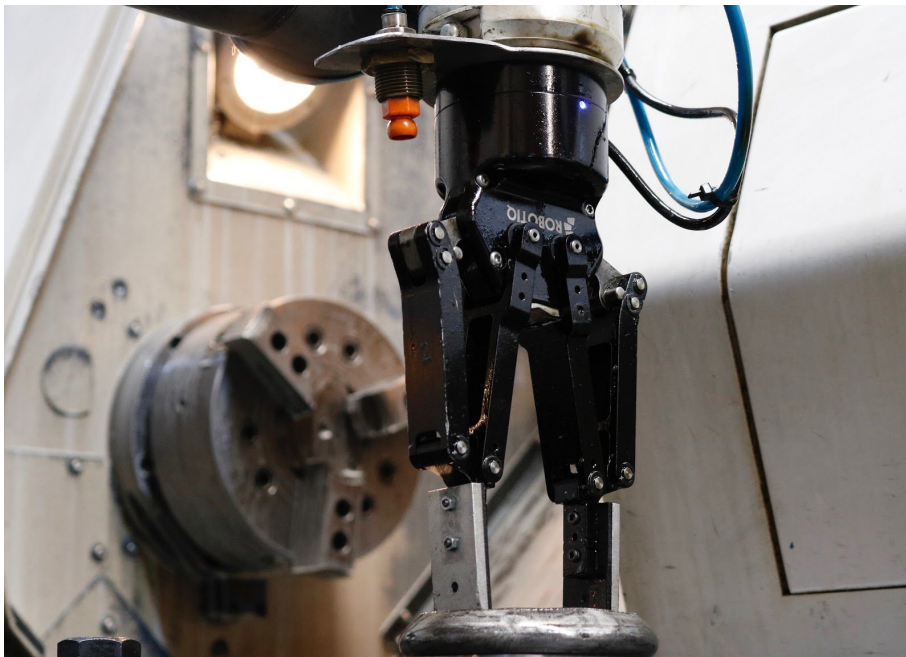




## Portas Euro-Rapid Doubles Machine Tending Capacity with 2F-140 Adaptive Grippers

*Portas Euro-Rapid manufactures fittings and couplings to join pipes together. Mechanical flaws slowed machine operations, causing a lot of downtime with limited personnel available to fix issues. Integrating Robotiq [2F-140 Adaptive Grippers](#) and Universal Robots UR10 to each machine allowed each employee to take care of three machines. Now their machines run full-time and production capacity has doubled.*



In the city of Figueres—a major hub of Catalonia, Spain—one company has been supplying parts for Europe’s agricultural and industrial projects since 1962. Joaquim Portas is the second-generation president of Portas Euro-Rapid. And like his father before him, Joaquim has had to adapt to today’s market to meet each customer’s requirements and deliver big orders with short lead times.

### START PRODUCTION FASTER

*To keep the machines running, each worker had to work full-time loading and unloading parts from the machines.*

With 25 employees on the payroll and no time to spare, Portas Euro-Rapid must make the most of its resources. One thing that kept limiting their potential was CNC machine downtime. To keep the machines running, each worker had to work full-time loading and unloading parts from the machines.

## Designing a flexible robotic cell

“We had a blockage in terms of downtime and something had to change,” Joaquim recalled. “We installed robots so that each worker could tend two machines. Unfortunately this didn’t do much for our efficiency, since we almost always had at least one stopped machine.”

Still looking for improvements, Joaquim was at a trade show one day when he stumbled upon Universal Robots. He noticed the simplicity of the robot, and thought “It seemed perfect for what we wanted to do.”



*“With Robotiq 2F-140 Adaptive Grippers, we could program different positions and tailor them perfectly for each part of the process.”*

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Joaquim contacted [Vicosystems](#), a local distributor. Enric Vila, CTO at Vicosystems, explained “We knew from the first glance that our client’s process was really well-suited to collaborative robots.”

But a cobot alone wouldn’t solve everything. To deal with so many orders of different sizes, shapes, and weight, Joaquim needed something that could quickly and easily adapt to each part. [Vicosystems](#) CEO Juan José Coronado said “Robotiq [2F-140 Adaptive Grippers](#) were very appropriate for the variety of pieces they had to manipulate. We could program different positions and tailor them perfectly for each part of the process.”

[Vicosystems](#) customized the Robotiq [2F-140 Adaptive Grippers](#) so they could grip each type of part with a precise external or internal grip, depending on the part’s geometric shape.

[Vicosystems](#) also designed a robotic cell that would handle the whole machining process, including part feeding. First a worker palletizes parts on a table. Then, the robot picks up a part, inserts it in the machine, and waits until the machining process is over. Finally, the robot unloads the machine. It places the part either in the finished parts bin or on a jug used to turn the part over for another machining process.



## Integrating in one week

Once the new robotic cell design was complete, the application was ready to be integrated into Portas’ facilities. “We programmed the robot with the newest machines in a few days,” said Enric Vila. “It took a bit more time with the older machine, but everything was operational within a week.”

*“Half our staff is over 40 years old, and everyone found it easy to learn to work with Robotiq and Universal Robots.”*

### START PRODUCTION FASTER

This integration was huge success for Joaquim Portas. “We’d installed a robot before, so we knew what it was like. This time it was more of an improvement than pure discovery.” Upon reflection, he said, “The whole integration went very smoothly. Half our staff is over 40 years old, and everyone found it easy to learn to work with Robotiq and Universal Robots.”

[Vicosystems](#) handled employee training. “Some employees knew a little about the robot,” said Joaquim. “But most employees didn’t know anything about it. They spent a few hours learning how to program, how to make the grippers work, and how the machines had to work. Everything turned out well.”



*“We managed to have one worker operating three machines at the same time, and we’ve doubled our production capacity.”*

## START PRODUCTION FASTER



Machine operator Xavi Hernández's concerns about robots were quickly resolved as he went through the training. "At first I was a little worried because I'm used to working with a machine that works alone. When I thought about collaborating with an unknown machine, I thought I should at least keep some distance between us. But the training was at the user level. It wasn't complicated: you just go step by step and soon you've learned the whole thing pretty quickly."

## Operating twice as fast

Portas Euro-Rapid saw the effects of collaborative robot deployment immediately: Joaquim said "We managed to have one worker operating three machines at the same time, and we've doubled our production capacity."

*"We manufacture many more parts a day and we can deliver much faster."*

Adding collaborative robots was just the start of major improvements. According to Joaquim, "We couldn't even cope with the demand before. Now, with the same machines, we've managed to stay up to date and serve our customers much better. We manufacture many more parts a day and we can deliver much faster."

Now that this first collaborative robotics project is in full operation, Portas Euro-Rapid plans to deploy more robots to pick and place parts in pressing machines. From one workstation to the next, future areas for improvement will be identified with a single goal in mind: to maximize machine efficiency while fulfilling human potential.

Design your robotic cell

### START PRODUCTION FASTER

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## About Robotiq

Robotiq's mission is to free human hands from repetitive tasks. Manufacturers struggle to put robots to work in their factory because it's still too costly and too complicated. Our tools and know-how simplify collaborative robot applications, so factories can start production faster. Robotiq works with a global network of connected robot experts supporting their local manufacturers.

## Let's Keep in Touch

For any questions regarding robotics and automated handling or if you want to learn more about the benefits of using flexible electric handling tools, [contact us](#). And join us on social media!



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