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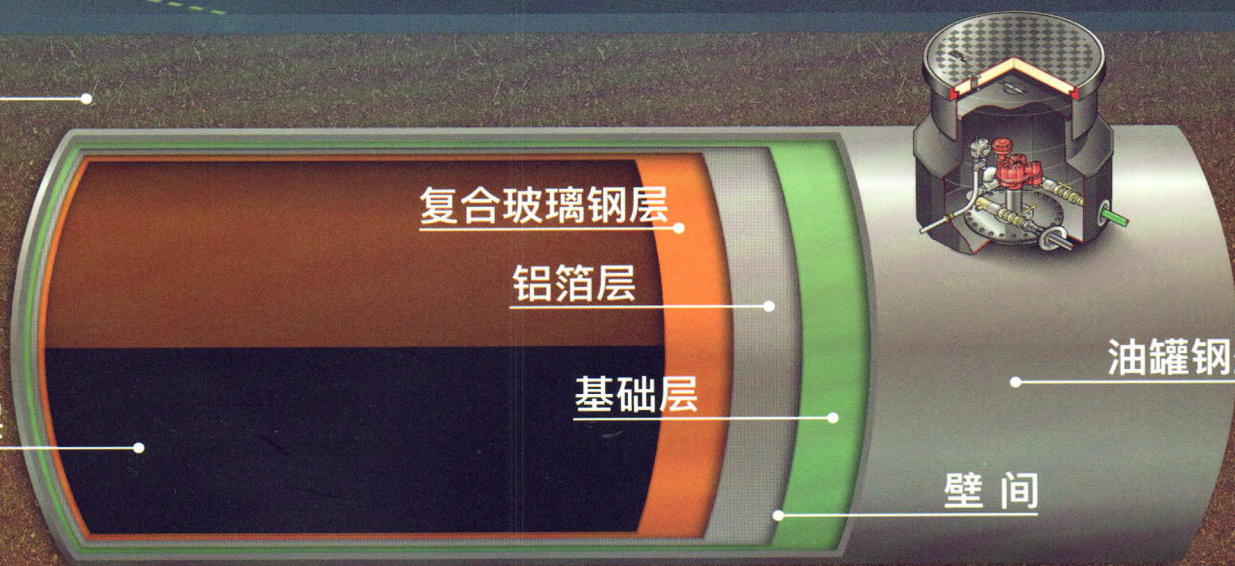
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地址:北京市东城区广渠家园 6 号楼
303 室

邮编:100022

电话:(010)67006041;67006042

传真:(010)67006043

E-mail:sykjyz@vip.sina.com

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(010) 67006043

E-mail:

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Abstract: Based on the inspection results of the steel canopies in 51 gas stations, the common quality faults existing in the operation and maintenance are analyzed and summarized. The problems existing in the design, construction, usage and maintenance of steel canopy of gas station are pointed out, and the relevant suggestions on the safety in construction and usage of canopy are put forward.

Key words: gas station, steel structure, canopy, problem, analysis.

4 Measures to Prevent Corrosion of Flange in Oil Depots and Gas Stations. Ji Haiqiang, Lu Pinbao.

Abstract: The corrosion status of flanges in the oil depots and gas stations in wet environment in Guangxi Province, the common corrosion principle of flange and the electrochemical reaction principle are briefly described. The main methods for anti-corrosion of flange are introduced, such as oxygen corrosion preventing method by using polyurethane foam, electrochemical corrosion preventing method, replacement reaction method by using copper sulfate, sealing method by filling glass adhesive in the packing, block method by using tape and grease, setting protective cover of flange, viscoelastic body anti-corrosion method. And the viscoelastic body anti-corrosion is recommended.

Key words: oil depot, gas station, flange, anti-corrosion, method.

OIL AND GAS PIPELINE

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Abstract: According to the actual situation of SINOPEC East China oil pipe network operation, in order to optimize the oil product pipeline network scheduling process, improve the oil transportation efficiency of oil

pipeline, control and prevent the production risk, promote the full flow and sharing of basic data, and improve the traditional one-way linear business model and production-specialization system, based on the analysis of user needs, taking full advantage of mobile internet technology, big data, and intelligent methods, the design principle and realization method of system architecture, business process and main modules are integrated using Android Studio development platform and Oracle database. The key technologies, such as construction of database, design of knowledge base, establishment of fault tree model, are introduced. The mobile application system for oil pipeline scheduling support and abnormal diagnosis is established, providing a guarantee for efficiency improvement and safe operation of pipeline network.

Key words: oil product, pipeline network, scheduling support, abnormal diagnosis, mobile application, design.

12 Study on Foreign Advanced Process Design Standards of Long Distance Pipeline. Du Juan, Li Lian, Jia Zhanying, Zhu Xingyan, Zhang Yanming.

Abstract: The advanced contents in the long distance oil products pipeline standards in the United States, Canada, Russia, Australia and other countries are introduced respectively, such as the distance and location of valve rooms, the pressure relief valve setting, crude oil pipeline temperature, sequencing principle of batching transport, pressure protection principle of oil stations, emergency shutdown principle of oil stations, and ventilation system design of pumping stations, and compared with the relevant standards in China, the differences are pointed out, and the suggestions for improving China's long distance pipeline standards are put forward.

Key words: oil, long distance pipeline, standard, introduction, improvement, suggestion.

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15 Discussion on Application of Virtual Reality Technology in Safety Training of Hazardous Chemical Enterprises. Lin Jiancheng.

