



INCREASING MANUFACTURING PRODUCTIVITY

SIDOOR door control significantly reduces downtimes

For metalworking companies, a high level of machine tool availability is extremely important. No company can afford production stoppages or delays due to machine door malfunctions. With an **automatic, easy-to-install door control system based upon SIDOOR**, the CNC AutoDoor solution reduces customer downtimes by **98%**, as compared to pneumatic door openers, while increasing occupational safety.

CNC AutoDoor designed a practical and robust housing for SIDOOR The control module is supplied ready-to-use with universal mounting brackets and a cable package so that it can be quickly and easily mounted on any CNC machine. The door opener is controlled by the I/O signals inside the machine or by push-buttons that can be fitted as an option. **Clients are very enthusiastic about the ease-of-use and safety, as well as the professional look and integrity of this solution.** “An unrivaled achievement,” says Brad Woody, Upper Midwest Division President at Ellison Technologies. “The CNC AutoDoor solution has been a great success for us in retrofitting and after-sales activities. It’s a top-of-the-line industrial product that I can definitely recommend.”

98% less downtime Engineer Bart van Halteren: “Our clients cannot afford machine downtimes due to malfunctioning doors—pneumatic door openers regularly have issues. Our solution with SIDOOR works very reliably. As a result, customers have been able to reduce their machine downtimes by 98% compared to pneumatic door openers—and they are happy that they can purchase a complete door automation solution from a single supplier. The one-stop shopping formula saves time and money, partly because we can supply almost every model from stock.”

