



**Reducing Hospital Labor and
Improving Patient Satisfaction
Through 24/7 Automated
Transportation of Medical Supplies**

국립암센터
NATIONAL CANCER CENTER





EXECUTIVE SUMMARY

THIRA ROBOTICS recently partnered with the National Cancer Center, a medical center that performs fundamental and clinical research on cancer and provides care services for cancer patients. The National Cancer Center was in need of automation that could safely transport medical supplies and materials in their multi-level facilities to assist overloaded workers. THIRA ROBOTICS provided its T600 system to improve productivity among its multi-level operations.

THIRA ROBOTICS enabled 24/7, automated transportation of medical supplies typically transported by human workers. THIRA ROBOTICS AMR can take care of tedious, time-sensitive tasks in medical centers typically completed by staff, thus reducing their heavy workloads. With AMR integrated into medical facilities, understaffed hospitals can enhance overall performance by enabling human workers to focus their daily activities on patient care and increase patient satisfaction.

CHALLENGES: LABOR SHORTAGES DECREASE PERFORMANCE LEVELS OF MEDICAL FACILITIES

The main challenge that this medical facility faced was the need for additional support with time-consuming tasks. Due to worker shortages and staffing issues, most medical facilities have seen a decrease in performance levels and patient satisfaction. Medical facilities needed to find automated solutions to reduce staff workloads to improve efficiency and patient satisfaction.

Another challenge this manufacturer has had in integrating automation is having a multi-floor facility. The only way for AMR to access this floor is by elevator. The elevator required transfer-automation for night operation to carry heavy loads upstairs. Thus, THIRA ROBOTICS' unique AMR offering was a perfect solution for this challenge.





THE SOLUTION: THIRA ROBOTICS T600

The T600 was the perfect solution for the National Cancer Center's facility needs, as it could ride the elevators without having to modify them and accommodated a perfect payload to meet the requirements to replace human workers for heavy lifting.

The T600 system can easily travel in the multi-level facility, which was a major requirement for the National Cancer Center. Limited existing high-quality AMR options for multilevel transportation in the robotics industry uniquely qualified THIRA ROBOTICS systems as the perfect solution.

In addition, the T600 system had a payload capacity of 600 kg (1,322.77 lbs), which met and exceeded the expectations and requirements of the National Cancer Center's facility needs.



THE RESULTS

T600 now works around the clock in the medical facility and human workers no longer need to move heavy materials using the elevator—the AMR does it for them.

The T600 saved staff from having to lift heavy materials, reducing risk of injuries and improving worker satisfaction.

The T600 automation solution also increased productivity and improved time management in the National Cancer Center facility by running 24/7 around the clock.

The National Cancer Center was satisfied with the results because the solution helped address two of their main goals: reducing the demands on staff to do grunt work of lifting and moving supplies and increasing patient satisfaction.

ABOUT THE NATIONAL CANCER CENTER



The National Cancer Center is an organization actively assisting the Korean government in formulating and executing cancer-related national policies. Its functions include cancer registration and statistics, early detection, hospice, and palliative care, collection and dissemination of cancer-related information and education, and cancer risk appraisal and prevention.

The National Cancer Center conducts research projects, consisting of both NCC's Institutional R&D Program and contract-based R&D projects from the industry. Its research activities are categorized into two areas: building a national infrastructure for cancer research and improving cancer prevention and control activities in Korea.

ABOUT THIRA ROBOTICS



THIRA ROBOTICS is the AMR subsidiary of global smart factory solution leader THiRA UTech. It manufactures autonomous mobile robots (AMR) and creates complete automation solutions to meet unmet market needs.

THIRA's AMR technology is employee-friendly and optimized to navigate harsh conditions, including damaged floors, changing facility surroundings, slopes, narrow spaces, spills, and elevators.

All THIRA ROBOTICS systems are built in-house, enabling high-quality and unique customization needs for international leaders across multiple industries, including Samsung, the National Cancer Center, LG CNS, and AmorePacific.

ABOUT T600

T600 is designed to hold up to 600 kg (1,322.77 lbs). Lifts, conveyors, and storage can sit on top of the unit for optimal productivity to meet specific facility needs. T600 decreases the chance of workplace accidents thanks to its advanced obstacle detection and avoidance capabilities, such as 360° visual protection. It operates steadily regardless of floor conditions, including liquids, oils, bumps, cracks, multi-levels, etc., and can be customized to any facility's needs.

CONTACT US



To learn more about our AMR solutions, contact sales@thirarobotics.com