

FlexiForce® : Providing Tactile Force Feedback in Palpation Training Device

Benefits of FlexiForce

- Ultra-thin sensor construction and flexibility means minimal interference/disturbance to normal action
- Accurate response gives your customers and end users confidence in the performance of your product
- Knowledgeable/experienced technical staff help you develop the most effective, economical sensor based on your specific requirements.

Industries:

- Athletic Equipment Manufacturers
- Consumer Product Manufacturers
- Medical
- Military
- Educational
- Government Agencies



MammaCare® is the recognized medical and scientific standard for clinical breast examination efficiency. Developed with the support of the National Cancer Institute, this training platform is used in the US and Europe to teach health professionals to perform effective breast palpation. *MammaCare's* overall goal is to reduce the incidence of missed palpable breast cancers, which are frequently not seen on imaging.

The Challenge: Improving Current Sensor Sensitivities and Reducing Manufacturing Costs

When *MammaCare* needed a more stable, durable, cost-effective tactile transducer for their PAD (Palpation Proficiency and Assessment Device) system, they turned to Tekscan. The PAD system is comprised of tactually accurate breast models, instrumented with FlexiForce® sensors. The sensors locate and relay over 1000 levels of examination pressure within each square centimeter via a digital signal processor. This ability to quantify human palpation and lesion detection allows *MammaCare* to confidently certify whether clinicians have demonstrated appropriate examination skill. Prior to contacting Tekscan, *MammaCare* had been working with a sensor vendor whose touch pad was not sensitive enough, had too much bleedover to actually see where fingers were placed, and was not sturdy enough.



The Solution

The complete solution included a new sensor pad from Tekscan, and electronics, hardware, firmware, and Window drivers designed and provided by SSI Wireless. The ultra-thin sensor provided by Tekscan contained multiple force sensing points that enabled the system to confirm correct placement of the

fingers, as well as the level of force applied by the fingers. The ideal solution also included no changes to the existing PC application and silicon models, and a full-featured product was delivered that helped keep costs within their budget.

"Work is spectacular. More exceptional than I thought it would be. Sensors work great. They can detect the slightest pressure accurately. It is WAY beyond my expectations."

Mark Goldstein, Ph. D.

Mammacare

MammaCare® is the registered US and EU trademark of the Mammatech Corporation.



standard FlexiForce sensor

Call Today to Find Your Solution!



Rev A_071708