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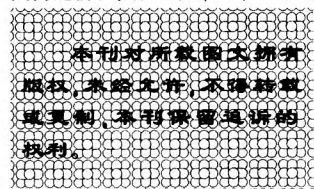
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Contents and Abstracts

STORAGE TECHNOLOGY

1 Analysis and Suggestions on Oil Depot Renovation for Ethanol Gasoline Storage in Oil Sales Enterprises. Cheng Qi.

Abstract: In view of the situation that ethanol gasoline will be widely used in the whole country by 2020 and a large number of storage and transportation facilities need to be renovated in oil sales enterprises, combined with the actual renovation practice of ethanol gasoline storage and transportation facilities in oil depots in recent years, according to the "Code for Design of Oil Depot" (GB50074-2014) and "Design Specification for Tank Farms of Storage and Transportation System in Petrochemical Industry (SH/T3007-2014)", the layout of ethanol gasoline depot, renovation of storage and transportation facilities, management of oil quality, safety and environmental protection were analyzed, and the corresponding suggestions were put forward, which could provide a reference for the renovation of ethanol gasoline depot.

Key words: ethanol gasoline, oil depot, storage and transportation, facilities, renovation, suggestions.

6 Feasibility Study on Increasing Flow Rate in Fuel Nozzle of Gasoline Dispenser. Liu Dong.

Abstract: Aiming at the problem that the flow rate of gasoline nozzle is less than 30L/min, which affects the refueling speed and operation of gas station, by comparing the relevant regulations at home and abroad and analyzing the factors affecting the flow rate of dispenser, it is proposed that the reasonable range of the flow rate in gasoline nozzle of dispenser is 40 - 45L/min. At the same time, the measures to improve the flow rate from the dispenser are put forward: firstly, reducing the pressure loss of the hose by shortening the hose length and reducing the elbow joint; secondly, increasing the pressure of the oil pump; thirdly, reducing the number of nozzles loaded by the oil pump; fourthly, cleaning or replacing the filter device of the dispenser in time; fifthly, appropriately increasing the diameter of the refueling nozzle and hose.

Key words: improvement, dispenser, gasoline nozzle, flow rate, feasibility, discussion.

9 Suggestions on Investigation and Design of Earth - Covered Oil Tanks. Jiang Xunjian, Sun Haijun, Li Xiaopeng, Fan Zongnan.

Abstract: According to the relevant standards and specifications for the design and construction of earth - covered oil tanks, combined with the working experience, in view of the problems that are easily neglected in the design and construction of earth - covered oil tanks, such as the layout of oil tanks, the opening form of tank chambers, the drainage and emergency discharge inside and outside tank chambers, the camouflage of oil tanks, and the setting of oil trap, some suggestions are put forward: firstly, the plane layout of oil tanks and the elevation of tank bottom should be determined reasonably; secondly, the opening of tank chamber should be set in the middle; thirdly, the drainage and emergency discharge facilities should be designed reasonably; fourthly, the surrounding environment should be used reasonably to camouflage the tank; fifthly, the oil trap should be set reasonably.

Key words: earth - covered vertical oil tank, design, construction, suggestion.

OIL AND GAS PIPELINE

12 The Design Scheme of Chongqing - Qijiang Oil Product Pipeline Rerouting Project. Zeng Hongtao, Wang Yi, Zhu Shaodong.

Abstract: In view of the interference problems of four crossings between the third contract section of Chongqing - Guizhou expressway expansion project and the existing Chongqing - Qijiang oil product pipeline, in order to ensure the safety of oil product pipeline and eliminate hidden dangers, according to relevant codes and standards and combining with the actual situation, four specific rerouting design schemes are put forward respectively. At the same time, the requirements on pipeline standard, pipeline anticorrosion and cathodic protection, pipeline pigging and pressure test are described in detail, which can provide a certain guidance and reference role for the oil product pipeline rerouting project.

Key words: oil product, oil pipeline, rerouting, construction, design, scheme.

INFORMATION TECHNOLOGY

16 Construction and Application of Three - Dimensional Visualization System for Equipment Management and Training in Oil Product Pipeline Enterprise. Yang Dong.

Abstract: Aiming at the problems existing in equipment management of long - distance oil product pipeline enterprises with features of many points, long lines and wide areas, such as inconvenience in statistics of key indicators, inefficiency in examination and approval of bills, difficulty in collection and collation, difficulty in preventive management of equipment, lack of effective management of equipment life cycle information and lack of simulation training platform for equipment management, a set of visualized equipment management and training system based on

three - dimensional model is developed. The architecture and functional modules of the system is introduced. Using the system, the whole life cycle management of equipment can be realized, such as statistical analysis of key management indicators, management of point inspection and regular repair, file data management, production material management, training management and so on, which can improve the efficiency of equipment management and achieve better application results.

Key words: oil product, long - distance pipeline, equipment, management, training, system, construction, application.

GREEN ENERGY

21 Current Situation and Prospect of Hydrogen Refueling Station for Fuel Cell Vehicle. Liu Haili.

Abstract: The concept of hydrogen refueling station, hydrogen transmission mode, cost, classification of hydrogen station, storage mode of hydrogen, the main equipment, refueling mode, the present situation of foreign hydrogen station construction, and the present situation of domestic hydrogen station construction and operation are briefly described. The relevant policies and standards for the construction and operation of domestic and foreign hydrogen station are introduced. And the problems needing attention for the construction and operation of hydrogen station are pointed out, providing a reference for the development, construction and operation of hydrogen stations in the future.

Key words: hydrogen station, construction, operation, status quo, prospects, introduction.

