

Ars Automation

Application notes

Flexible automation for spirometry filter assembly: how to handle transparent and complex geometry parts



Industry

The medical industry requires meticulous precision, high quality standards, and flexible production capabilities to remain competitive and compliant with regulatory requirements. Manufacturers in this field increasingly rely on advanced industrial automation solutions to achieve accurate, efficient, and scalable assembly processes—especially when handling delicate and complex components.

Handled Parts

A leading manufacturer of respiratory diagnostic equipment, chose to implement a semi-automatic assembly solution specifically designed for its products. The main challenge was the precise handling and positioning of spirometry filters. Due to their size, transparency, and specific geometry, these components tend to jam and are difficult to handle with traditional feeding systems.

Moreover, these products require gentle handling to prevent damage and misalignment, making conventional feeding solutions unsuitable.

