

ABSTRACT - A DESIGN OF ELECTRIC ICU HOSPITAL BED WITH ORIGINAL INCLINATION DISPLAYS

A new design of an electric hospital bed with a column structure including head-and-foot panels and side guards (folded under the frame) made of HDPE with extrusion blow molding method. The side guards are reinforced, triple split, move along with the bed segments, and fold independently to provide patient's body protection against being entangled between side guards.

The bed model is designated for therapies in ICU wards and first-class rooms. The bed's electrical functions can be controlled using a wired remote control (by patient), two-way membrane controls on the side guards (by patient or hospital staff) and a nursing panel (staff) on a 10-inch touch screen built into the foot panel. The bed has Trendelenburg and anti-Trendelenburg position settings, as well as a CPR function that allows the bed to be flat-levelled by a touch of a button.

HDPE plastic parts are key elements of this design, which, in addition to being more resistant to damage during use and being easier to keep clean, give the product an original look, differentiating it from products available on the market. This gives the company a better chance to win the domestic market as well as foreign markets.

The bed is also equipped with original and innovatively designed inclination indicator panels, which are mounted on the side guards. The indicator panel consists of four plastic components: a main housing, a clock face, a pendulum wheel and a clear acrylic shield. The indicator, which is visible regardless of the position of the side guard, shows the tilt angles of the backrest segment (in the range of 0° - 90°) with 30° and 60° angles specially marked, as well as the angle of the bed frame for position therapy.

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