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一种伸缩磁棒式车载污染土壤重金属磁场原位净化装置

其他名称 The present invention relates to a telescopic magnetic bar type vehicle-mounted contaminated soil heavy metal magnetic field in-situ purification equipment

专利类型 发明

专利号 2022107996200



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申请日期 2022-07-06



2023-06-27

专利状态 授权

授权国家 中国

摘要 本发明涉及一种伸缩磁棒式车载污染土壤重金属磁场原位净化装置，其中磁粒提取机构包括安装架和伸缩磁棒组件，安装架呈闭环状，且伸缩磁棒组件沿着安装架闭环周向运动，安装架下端和升降调节装置下端均铰接于农机架体上，且安装架上端通过升降调节装置支撑，磁粒回收组件设于安装架上端下方；伸缩磁棒组件包括透磁套管、磁棒和弹簧，两个磁棒由透磁套管两端插入并通过弹簧连接，安装架上设有侧挡板和释放挡板，磁棒通过侧挡板限位压入透磁套管中，磁棒在释放挡板的释放段内伸出、压缩段内缩回。本发明利用伸缩磁棒组件回转实现磁粒连续提取，并利用弹簧和释放挡板配合实现磁棒伸缩，进而实现磁粒回收，结构简单，能耗低，且满足田间连续作业要求。

其他摘要 The present invention relates to a telescopic magnetic bar type vehicle-mounted contaminated soil heavy metal magnetic field in-situ purification equipment. Wherein the magnetic particle extraction mechanism comprises a mounting frame and a telescopic magnetic bar assembly, the mounting frame is in a closed loop shape, and the telescopic magnetic bar assembly moves along the closed loop circumferential direction of the mounting frame, the lower end of the mounting frame and the lower end of the lifting adjustment device are hinged to the agricultural machine frame body, and the upper end of the mounting frame is supported by the lifting adjustment device, and the magnetic particle recovery assembly is arranged below the upper end of the mounting frame; The telescopic magnetic rod assembly comprises a permeable sleeve, magnetic rods and a spring, wherein the two magnetic rods are inserted from two ends of the permeable sleeve and are connected through the spring; a side baffle and a release baffle are arranged on the mounting frame; the magnetic rods are pressed into the permeable sleeve through the limiting of the side baffle; and the magnetic rods extend out of a release section of the release baffle and retract into a compression section of the release baffle. According to the invention, the continuous extraction of magnetic particles is realized by utilizing the rotation of the telescopic magnetic bar assembly, and the telescopic of the magnetic bar is realized by utilizing the matching of the spring and the release baffle plate, so that the recovery of the magnetic particles is realized; and the device has the advantages of simple structure and low energy consumption, and meets the requirements of field continuous operation.

申请号 2022107996200

公开(公告)号 CN115069753B

IPC分类号 B09C1/00 ; B03C1/02 ; B08B3/04 ; F26B9/06 ; F26B21/00 ; A01B49/04

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CPC分类号 B09C1/00 ; B03C1/02 ; B08B3/04 ; F26B9/066 ; F26B21/001 ; F26B21/003 ; A01B49/04 ; B09C2101/00 ; Y02P10/20

文献类型 [专利](#)

条目标识符 <http://ir.yic.ac.cn/handle/133337/33554>

专题 中国科学院海岸带环境过程与生态修复重点实验室_海岸带环境过程实验室

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推荐引用方式 刘国明,骆永明,李远,等. 一种伸缩磁棒式车载污染土壤重金属磁场原位净化装置. 2022107996200[P]. 2023-06-27.
GB/T 7714

条目包含的文件

条目无相关文件。

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