

Cobot boosts production by 15% at Topcustom

Topcustom srl, an Italian producer of custom-made bathroom sinks, has recently transformed part of its operations by deploying a collaborative robot (cobot) from OMRON. The new cobot is being used to automate all the finishing operations of Topcustom's products made from Ocritech. This is a light material that is easy to work, guarantees perfect hygiene and has excellent resistance to UV rays.

The company needed the cobot for the precision milling of its sinks. This includes the removal of acrylic glue residues (from 1.5 mm to a maximum of 3 mm). The glue is used to connect the thermoformed basin of the sink to its top. OMRON's TM12 robot has a reach of 1300 mm and operates on two sides of a very large working area. It eliminates all rough edges (burrs) and residues of the acrylic glue with maximum precision and minimum human intervention.

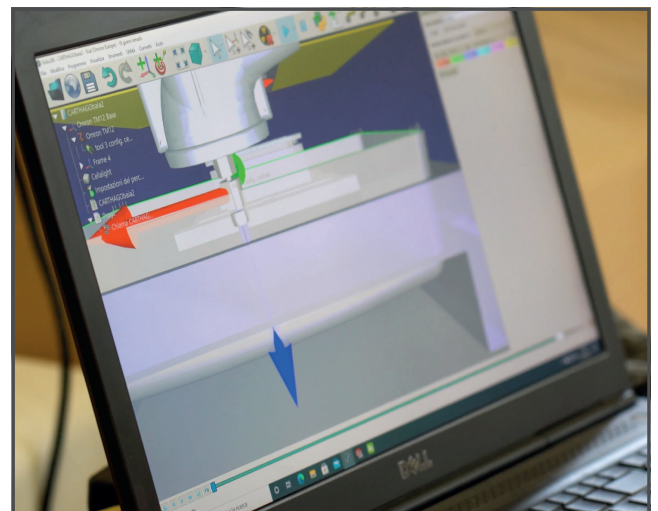
The path that guides the robot's movements is determined by a three-dimensional model of the sink, generated from

the final customer's drawing. This is because the model is able to import all the data and the calculations of the path program from the CAD / CAM so that there is a reliable initial basis for handling. This can then be refined to compensate for any variation in tolerances. Employee safety is guaranteed by special safety barriers equipped with scanners. These communicate the presence of personnel to the cobot so that it can stop moving whenever necessary.

As a result of introducing the cobot, Topcustom has increased its production by 15%, and is now producing more than 800 sinks per week, of different types and sizes. The whole process - from the initial order to the delivery of the finished product - can be managed in two weeks, with a level of precision and repeatability that isn't possible with manual labour. This introduction to the world of Industry 4.0 has also enabled Topcustom to take advantage of the integration of future production data, by creating a link between the product codes and the associated processing programs.



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About Topcustom srl

Topcustom srl is situated in central Italy, and bases its success on the entrepreneurial tradition of the Le Marche region. Topcustom International was formed in 2018, in partnership with Nicos International Spa, which is responsible for marketing the products in Italy and abroad. Its strengths lie in understanding market needs and developing innovative products with the use of Ocritech®, the company's acrylic material. This has unique characteristics, which has allowed Topcustom to respond to the many customisation needs typical of this market, which is always looking for innovative and bespoke solutions, adaptability and speed of execution. Another strength of the company is its ability to respond to specific needs, carrying out projects in close collaboration with the customer's design offices. The ten-year experience of its production and technical departments enables every proposal, from the request to the finished product, to be completed in a maximum of three weeks. Each product, after passing through the industrial chain, is finished by hand. This ensures that each piece meets the required specifications and is of the right quality for the next stage of processing, up to packaging. Industry but with the human touch. www.topcustominternational.it/en

About OMRON Corporation

OMRON Corporation is a global leader in the field of automation based on its core technology of 'Sensing & Control + Think'. OMRON's business fields cover a broad spectrum, ranging from industrial automation and electronic components to automotive electronic components, social infrastructure systems, healthcare, and environmental solutions. Established in 1933, OMRON has over 30,000 employees worldwide, working to provide products and services in 120 countries and regions. In the field of industrial automation, OMRON supports manufacturing innovation by providing advanced automation technologies and products, as well as through extensive customer support, in order to help create a better society. For more information, visit OMRON's website at: industrial.omron.eu