节能

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SHEN YANG JIAN GONG

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万方数据

Preparation and reserch on Si-Ni anode material of lithium ion battery

LIU Yun-hai, WU Zhi-xin, JI Chao, et al
(School of Environment and Chemistry Engineering, Shenyang Ligong University, Shenyang 110159, China)

Abstract: Sodium hypophosphite is use as reducing agent, activation solution is use as colloid palladium Nickel plating to Silicon powder surface, get the best results of plating technology through orthogonal experiment. analysis object image and morphology to composite powder. Charge-discharge performance tests the composite powder to use as negative electrode of lithium ion battery. The results showed that the charge and discharge efficiency above 90% to improve the electrochemistry performance of the battery.

Key words: lithium-ion batteries; anode materials; thin films

Application research of special incorporate air conditioner and water heater in the kitchen

XING Jin-cheng
(Jinan petrochemical design institute, Jinan 250100, China)

Abstract: Briefly introducing the composition and working principle of incorporate air conditioner and water heater, in the cooling system of hot water and mode of operation is analyzed, and compared with conventional air conditioning, electric water heater. The results show that energy saving effect of the incorporate air conditioner and water heater is remarkable. The machine is worth popularization and application in new or modified kitchen structures.

Key words: air conditioner; hot water; integrated machine; refrigeration; heating; economy; energy saving

Design and test analysis on a new intelligent temperature control evaporative thermantidote

LIAO Zhen-qi, ZHOU Dong-yi, WANG Quan
(Department of Mechanical and Energy Engineering, Shaoyang University, Shaoyang 422000, China)

Abstract: Maintaining the original internal structure of electric fan, a new type of intelligent temperature control evaporative air cooling fan was designed. A around pipe connected to the ultrasonic atomizer been added behind the fan, the fog is sprayed by atomizer and been suctioned through holes on the pipe, thus reducing the temperature of the air, improve the effect of the cooling fan, can automatically adjust the fan speed according to the indoor temperature at the same time. This fan is made of the electric fan and temperature controller and spray creative by low cost, it has the good economic efficiency, suitable for wide popularization and application.

Key words: temperature control; evaporative; thermantidote; energy conservation

Demonstration of oil-free screw air compressor heat recovery system

CHEN Yi
(Shanghai East Low Carbon System Jntegration Co. Ltd., Shanghai 200031, China)

Abstract: A measure of oil-free screw air compressor heat recovery is introduced. Taking a specific project as an example, analyze the solution design, system components, operation principle, energy savings and simple payback of the heat recovery system. Provide a reference for other oil-free screw air compressor heat recovery retrofit project.

Key words: oil-free screw air compressor; heat recovery; energy saving

Compressed air line freeze analysis in northern

WANG Fu-cai, LIU Bao-hua, GUO Qing-hai
(Liaoning Diaobingshan Coal Gangue Power Generation Iimited Company of Liaoning Province, Diaobingshan 112700, China)

Abstract: Winter moisture content of compressed air as the power generation companies Diaobingshan summer, significantly more than conventional lead pipe freeze anomaly cause analysis, combined with the actual situation at the scene to verify the results, and take effective measures to eradicate the chronic problem of power plant production-stable. The winter safe operation of the compressed air system for cold northern regions have high practical significance.

Key words: air compressors; dryers; air dew point; freezing

Compacted sand filter causes and treatment

ZANG Dian-rong
(Shandong Guangming Heat & Power Co. Ltd., Taian 271221, China)

Abstract: By reason compacted sand filter media in-depth research and analysis to identify the factors that influence media compaction, high alkalinity water hardness is the intrinsic cause compaction of filter backwash strong enough, such as bacteria and algae breeding operations and external environmental conditions and external factors affecting the direct cause of their compaction and develop pickling according to the corresponding factors, changes in backwash mode, impact resistance and other preventive measures to filter sterilization in a good filter condition. Can to mine water, deep well water as high hardness high alkalinity water, sand filtration system with reverse osmosis pretreatment equipment to ensure the safety of its long-running reference.

Key words: sand filters; media compaction; pickling; backwash; sterilization

万方数据

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