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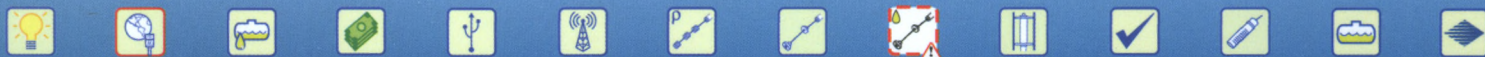
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Contents and Abstracts

STORAGE TECHNOLOGIES

1. Developing Trend and Application Prospect of Double - Layer FRP Tank. Xu Wenzhong, Yin Qiang.

Abstract: The development course, the structure and performance of various types of double - layer tank in gas station are introduced. The research results on oil corrosion and the application status of double - layer tank in North America and Europe are presented. The advantages of FRP tank about the aspects of corrosion resistance, safety and environment protection are described. Based on the upgrading process of oil product quality in China, the double - layer FRP tank is considered to have broad application prospects in China.

Keywords: gas station, corrosion, double - layer FRP tank, application.

4. Mechanism Analysis on External Corrosion of Storage Tank and Pipeline and Countermeasures. Yu Hanghui.

Abstract: Taking the Liandu oil depot in Lishui City as investigating target, the reasons causing external corrosion of oil product tank and pipeline are analyzed. It is found that the external corrosion is caused by the tilt peel of organic coating on the surface. Based on the analysis of reasons causing the tilt peel of coating, the countermeasures including control of construction quality of outside anti - corrosion coating, optimization of structure, application of thermal spray technology to prevent the external corrosion of tank and pipeline are proposed.

Keywords: storage tank, pipeline, external corrosion, reason, countermeasure.

8. Considerations on Design of LPG Spherical Tank. Wang Shuo.

Abstract: In order to assure the safety of LPG spherical tank, combining the characteristics of LPG, the issues to be considered in the design of spherical tank are proposed, especially the issues about design pressure, loading height, material selection, structural design, safety relief device, the maximum allowable working pressure, failure mode of the spherical tank are highlighted.

Keywords: LPG spherical tank, design, issue.

OIL AND GAS PIPELINE

11. Discussion on Cleaning Operation in Running Oil Product Pipeline. Wang Xianzhong.

Abstract: The importance of cleaning operation for oil product pipeline and the cleaning operation methods mainly used in South China oil product pipeline network are introduced. Taking the cleaning operation of Huangpu - Dongguan - Dapeng pipeline as an example, the precautionary measures related to program planning, the key link of pipe cleaning, slop oil disposal and cleaning operation are described, which can provide reference to the cleaning operation of other running oil product pipeline.

Keywords: oil product pipeline, cleaning operation, key link, slop oil disposal

14. Application of Risk Analysis Techniques in Standardization Management of Long - Distance Oil Products Pipeline and Equipment. Chen Xiuli, Zhong Jiayong.

Abstract: In order to provide ideas and methods for risk managers to improve the management of long - distance oil products pipeline and equipment, the Kent pipeline risk assessment method and pipeline risk assessment process were introduced, and taking the southwest oil products pipeline as an example, the application of the Kent pipeline risk assessment method was described. The equipment management method basing on risk detection technology was also introduced.

Keywords: long - distance oil products pipeline, risk analysis, risk assessment.

INFORMATION TECHNOLOGY

18. Application of Equipment Management Information System in SINOPEC Beijing Oil Product Company. Wang Wenlian.

Abstract: The background of establishing equipment management information system (EM System) in SINOPEC Beijing Oil Product Company and the current application status of EM System are introduced. It is proposed that implementation of EM System requires improving application staff quality, establishing normalized training institutions, and strengthening integration of EM System with other information system by which effective integration of resources is achieved.

Keywords: equipment management, information, application.