QUANTITY AND QUALITY MANAGEMENT

25 Design of On - Line Metering Verification Device for Vehicle - Mounted LNG Dispenser Based on Master Meter Method. Wang Lin.

Abstract: In view of the lack of scientific follow - up measurement and verification methods for LNG dispenser in China, which reduces the measurement accuracy of LNG dispenser and causes measurement risks, an on - line measurement and verification device based on master meter method for LNG dispenser with ultra - low temperature insulation capacity, high precision collecting capacity, high reliability and data analysis capability is designed. The device includes: field instrument layer composed of standard liquid flowmeter and standard gas flowmeter, field control layer composed of programmable controller and flow verification collector, management layer with system monitoring and report generation function. The device uses master meter method, liquid flow calibration, whole machine flow calibration and other methods to realize on - line automatic verification of " one - key start - stop" in the verification process. The detection accuracy of the device can reach 0. 2%, which fills the gaps in the domestic verification business of gas dispenser, and the overall technology has reached the advanced international level. This technology has been applied to the verification of LNG dispensers in Beijing Public Transport Company, showing a good popularization value.

Key words: vehicle - mounted, LNG dispenser, on-line measurement, verification, device, design.

SAFETY MANAGEMENT

30 Thoughts on Several Dispenser Drag - down Accidents in Gas Station. Guo Shouxiang, Xue Long.

Abstract: The courses of four drag - down accidents of dispensers in gas stations is briefly introduced, and it is pointed out that the gas stations strictly implement the responsibility for safe production, relevant rules and regulations as well as operating rules, and the emergency disposal is in place by which has avoided the occurrence of major accidents such as fire and explosion. The unreasonable problems in the installing location of safety valve, the plinths installation of dispenser, and the fixing mode of dispenser and refueling island are also discussed. The corresponding suggestions are put forward as follows: firstly, the clear technical design requirements should be put forward for safety standards of pull - out valves; secondly, the connection between the contractors of civil engineering and dispenser installation should be improved; thirdly, the pull - out valves should be installed between fuel nozzle and hose or in the middle of hose; fourthly, the pull - out valves should be inspected and maintained timely; fifthly, the basic work for installation of dispenser should be perfected.

Key words: gas station, dispenser, drag - down, accident, analysis.

32 Discussion on Construction of Safety Management Informatization in Oil Sales Enterprises. Shi Xinlei.

Abstract: In view of the problems of the " power and responsibility" contradiction in the safety management of oil sales enterprises, lack of effective supervision measures and the scattered management of safety management data, the main idea of the informatization construction of safety management is put forward. Firstly, by using the concept of " Internet + ", the advance warning and advance safety management can be achieved through big data application. Secondly, through on - line guardianship of rules and regulations, timely reminder and guidance, and implementing all - staff duties and responsibilities, the problem of " low - level, old - fault, and bad - habit " can be fundamentally solved. Thirdly, based on Wikipedia's open thinking, mobile internet technology is used to promote all staff to participate in the transformation of safety management through reasonable authorization. Fourthly, by establishing and continuously improving enterprise standards by intelligent comparison with industry standards and international standards, the level of safety management is promoted. The main content and expected effect of safety management informatization construction are pointed out.

Key words: oil sales enterprises, safety management, information technology, construction, discussion.

OPERATION MANAGEMENT

35 Using Platform Thinking to Improve the Marketing Ability of Enterprises. Wang Chao.

Abstract: The severe situation faced by the oil products market environment in recent years is

analyzed, such as the continuous adjustment of relevant national policies, the acceleration of market - oriented process, the oversupply of oil products resources, the fierce market competition, the rapid development of the Internet, the emergence of new marketing modes, and the great challenge to traditional marketing modes. The establishment of a platform with existing resources as center and the core goal to create value for users is put forward to achieve a win - win " platform + N + users " marketing mode through cross - border integration, connecting the third parties, and integrating the resource advantages of all parties. The mode is analyzed, interpreted and explored, which can provide a reference for improving the marketing ability of oil sales enterprises.

Key words: oil products, sales enterprises, marketing mode, innovation, platform, thinking.

39 Research on Performance Appraisal and Salary System of Oil Products Wholesale Team. Liu Yang.

Abstract: According to the concept of performance appraisal and the current development trend of the wholesale business of oil product, the content of performance appraisal and the change of salary system of the wholesale team, i. e. customer manager and sales department director, of oil product were studied. It was pointed out that the original performance appraisal method focused on oil sales and neglected gross profit index appraisal, which resulted in the disadvantage of inconsistent appraisal orientation with the business objectives of enterprises, inability to give full play to the role of appraisal incentives, and difficulty in the implementation of some appraisal indicators. A new performance appraisal system is put forward, which insists on the interaction of quantity and effect, changes the appraisal index to gross profit as the main direction, emphasizes personal performance orientation, widens income gap, and improves the cohesion of sales team. The new system mobilizes the sales enthusiasm of the team with good results achieved.

Key words: oil product, wholesale, team, performance appraisal, salary system, research.

42 Exploration of Brand Development Strategy for Non - Oil Business in Petrochemical Sales Enterprises. Luo Xue.

Abstract: The development process of non - oil business in petrochemical sales enterprises in recent years is briefly described, the concepts and characteristics of service brand and product brand are introduced, the advantages and disadvantages of single brand development strategy and multi - brand development strategy are analyzed, and some suggestions on the development strategy of non - oil business brand in petrochemical sales enterprises are put forward, i. e. differentiating the main and sub - brands, improving service brand meticulously, and building the product brand in depth.

Key words: petrochemical sales enterprises, non - oil business, brand, development, strategy, exploration.

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