

[Stepper Motor for Automated Retail Vending Machines](#) – Case Study



Overview: ISL was introduced to a company who specialized in manufacturing state of the art Automated Retail Vending Machines. They needed a stepper motor with an enough torque to dispense a wide variety of products. They were previously using an off-the-shelf stepper motor that was jamming up due to insufficient torque while trying to dispense heavier items.

Challenge: They needed ISL to offer a stepper motor with more torque and still be able to fit into the given physical area. The customer requested that the stepper motor had a torque value of at least 5.8 kg-cm in order to dispense products with varying weights.

ISL was asked to deliver the goods directly to their manufacturing facility in Asia. This was also a price sensitive component.

Solution: ISL came up with a stepper motor solution with a 6.0 kg-cm torque value. It was slightly larger than the incumbent motor, but it fit within the customers' physical parameters. When ISL's stepper motors were installed into the vending machines, all of the items were dispensed flawlessly, even the heaviest ones. We added the customer's desired JST connector as well so our stepper motor is a complete "plug and play" component.

ISL manufactures and releases these stepper motors directly from our factory to the customers manufacturing facility in Asia. We ship against a blanket PO so the customer is able to benefit from higher quantity price breaks and a JIT inventory model.