

ARTEREX

CASE STUDY- Drug Transfer Systems



Medical Condition/Clinical Need: This customer approached Arterex Medical seeking a contract manufacturer to assume the responsibility of building their product by utilizing their automated equipment. Their previous contract manufacturer had limited capability to operate the equipment efficiently, resulting in output well below the demand rate. Arterex understood that a team focused on automated assembly was required to produce a much higher yield to meet customer demand.

The Challenge: The previous contract manufacturer had struggled to produce the required output. In order to ensure success, Arterex hired an automation engineer to specifically address machine up time, which was the limiting factor on product output. To gain an immediate understanding of how the equipment operated, their engineering team arrived on site and participated in the breakdown of the equipment in preparation for shipment to its Tijuana facility. Under the direction of the automation engineer, the equipment was successfully installed and areas for improvement were determined.

The Design/Manufacturing Solution: Prior to the delivery of the automation equipment, Arterex hired two additional manufacturing engineers to manage the process validations. These validation efforts included redefining inefficient process windows to improve process capability and machine uptime. As an example, the automated ultrasonic welding process parameters were adjusted to increase output to a nearly 100% yield. The automation equipment transfer included Needle insertion with camera inspection, automated adhesive dispensing and UV curing, and a pick-and-place robot with camera inspection.

Results: The expertise and knowledge applied by the personnel involved successfully completed a complex transfer of automation equipment within eight weeks. This successful transfer resulted in a much higher yield, enabling Arterex to deliver the customer's required output across all shifts. The customer's expectations were far exceeded, resulting in a letter from the customer's president conveying his compliments on this achievement and his accolades given to the staff involved.