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[54] ANTI-VIBRATION DEVICE 抗振裝置

[57] The present application provides an anti-vibration device, which includes: a support frame, the supporting frame including a base and a slide rail arranged on the base; an operating handle; a linkage mechanism, with one end connected with the base and with the other end connected with the operating handle, the linkage mechanism being provided with slide blocks which is slidably connected with the slide rail; horizontal elastic members configured to provide nonlinear damping; and vertical elastic members configured to remove stiffness. The anti-vibration device provided by the present application can reduce a vibration level transmitted to an operating person to a minimum degree, thereby achieving a better anti-vibration protection and effectively solve the engineering problem troubling the operating persons for a long-term. The anti-vibration device of the present application adopts a passive vibration control method, which, compared with the positive vibration control method in the prior art, has simple assembly, good stability, greatly saved production cost, and low maintenance cost.

本實用新型提供了一種抗振裝置,包括支撑架,所述支撑架包括底座、設於所述底座上的滑軌:操作手柄:連杆機構,所述連杆機構的一端與所述底座連接,所述連杆機構的另一端與所述操作手柄連接,所述連杆機構上設有滑塊,所述滑塊與所述滑軌滑動連接;用於提供非線性阻尼的水平彈性件,用於消除負剛度的垂直彈性件。本實用新型提供的抗振裝置可以將傳遞到操作者身體上的振動水平減少到最低限度,達到較佳的抗振保護,有效解決了一個長期困擾操作者的工程難題;且本實用新型的抗振裝置採用被動振動控制的方式,相對於現有技術的主動振動控制方式來說,本實用新型的抗振裝置裝配簡單,穩定性好,可大幅度節約生產成本,且維護成本低。

