

5 结论

(1)传统四立柱式平板硫化机底座采用铸铁材料,底座拉耳处采用翻砂口下置式设计,材料分布不合理,结构设计不妥当,底座拉耳易被拉断。

(2)底座拉耳处采用翻砂口上置式设计,能提高材料利用率,提高抗拉能力和承载能力,有效地避免底座拉耳的断裂。

(3)底座拉耳处翻砂口采用上置式,将翻砂口用马口铁封闭,能有效美化外观。

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Stress Analysis and Structure Improvement of Pull Ring of Four Pillar Plate Vulcanizing Machine

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Abstract: The base of traditional four pillar plate vulcanizing machine was made from cast iron and the pull ring was usually formed under the level of casting gate entry point. Due to the improper distribution of material, the tensile strength of pull ring was low, which resulted in easy fracture of pull ring. In this study, the stress distribution of pull ring was analyzed through conventional stress analysis and ANSYS modeling analysis, considering the cases that pull ring position was under and above the level of gate. The analysis results showed that since the tensile strength of the cast iron was much lower than the compression strength, when the pull ring was formed above the level of the gate, the stress distribution of pull ring was improved and the easy fracture was prevented.

Key words: plate vulcanizing machine; base; pull ring; ANSYS analysis; sand-cast gate

一种粉料气力输送槽

中图分类号:TQ330.4+3 文献标志码:D

由芜湖万向新元环保科技有限公司申请的专利(公开号 CN 103612911A, 公开日期 2014-03-05)“一种粉料气力输送槽”,涉及的粉料气力输送槽的粉料腔左上方设有进料口、下方设有过滤板,进料口处设有进料阀门,过滤板下方设有压缩气腔,压缩气腔下方设有压缩空气输送管。通过倾斜状的输送槽,粉料从高处经过进料阀门进入内壁有橡胶内衬的粉料腔,通过底部的压缩空气进行输送。此外,粉料腔内设有填充量传感器,粉料填充量较大时,传感器便会通过进料阀门控制粉料的输送速度,从而保证粉料的顺利输送。装置底端的可伸缩支架可以调节整个装置的倾斜角度,能够根据粉料的性质调整倾斜角度。

(本刊编辑部 赵 敏)

一种绝缘耐油密封垫材料及其制备方法

中图分类号:TQ336.4+2;TQ333.7 文献标志码:D

由铜陵市肆得科技有限责任公司申请的专利(公开号 CN 103613801A, 公开日期 2014-03-05)“一种绝缘耐油密封垫材料及其制备方法”,涉及的密封垫配方为:丁腈橡胶(牌号 N41) 85~90,活性氯型丙烯酸酯橡胶 10~15,沉淀法白炭黑 24~28,炭黑 N330 26~30,海泡石粉 12~15,改性凹凸棒土 10~12,四丁基溴化铵 2~5,氧化镁 3~4,氧化钇 3~4,硅烷偶联剂 KH-550 1~2,防老剂 OD 1~2,防老剂 ODA 1~2,2-巯基苯并咪唑 1~2,促进剂 DM 3~4。该配方添加了改性凹凸棒土,改善了胶料的工艺性能。该发明配方合理,工艺简单,产品具有良好的绝缘以及耐油性能。

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