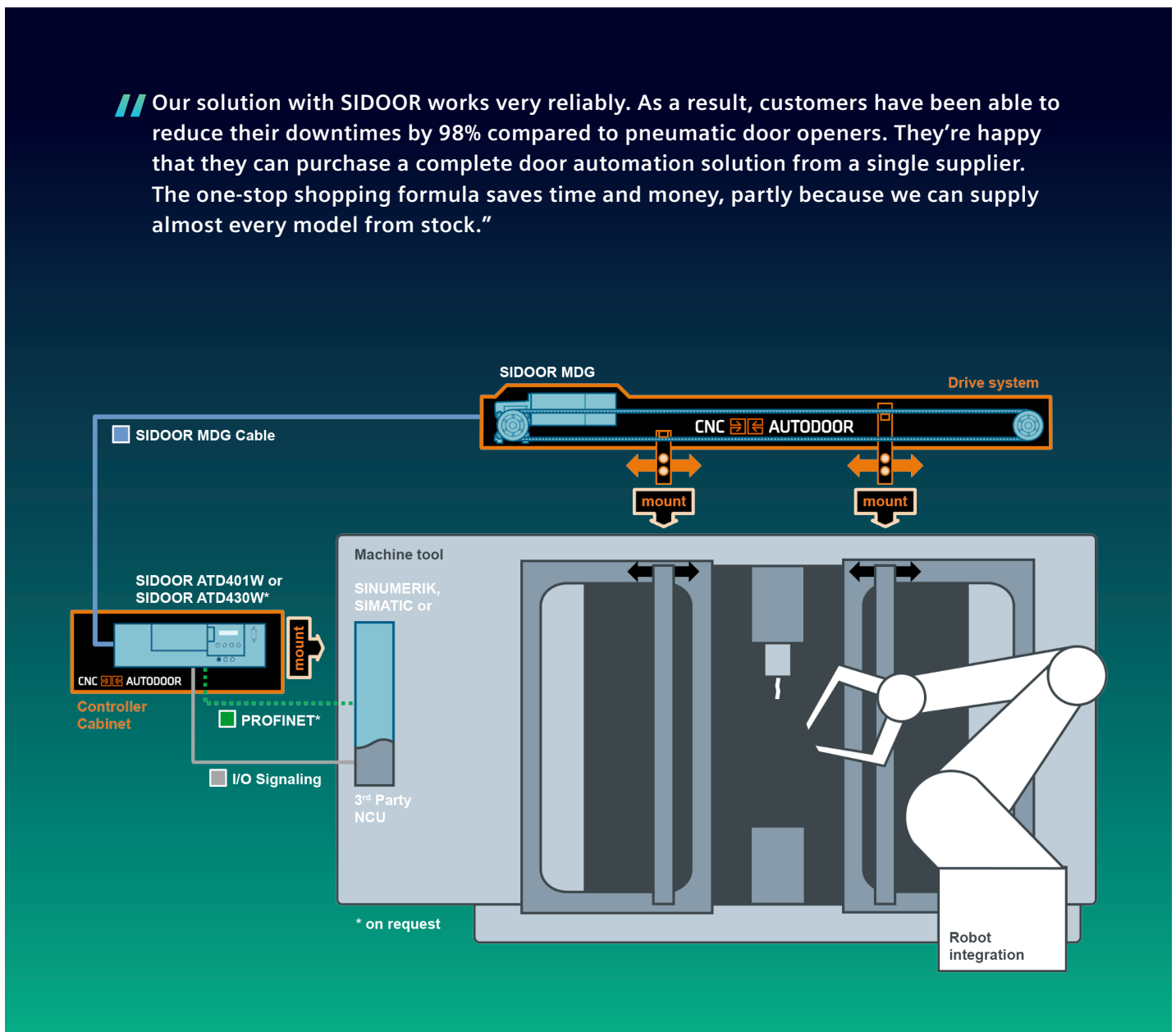
SIEMENS

Efficient and less burdensome

The solution also provides an answer to the increasing scarcity of machine tool operators. As a result, operators face higher workloads. **With this new solution, an automatic door opener contributes to safe and ergonomic working conditions.**

Van Halteren: "No company wants its employees to work in sub-optimal conditions. Machine tool operators who open and close heavy doors for eight hours a day are unnecessarily strained. By automating this task, there is less risk of physical complaints and more time for other tasks. This benefits their health and the company's manufacturing efficiency. In today's market, metalworking companies must ensure 24/7 production, with a single operator controlling multiple machines. Every minute gained adds to the value of a CNC machine output."

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Schematic diagram of mounting the CNC AutoDoor components onto a CNC machine

Reliability

HALTER CNC Automation, a supplier of loading robots for CNC machines, used to purchase solutions for the opening and closing of machine doors from a different supplier. Robert van Soest, Product Specialist at HALTER CNC Automation: “We received little support and the delivery times were long. As a result, it wasn’t always possible to include the door opener in the delivery of our loading robot. In addition, the quality was insufficient. Since 2017, we have been buying automatic door openers from the Dutch manufacturer CNC AutoDoor. They developed a plug-and-play system based upon SIDOOR. We only use “A-brands”, so by choosing CNC AutoDoor with SIDOOR, we can offer a reliable product.”

Continuous optimization

CNC AutoDoor designed the SIDOOR housing with a digital CAD system, into which the 3D files of the Siemens components are read. Many product improvements have already been implemented since 2017. The number of components making up the housing has been reduced, which simplifies assembly.

Van Halteren: “We continue to optimize and we will also broaden our portfolio. Our current solutions are one to two meters long and suitable for single and double doors with a moveable weight of up to 180 and 400 kg (396–881 lbs.). In time, we will also be supplying systems up to four meters long. Such systems are suitable for doors with a moveable weight of up to 700 kg (1,545 lbs.).”



