulation calculations of pool fire radius, the necessity to further subdivide the first – order oil depot (station and yard) was presented, and the oil depots (station and yard) of volume more than one million cubic meters should be classified individually, which safety standard should be improved.

Keyword: oil depot, pool fire, thermal radiation, numerical simulation.

 Detection Technology for Submarine Crude Oil Leakage. Liu Xin.

Abstract: The basic status of submarine pipelines home and abroad was briefly introduced. The detection technologies for submarine crude oil pipeline leakage including pipeline inside detection, outside detection, and the newly arisen real – time detection were introduced.

Keyword: submarine pipeline, leakage, detection.

STORAGE TECHNOLOGIES

 Discussion on Improving Application Level of Oil Products Depot Automatization and Information Technology. Xu Shu.

Abstract: In order to improve the application level of oil products depot automatization and information technology, the influencing factors including optimization of equipment configuration, increasing application software development level, and improving the application and management level of operator were discussed.

Keyword: oil depot, automatization, information, application.

Study on Selection of Highway Oil Distribution
Technology. Yan Delin.

Abstract: Based on the analysis of configuration, features and comparison of highway oil distribution technologies of oil depot, the applicability of various technologies was proposed. The general principle for technology selection and the method to selecting automatic control modes, controller, and offloading system for highway oil distribution of oil depot was presented.

Keyword: oil depot, highway oil distribution, technology analysis, selection.

33. Application of Energy – Saving Hydraulic CNG Secondary Fueling Station. Lei Jianping, Zhou Sanping, Li Shan.

Abstract: The structure, process flow, features and operation status of energy – saving hydraulic CNG secondary fueling station were introduced, and the problems needing to be solved in operation were presented.

Keyword: CNG secondary fueling station, structure, operation, problem.

35. Thoughts on Oil Vapor Recovery Equipment Selection in Gas Station. Cheng Jiacheng, She Shuping.

Abstract: The working principles of oil vapor recovery methods common used in gas station, such as absorption, adsorption, condensation and membrane separation were introduced, and the advantages and disadvantages of these methods were analyzed. Based on the analysis and comparison, it was proposed that condensation combined with adsorption method is suitable for gas station. The case analysis results showed that using condensation combined with adsorption method, the gas station could achieve better economic and social benefits.

Keyword: gas station, oil vapor recovery, economic benefit, analysis.

ENVIRONMENT PROTECTION

38. Prevention of Water Pollution Caused by Gas Station. Hu Yiping.

Abstract: The hazards of water pollution and the reasons causing water pollution by gas station were introduced. The prevention measures for water pollution caused by gas station were proposed such as strengthening the maintenance of equipments, improving the implementation of rules and regulations, establishing effective contingency plans, allocating reasonably prevention and control material, and nurturing the good operation habit.

Keyword: gas station, water pollution, prevention and control measure.

 Oil Vapor Recovery Process Based on Refrigeration Technology. Li Shaohua, Liu Baoyu.

Abstract: In the course of storage and distribution of oil products, there is large amount of evaporation loss, which not only cause energy waste, but also bring about environment pollution. Oil vapor recovery is the most effective method to solve the problem. The principle of oil vapor recovery based on direct refrigeration and the application of combination process on oil vapor recovery were introduced. Keyword: refrigeration, oil vapor recovery, combination process.