21. Discussion on Combining Application of Fuel Card and ETC System. Qin Jingyuan.

Abstract: Based on the introduction of fuel card and ETC (Highway Electronic Toll Collection) system, the feasibility of cross - industry application of intelligent IC card in gas stations and highway toll industry is discussed in order to achieve an effective combination of the two systems, and the solving solution is proposed.

Keywords: intelligent IC card, fuel card, highway electronic toll collection (ETC) system, cross - industry application.

24. Analysis on the Application of Electronic Seals Based on Internet of Things in Oil Transportation. Wen Baobo.

Abstract: The application solution of RFID electronic seals based on internet of things in oil transportation is analyzed. The electronic seals technology and its application features, security encryption, key business processes, and the economic and social benefit brought by its application are highlighted. The application trend of electronic seals is compared with traditional physical seal. And views on perfect development of electronic seals are presented.

Keywords: internet of things, RFID, electronic seals, physical seal.

27. Discussion on Improving Competitiveness of Gas Station Convenience Store Using Information Technology. Wang Tiejun.

Abstract: The development course of information technology for non – oil business in SINOPEC is reviewed. The main issues about strengthening information construction, giving full play to the advantages of information technology, and improving the core competitiveness of gas station convenience stores are discussed.

Keywords: SINOPEC, non – oil business, convenience chain store, core competitiveness, information technology.

QUANTITY AND QUALITY MANAGEMENT

31. Discussion on Oxygen Content Analysis of Gasoline Containing Methylal. Wang Shoucheng, Li Nannan, Wang Xiangchong, Wang Fujiang.

Abstract: The qualitative and quantitative analysis on methylal is carried out for suspected motor gasoline sample containing methylal using three kinds of gas chromatography and mid – infrared spectroscopy. The results indicate that methylal are really added to the gasoline samples tested as blending component. The analysis methods used currently for determining oxygen content are compared, which proves that all the methods are not suitable to determine oxygen content for the newly emerging oxygen compounds in gasoline, and oxygen content analysis methods should be perfected.

Keywords: motor gasoline, methylal, oxygen content, analysis method.

SAFETY MANAGEMENT

34. Using PCEC Management Model to Strengthen Safety Supervision of Inspection and Maintenance Operations. Hu Xianglin.

Abstract: According to accident – prone characteristics for the inspection and maintenance operations, the status and shortcomings of current safety supervision model are analyzed, and the application of PCEC management model in all aspects of inspection and maintenance operations is discussed.

Keywords: PCEC management model, inspection and maintenance, safety supervision.

36. Practice and Consideration on Enterprise Safety

Culture Construction. Li Quanyuan, Shi Qi.

Abstract: The experience of SINOPEC Shanghai Oil Product Company on committing safety culture construction is introduced, that is: focusing on quality construction to culture full staff awareness for security responsibility; attaching important to team – building to strengthen professional training; emphasizing on institution building to optimize HSE management system constantly; grasping software routine operation and maintenance to lay a solid material security base, and grasping the concretization of experience to create the long – term mechanism of safety development. And from three aspects of safety concept, vision and behavior, the shortcomings in safety culture construction are analyzed, and the targeted corrective measures are proposed.

Keywords: enterprise safety culture, construction, consideration.

OPERATION MANAGEMENT

39. Consideration and Suggestion on Anti – Counterfeiting and Rights Protection by Oil Sales Enterprise. Du Daolin.

Abstract: According to the status quo of anti – counterfeiting and rights protection by SINOPEC oil sales enterprise, the existing problems are considered from the legal aspects, and the advice for anti – counterfeiting and rights protection under multi – party cooperation of the judicial and administrative departments are proposed.

Keywords: oil sales, anti – counterfeiting and rights protection, legal consideration, recommendations.

41. Problems Existing in Oil Sales Enterprise Staff Training and Countermeasures. Yin Hong.

Abstract: The problems and shortcomings existing in oil sales enterprise training are analyzed, and the methods and recommendations to solve the existing problems and improve training effect are presented.

Keywords: sales enterprise, human resources development, training, measures.