



## Ultra-low Headroom Hoist Solution for Nuclear Power Plant

The project engineer thought that he had an impossible task. When contacting virtually every hoist manufacturer he could find, this project engineer at an East Coast (U.S.) nuclear power plant was repeatedly told that his application requirements were “unworkable”.

The project required a 16-ton capacity hoist and trolley that could be operated manually by one person. The trolley had to operate on a circular track having a curve radius of only 132”. The minimum headroom could not exceed 14-1/4”.



The unit also had to be designed to permit installation from directly under the monorail beam, with the minimum amount of disassembly and reassembly required for installation.

Numerous other requirements existed including a high minimum design factor, compliance with applicable standards (ASME B30.16 in addition to specifications set forth by the project engineer at the site), and training and support prior to commissioning of the hoist.

[Chester Hoist](#) tackled the project and succeeded above and beyond the expectations and requirements.



Two-wheel trolleys articulate circular monorail beam



Special Construction allows the hook to be raised virtually to the bottom of the monorail beam. The resulting headroom dimension is only **14”**

Columbus McKinnon is a leading worldwide designer, manufacturer, and marketer of material handling systems and services, which efficiently and ergonomically move, lift, position, or secure material. Key products include hoists, actuators, cranes, and lifting and rigging tools. With a rich 135-year tradition, the company is focused on commercial and industrial applications that require the safety and quality provided by its superior design and know-how.