

A large, white, classical-style statue of a figure, possibly a deity or a person in a dynamic pose, is being machined by a robotic arm. The arm is holding a high-speed mill and is cutting into the statue's back. Coolant is spraying from the machine, creating a mist. The machine is housed in a dark, enclosed metal frame.

Reduce placement errors with accurate part setting using RCS P-series robot probes



Milling that requires precision



Reduced programming time



Background:

Ronchini Milling (RM) Technologies, founded in Italy in 1985, drew on its expertise in CNC machine development to create the automated RoboCut milling robot cell. The milling cell is specifically designed to produce statues, stage sets, bas-reliefs, and other artistic objects.



Challenge:

RM's primary challenge was accurately determining the part's position relative to the robot. They needed a solution to minimise robot errors and enable seamless offline programming, bridging the gap between the digital CAD environment and physical reality.



Solution:

By milling their own reference holes, RM can use a Renishaw probe to perform alignments, precisely locating each part relative to the robot. Paired with in-process recovery routines, this approach boosts accuracy and drastically reduces errors, ensuring every part meets specifications.

“ Renishaw’s solution has streamlined our processes, reduced set-up times, and improved precision and repeatability.

Ronchini Milling Technologies (Italy)

