

CASE STUDY

Crate redesign for medical device streamlines delivery process & saves 50% in packaging costs



Challenge

- The crate was poorly designed, extremely cumbersome, and unnecessarily expensive at \$700 per crate
- Difficult, if not downright unsafe, to get the sensitive and heavy piece of equipment loaded into the crate for transport.
- Two or three men were needed to manually lift the heavy device off the scissor lift and onto a wooden cart with wheels.
- The size of the crate meant the equipment had to be unpacked outside as it couldn't fit through standard doorways.

Solution

- Re-designed crate base with castor wheels to sit on top of the production scissor lift. This meant the device could now be built on the crate base while safely secured to the scissor lift.
- The new design also allowed one person to easily roll the device off the scissor lift when lowered.
- Crate size altered to fit through standard doorways so the equipment could be unloaded at point of use (not outside).
- Crate cap re-designed with appropriate markings and window for serial number checks.
- Cap was secured with tool-free fasteners to further simplify the packing and unpacking process.

RESULTS



50% Saving
in crate manufacturing costs



Dramatically reduced time to unpack
and setup the new piece of equipment.



Improved safety
and a reduction in the number of people needed to move the crate (from two to one).