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OnRobot releases powerful electric vacuum gripper for palletizing applications

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OnRobot's VGP20 electric vacuum gripper provides a powerful and versatile solution for challenging palletising scenarios in the healthcare industry, pharmaceuticals, and food & beverage industries



Singapore's OnRobot's new VGP20 gripper introduces the world's most-powerful electric vacuum gripper. Compatible with all leading robot brands, the gripper can handle payloads of 20kg (44.09lbs), making it a great fit for a wide range of applications in the healthcare, pharmaceuticals, and food & beverage industries.

"The VGP20 combines power, intelligence and ease-of-use that competes with expensive, complex pneumatic grippers. It is a cost-effective, easy-to-deploy vacuum gripper that can pick up bulky, heavy-duty payloads while being intelligent enough to handle a wide range of items, including those with irregular shapes and porous surfaces," says Enrico Krog Iversen, CEO at OnRobot.

End-of-line operations such as palletising are labour-intensive and costly. Researchers estimate that, on average, labour costs account for 65% of warehouse facility operating budgets, dwarfing the costs associated with utilities, taxes, distribution and rent combined. On this basis alone, automation is a compelling proposition for companies of all sizes. According to researchers, adoption of automated palletising solutions in the food and beverage sector is estimated to have increased at a CAGR of more than 13% since 2017 and is set to reach USD390 million by 2022.

While traditional pneumatic grippers require compressed air to operate, the VGP20 is all-electric and ready to go out of the box, enabling companies to save up to 90% on operating and maintenance costs compared to traditional pneumatic gripper

deployments. The VGP20 provides unlimited cup and airflow customisation and multichannel functionality, allowing it to be deployed on multiple items of different shapes and sizes.

Additionally, the VGP20 gripper's built-in intelligence, combined with its easy-to-use software, provides precise air flow control functionality that is beyond the capabilities of traditional pneumatic grippers. This functionality allows users to vary the type of grip used in different applications, such as the soft grip used to handle delicate items to the hard grip required for handling bulky, heavy cardboard boxes with porous surfaces.

OnRobot's VGP20 gripper also provides an option to enable continuous monitoring of the gripper's air flow. If this option is selected, and the vacuum is interrupted for any reason, the robot will come to an immediate halt and an alert pop-up window will be displayed in the gripper software.

"Efficient packaging and palletising performance is crucial to success for manufacturers, e-commerce and logistics companies. However, labour shortages present an ongoing challenge and performing these jobs by hand is both monotonous and unergonomic," says Iversen. "The powerful and versatile VGP20 gripper enables companies to automate these tasks, providing relief to workers while improving overall productivity and quality."