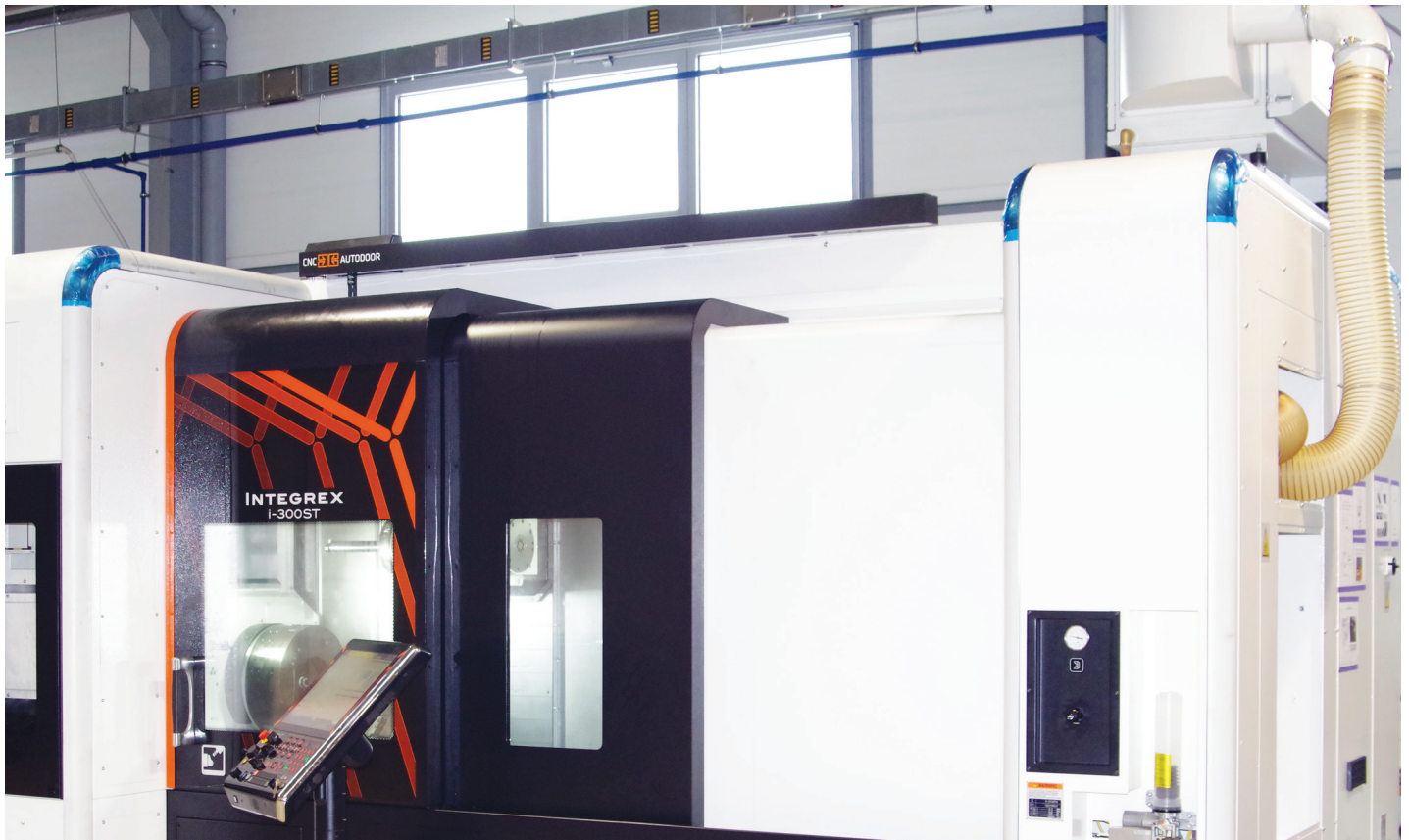
CNC AutoDoor drive rail

Preventive maintenance

SIDOOR can communicate via PROFINET with a higher-level PLC for the entire automation system. This makes it possible to collect data and perform predictive maintenance. Industrial doors are critical components for safety and continuity, just like elevator doors or platform screen doors. Preventive maintenance increases availability and ensures flawless operation. The PROFINET connection to the higher-level automation system is especially interesting for manufacturers that have large machines with wide doors.

Industrial top-notch product

The SIDOOR door control system consists of a drive, motor and a controller. It has been used successfully in various environments for over 30 years. Elevator manufacturers use SIDOOR for the automatic opening and closing of elevator doors. An application in the mobility sector is the control of platform screen doors at train stations in cities such as London and Beijing, preventing travelers from falling on the tracks. **SIDOOR can be commissioned quickly.** There is no need to program it, instead it is only parameterized as needed. Safety is integrated in the controller. The system is safety-certified, automatically detects resistance, and thereby prevents unsafe situations. (Machinery Directive EN ISO 14120, EN ISO 13849-1 Performance Level D-Cat. 2)



Example of the space-saving installation of the CNC AutoDoor drive rail

New markets Since 2017, CNC AutoDoor has sold increasingly higher numbers of door control systems each year. **The product helps meet the growing demand for retrofitting and the single automation of CNC machines to enable robot loading. This is a very suitable solution for quickly increasing a machine tool's productivity to a higher level and ensuring safety.** No additional door sensors are needed. After installing the system onto the door and pressing the self-learning button, the door is ready to use.

Van Halteren: "Our main markets are the United States, the United Kingdom, Germany, Scandinavia and Eastern Europe. In addition to machine tool builders such as Mazak, Okuma, Hwacheon, Haas and many others, we also supply directly to CNC machine end-users, the automotive industry and industrial production. Now that we have a very good grasp of the application for CNC machines, we are also keeping our eyes open for entirely new markets which require the automatic opening and closing of doors."



Engineer Bart van Halteren (CNC AutoDoor)

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