

Mitsui Chemical and hibot adopt robotics technology for inspection of industrial infrastructure

(Tokyo, July 12) Hibot Corp., an innovative robotics start-up pioneering infrastructure maintenance applications, started conducting remote inspection of industrial facilities in Japan with its Float Arm robot. The first inspection in Japan was conducted at the Mitsui Chemical plant in Osaka, and involved the inspection of pipes in structures that are difficult to reach, located about 20m above the ground.

Float Arm is a multi-link manipulator designed especially for inspection and maintenance of infrastructure in narrow, hazardous or confined environments. Due to its internal weight-compensation mechanism, Float Arm is modular, lighter and more compact than other similar devices, and is able to navigate through obstacles in cluttered environments.



Float Arm during inspection mission at the Mitsui Chemical plant in Osaka

In its first inspection mission at the Mitsui Chemical plant in Osaka, Float Arm was assembled on the tip of an aerial platform and brought to the higher sections of a tower. Float Arm acquired 3D scans of the environment and used them to move through gaps between pipes and the structure to obtain images of the pipes in areas that are extremely difficult to inspect without scaffolding in place.

"It is essential to maintain the integrity of equipment for safe and stable plant operations, and we will continue to actively introduce new technologies to ensure that inspections are performed flawlessly," said Naoto Yasaka, General Manager of Production & Technology Division at Mitsui Chemical.

The start of remote inspections with Float Arm in Japan follows trial inspection missions performed in Europe earlier this year, as well as the pre-release of HiBox, a platform developed by hibot to interface with its robots, acquire and manage data collected from inspection sites, post-process information from sensors and generate inspection reports.

Michele Guarnieri, CEO of hibot, summarized the recent developments, "Mitsui Chemical is bravely leading the path to innovate inspection and maintenance of industrial infrastructure in Japan. The first inspection with Float Arm, performed at their Osaka plant, shows clearly that time and costs can be greatly reduced by avoiding scaffolding, and that Float Arm can acquire images that are much more detailed than the standard ground-based inspection methods".



About hibot

Established in 2004, hibot is a robotics start-up originating from within the Tokyo Institute of Technology, committed to realizing a safer and more sustainable world by creating new trends in infrastructure inspection and maintenance. Hibot develops and utilizes AI-powered remotely controlled robots that allow human beings to be removed from dirty, dangerous or demanding working environments. Hibot's robots have been applied in search and rescue missions, and have been used during decommissioning work at Japan's Fukushima No. 1 nuclear power plant. CEO: Michele Guarnieri.

For more information, see <http://www.hibot.co.jp>

Contact:

Takeyuki Iijima, Takuya Takenokuchi

Tel: +81 (0)3 5791 7526

e-mail: press@hibot.co.jp