

>3D Vision for inspecting food jars

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News Release Apex Automation and Robotics uses 3D Vision to inspect food jars A popped lid in a food jar is a serious problem. It indicates that the seal is broken and vacuum inside the jar was breached and can result in spoilage of the product. It is therefore crucial to detect these jars before they leave production and make their way to the supermarket shelf. Inspecting the lid on every jar by an operator is not very reliable since it is not always easy to distinguish between a popped lid and a good one especially when the production rate is high. In a recent system for a leading food manufacturer, Apex Automation and Robotics used 3D vision technology to automatically inspect the lids in sauce jars and bottles. As each jar moves on a conveyor under the 3D camera, the profile of the lid is scanned, and algorithms are used to measure and detect popped lids. The system is able to handle a wide range of jars and bottles of different heights without the need of any mechanical adjustments. Also, using a laser line makes this solution robust and not sensitive to ambient light or lid colour. This turnkey system inspects every single jar at a rate exceeding 100 jars/min and faulty jars are tracked down and rejected off the line. Apex Automation and Robotics is committed to using the latest available technologies and deliver smart automation systems that help their customers reduce labour cost and improve product quality.