

OnRobot Launches Complete Plug-and-Play Intelligent Screwdriver

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The new feature facilitates Fast, Easy and Flexible Deployment to assist in the robotic application at the Healthcare industry



[OnRobot](#), the maker of tools for collaborative applications, announces the release of its smart, complete-out-of-the-box Screwdriver that allows manufacturers to automate a wide range of assembly processes quickly, easily, and flexibly. This provides welcome relief for manufacturers who are eager to automate repetitive, unergonomic, and often inconsistent manual screwdriving processes, but who struggle to integrate and program typical piecemeal screwdriving systems.

Programming the OnRobot Screwdriver is as easy as entering the appropriate screw length and torque value into the user interface that is integrated into the teach pendant of any leading robot. With precise torque control and embedded axis, the OnRobot Screwdriver automatically calculates the speed and force required for consistent, accurate screwdriving. The Screwdriver can detect incorrect screw length, which can help improve overall quality and reduce scrap. With the Screwdriver's unique "z-axis," screws are retracted inside the tool and driven automatically once the robot arm moves into position, which reduces robot arm movement and additional programming. Screws up to 35mm long are retracted completely inside the Screwdriver when moving until the screwdriving process is safely initiated, enhancing its collaborative capabilities.

The Screwdriver can handle a wide range of screw sizes and lengths, from 1.6mm to 6mm diameter, and up to 50mm long. With its simple programming and easily exchangeable bit system, the Screwdriver can be quickly changed over to a different screw size, length or product line in minutes, which minimizes downtime and improves productivity.

"This is one of our most advanced products to date," says CEO of OnRobot, Enrico Krog Iversen. "We've designed an automated screwdriving tool that simplifies a highly complex process for our users, making it cost-effective and easy for manufacturers to see fast results in terms of higher uptime, output, consistency and quality."

The Screwdriver includes the following robust and intuitive features:

- Embedded axis for accuracy and easy programming
- Precise torque control from 0.15Nm to 5Nm
- Screw sizes from 1.6mm to 6mm diameter, and up to 50mm long
- Available screw feeders

- ESD safe for electronics assembly
- Mounting via OnRobot Quick Changer

The Screwdriver is compatible with OnRobot's [award-winning](#) One System Solution, a platform that provides a [unified mechanical and electrical interface](#) between leading robot arms and any OnRobot product. The One System Solution has been newly expanded to include integration with robots from ABB Robotics and Hanwha Precision Machinery. Users of those robots can now also take advantage of the unified mechanical and electrical interface of any OnRobot product, for easier integration and faster ROI.