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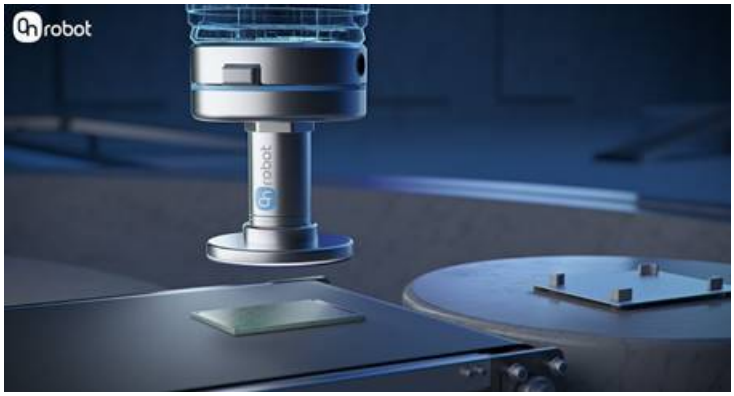
ASIA EDITION

OnRobot Expands Innovative Gecko Gripper Family

20 February 2020 | News | By Hithaishi CB

Gecko SP gripper offers no-mark automation for flat, shiny, and perforated workpieces with no electricity or air supply required



OnRobot, a global leader in robotic end-of-arm tooling (EoAT), has launched a compact, single-pad version of its innovative Gecko no-mark adhesive gripper for a wider application of its services at healthcare and medical packaging industries. The new Gecko Single Pad (SP) gripper brings the same capability to new automation applications with small footprints and lower payload.

OnRobot product range features a wide assortment of end-of-arm tooling, including electric grippers, force/torque sensors, a vacuum gripper, the award-winning Gecko Gripper, and tool changers. This new combination of offerings from OnRobot makes it quicker and simpler to automate tasks such as packaging, quality control, materials handling, machine tending, packaging, assembly, and surface finishing.

The Gecko SP is available in three sizes; SP1, SP3 and SP5 named after the gripper's payload in kilos, featuring ability to lift a wide range of flat, smooth, shiny or perforated surfaces. Because the technology doesn't mark even high-shine surfaces, it eliminates the need for a cleaning step in manufacturing processes, saving time and improving output. And like its larger sibling, the Gecko SP can grip even perforated workpieces such as printed circuit boards, aluminium mesh or head gaskets.

The award-winning Gecko gripper technology uses millions of micro-scaled fibrillar stalks that adhere to a surface using powerful van der Waals forces — the same way that geckos climb. The technology requires no compressed air or external power, saving costs and maintenance, and can be implemented quickly and easily through OnRobot's One-System Solution platform with little or no programming on any major collaborative or light industrial robot arm for greater production flexibility.

"Our unique Gecko technology automates processes that no other gripper can accomplish, and now it's available in a compact, flexible format that offers our customers even more options," said Enrico Krog Iversen, CEO of OnRobot. "This is a true plug-and-play gripper that fulfils our promise of a full range of easy, cost-effective, flexible robotic tooling that lets customers focus on their application rather than the robot."

Gecko SP Features

- Compact, lightweight, and flexible

- Available for 1kg, 3kg, 5kg payloads
- No wires or air supply needed at all
- Little or no programming required
- No-mark gripping for shiny workpieces without subsequent cleaning
- Powerful gripping for perforated workpieces

EoAT Grasps Increasing Demand

From 2017 to 2018, the annual installations of collaborative robots (cobots), robots designed to perform tasks in the same workspace as people, grew by 23 per cent with almost 14,000 units installed in 2018 according to the International Federation of Robotics (IFR).

IFR concluded that drivers for this adoption include more intelligent components or EoAT such as smart grippers. As cobot sales continue to rise, the number of installed units will likely double in approximately three years, creating an unprecedented EoAT market opportunity. This will also prompt EoAT use beyond traditional sectors; namely automotive and electronics, and into a variety of industries, notably food and beverage, healthcare and retail.

James Taylor, General Manager, APAC at OnRobot, said: “The new Gecko SP gripper is a great addition to OnRobot’s expanding product portfolio, which is poised to capture a significant share of the rapidly growing global EoAT market”.

“This trend is similar in Southeast Asia as the region’s industrial automation and process control market is expected to grow at a CAGR of 7.8 per cent from 2019 to 2025, reaching USD 4.97 billion by 2025. This growth is supported by government initiatives, growing adoption from manufacturing and the advent of Industry 4.0,” he added.

Singapore commanded the largest share of the region’s industrial automation & process control market in 2019, followed by Vietnam and Thailand. This was attributed to the country’s high per capita income in the region with the manufacturing industry as a major contributor.