C-MOVE (Ceiling Mounted Omnidirectional VEhicle)

Reference: TD-BE-1022

esa TECHNOLOGY BROKER

SPACE FOR BUSINESS

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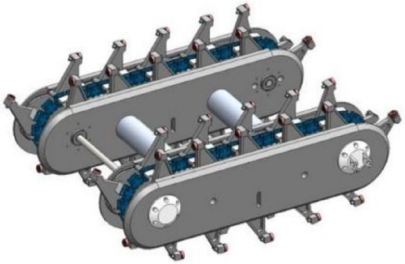
TECH CARD

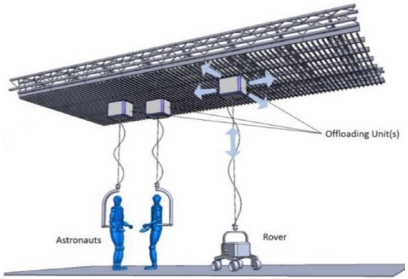
TECHNOLOGY DESCRIPTION

C-MOVE is a novel vehicle-based overhead locomotion system invented to enhance the capabilities of astronaut training facilities. The system enables the simulation of reduced gravity for multiple users simultaneously, while ensuring maximum mobility. C-MOVE overcomes inherent limitations of traditional crane and conveyor systems, and features a high level of modularity and extensibility. The technology can be transferred to any industry that makes use of loads tethered to the ceiling (gantries). This includes large-scale manufacturing, material flow and automation, distribution centres and warehouses, aerospace manufacturing and maintenance, etc.



INNOVATIVE ASPECTS

- Flexible and omnidirectional movement or handling process
- Once installed, traditional gantry cranes are generally not easily reconfigured or adapted to different tasks or workflows. They lack the ability to move freely around a facility or job site. In contrast to this, C-MOVE offers a modular and versatile solution.
- The assembly of a gantry crane can take several days to weeks, depending on the crane's size and complexity. With C-MOVE, a rapid installation is possible for several applications.



TECHNOLOGY READINESS (in space application)

TRL 4 (2024)

COUNTRY OF ORIGIN

Belgium

LATEST UPDATE

04/2024

TAGS #overhead #omnidirectional #gantry #crane #ceiling #modular

APPLICATION AREAS

Aviation | Construction & Civil Engineering | Energy | Infrastructure & Smart Cities | Mechanical Enginering | Media – Culture & Sport | Transport & Logistics