

Solutions@Mecmesin

Screw Torque of Pump Dispensers

Specification

Pfeiffer, based in Germany, are a leading manufacturer of atomisers and dosing systems for the pharmaceutical and cosmetics industries. The company required a torque test unit to measure the application and release torque of their pump products. In particular, they wanted to define the correct level of screw torque required to seal the pump dispenser to the container. Incorrect settings for torque application on the production line would result in poor performance of the pump dispenser and leakage of the contents. Having used Mecmesin force test equipment in the past, Pfeiffer contacted Mecmesin with this new application.

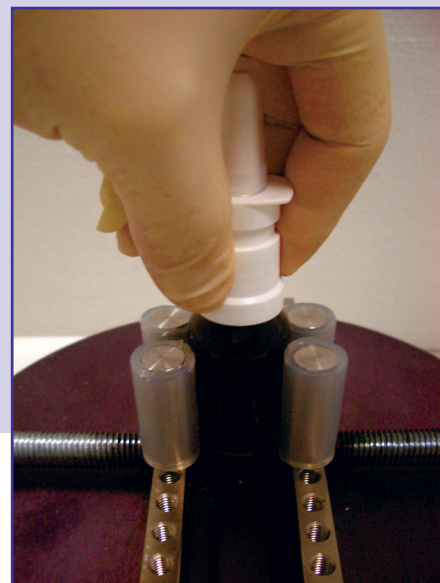


Tornado digital torque tester

Solution

Mecmesin provided a Tornado manual torque test instrument capable of measuring clockwise and counter-clockwise torque movement. To perform the test, the bottle container is securely positioned between the four gripping pegs. The pump dispenser is screwed onto the bottle using between 0.8-0.85N.m of torque. The seal tightness of the pump dispenser is then checked and the application torque determined.

To measure the removal torque, the device is set for counter-clockwise measurement and the pump dispenser unscrewed from the bottle.



Manual torque application performed on the pump dispenser

System

- Tornado Mk 1 (now superseded by the Tornado Mk2)

Testimonial

“We perform a variety of tests on our pump products. One of which is to evaluate their release torque. In order to precisely apply torque to screw and unscrew the pumps, we use Mecmesin equipment. These instruments prove their value to us through their ease-of-use and accuracy.”

Christoph Szymiczek, Manager Technical Service, Consumer Health Care Division, Aptar Pharma



Ing. Erich Pfeiffer GmbH is a member of Aptar Group

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