

# **CASE STUDY**



# MEETING SEALING STANDARDS— AND A FAST-APPROACHING LAUNCH DATE.

# **BACKGROUND**

Using low-frequency waves to painlessly kill bacteria and stimulate cell growth, MIST Ultrasound Therapy is transforming wound treatment—and medical device companies are rushing to get MIST products on the market to meet increasing demand. One of these companies approached PGC to resolve a design issue on their new MIST device, to prepare for a successful—and timely—product launch.

# **CHALLENGE**

As the scheduled launch date loomed, our customer was dealing with a serious cracking issue on the plastic enclosure of their MIST device. When the four screws connecting the base and cover were tightened, the base would crack along the plastic seams. The problem seemed to lie with the form-in-place silicone gasket used to seal the cover and base. It didn't have enough flex to accommodate the tightening screws.

#### PGC engineers were challenged to:

- > Develop a new gasket that would resolve the cracking problem.
- > Manufacture the new part in time for customer testing and the fast-approaching product launch date.

#### MIST Ultrasound Set Design





#### **INDUSTRY:**

Medical

# **APPLICATION:**

MIST Wound Therapy

#### **PRODUCT:**

Gaskets

# SOLUTION

To replace the problematic silicone gasket, PGC developed a custom die-cut, closed-cell polyurethane gasket with adhesive backing. This new, softer gasket resolved the cracking issue, met the customer's sealing requirements, and passed their rigorous pressure tests.

Since the new gasket was thinner and more delicate than the old one, PGC engineers wanted to ensure it survived shipping and installation. They tailored the manufacturing process so that the center "scrap" material stays with each part, for shipping

stability. PGC also provided fixture design recommendations, to help improve gasket placement on the small flange area and to lower labor costs.

### **RESULT**

PGC fixed the design flaw with a cost-effective, pressure-tested new gasket, in plenty of time for the launch. The efficiency of the process enabled the customer to stick to their scheduled rollout date, and introduce their MIST Ultrasound Therapy device with confidence.

If you would like more technical information on this case study, or have questions you'd like to discuss with one of our engineers, contact us at: sales@pgc-solutions.com or call (952) 942-6711.