Abstract: Based on the introduction of the concept, application scope and main characteristics of the virtual reality technology, the main content of virtual reality technology applied in the safety training of hazardous chemical enterprise are presented, including accident scenario simulation, modeling and simulation of workshop layout and environment, simulation of direct operation of installation and maintenance,

virtual search of hidden security and lessons simulation, accident emergency drilling simulation. The advantages of virtual reality technology in safety training of hazardous chemical enterprises, such as enhancing the training effect, saving time and cost, enhancing safety reliability and enriching the teaching forms, are proposed, which provides a new method for improving the safety training effect of hazardous chemical enterprise.

Key words: virtual reality technology, hazardous chemical enterprise, safety training, application, discussion.

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18 Analysis on the Operation Status of Oil Vapor Recovery Unit for Gas Station. Liu Dong.

Abstract: In Beijing, the oil vapor recovery units for post-treatment of oil vapor discharged from gas stations have been installed for many years. The recovery efficiency of oil vapor is low and the failure rate is increasing. Based on the calculation of the environmental benefit of the post-treatment device, the suggestion is proposed that under the condition of the strict control of the gas-liquid ratio, the equipment can be cancelled.

Key words: gas station, oil vapor recovery, post-treatment device, operation, analysis.

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22 Study on the Relation of Lubricity with Sulfur Content and Composition of Diesel Fraction. Liu Xinlu, Zhang Fengquan, Yang Yong, Dong Fang.

Abstract: The lubricity, density, viscosity and aromatics content of diesel fractions produced from different processes were analyzed. The results showed that, in the absence of additives, the diesel fraction with higher sulfur content showed better lubricity; the density was negatively correlated with the wear scar diameter; the kinematic viscosity and the wear scar diameter did not show a good correspondence; the lubricity of diesel fraction was a comprehensive result which was influenced by the polycyclic aromatics content, density and so on, and was not affected by the monocyclic aromatics content.

Key words: diesel fraction, lubricity, sulfur content, density, viscosity, relationship.

24 Gasoline Engine Technology and Advice for Selection of High Octane Gasoline. Cui Yongsheng.

Abstract: The new technologies used in the new gasoline engines, such as turbo charging, direct injection, variable valve timing technology, as well as the relevant knowledge about engine compression ratio,

tio, gasoline antiknock index, and gasoline octane at home and abroad, are introduced. According to the technical characteristics of different engines, reasonable recommendations are presented for the correct selection of gasoline.

Key words: gasoline engine, technology, introduction, high octane gasoline, selection, suggestion.

SAFETY MANAGEMENT

29 Discussion on Safety Management for Operation at Height in Gas Station Construction. Bai Fan, Jin Zuoxiang, He Ben.

Abstract: Combined with the gas station construction management practice, the effect of environmental factors, human factors, and protective facilities defects on the operation safety at height of gas station construction is analyzed. The measures are put forward to prevent accident of operation at height: one is to complete the construction plan; the second is to improve and strictly implement the rules and regulations of the operation at height in gas station construction; the third is to ensure the availability of the construction equipment and facilities.

Key words: gas station, construction, height, operation, safety, prevention, measures.

31 Problems in Formulating Emergency Plan of Inland Aquatic Gas Station (Barges) and Solutions. Mao Xingzhi.

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matters needing attention.

Key words: aquatic gas station, on-site disposal, scheme, formulation, problem, countermeasure.

OPERATION MANAGEMENT

34 Legal Problems on Land Usage in Gas Station. Chen Meiling.

Abstract: Based on the introduction of the current laws and regulations on land ownership, use and paid use in China, the legal risks in the process of land usage by gas station are pointed out, such as incomplete procedures, illegal land use, unclear land ownership, and improper management of the rental station. The corresponding prevention measures are proposed, the first is to fully understand the relevant policies of the national land management; the second is to obtain land use rights for the new land through the bid invitation, auction and listing system or acquisition of shares; the third is to avoid using rural collective land; the forth to strengthen the existing land management.

Key words: gas station, land, use, law, system.

39 Exploration of New Mode of All-Staff Micro Business in Petrochemical Sales Enterprises. Fan Xiaohong.

Abstract: According to the new situation, viz. the increasingly fierce market competition and the impact of the e-business on mobile internet, of petrochemical sales enterprises, through the analysis of customer behavior characteristics in mobile internet environment, combined with the characteristics of petrochemical sales enterprises, based on the "three business circle" of provincial headquarters, municipal branch, oil station (personal) and "all-staff marketing" mode, using WeChat as entrance, the "all-staff micro business" mode with two levels of architecture and three levels of online stores is put forward. Constructing micro business platform through the "Internet plus outlets", "Internet plus maker", "Internet plus micro shop" methods is proposed. The platform is designed as an SOA architecture with distributed components, which integrates the internal components and the external system through the standard API interface. Through the trial operation, the all-staff micro business mode has achieved practical results, which can provide an exploration for the innovation and transformation of business of petrochemical sales enterprises.

Key words: petrochemical sales enterprises, all-staff micro business, mode, exploration.



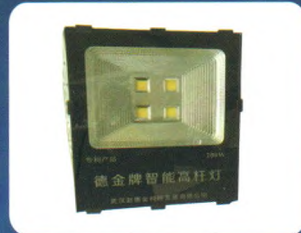
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电话:027-84680292 手机:13871560105

传真:027-84461553 邮编:430050

Email:84871036@163.com

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