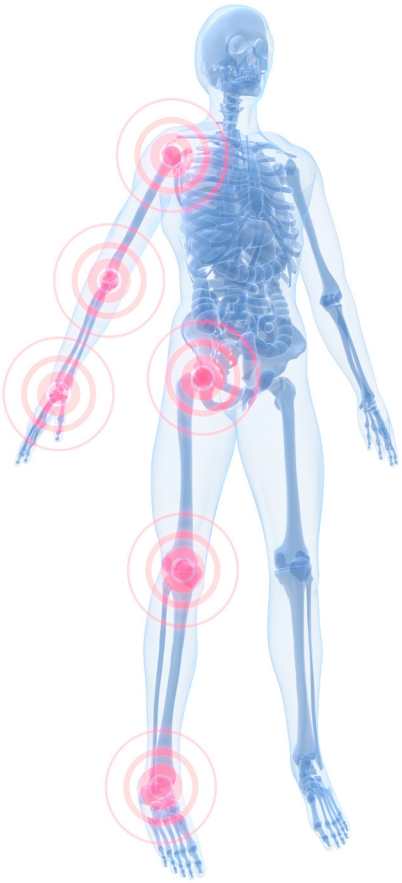
MEDICAL APPLICATIONS



CAPTURING THE SENSE OF TOUCH

PPS



DIAGNOSTIC BIOMECHANICAL & SURGICAL APPLICATIONS

PPS Tactile Sensors for Imaging Solutions in Medical Devices

PPS is a leading tactile pressure sensor company. We have successfully created products and implemented measurement and instrumentation solutions for many applications in the Medical Device field.
Let us help your Company develop that next successful medical product!

- Experts in custom designing tactile sensors for medical applications
- Specialists in integrating hardware with software development
- Experienced with US and international regulatory bodies and practices:
  FDA, CE, UL, CSA, CMDCAS, and CGMP

The following Case Studies illustrate our success in delivering solutions for a wide range of medical applications.

DIAGNOSTICS

DIAGNOSTICS

Gastrointestinal Imaging





CLIENT: **Sierra Scientific Instruments, Inc. [SSI]**
APPLICATION: ***ManoScan***™ system for Esophageal Manometry

- High-resolution catheter with 36 pressure sensing elements
- Measures pressures applied by muscles in the GI tract
- Eclipsed the previous state-of-the-art by nearly a factor of 10
- Established a new field of high-resolution manometry
- All sensor and system hardware developed by PPS
- In 2010, **Given Imaging Ltd** acquired **SSI** for $35 million

Breast Cancer Detection





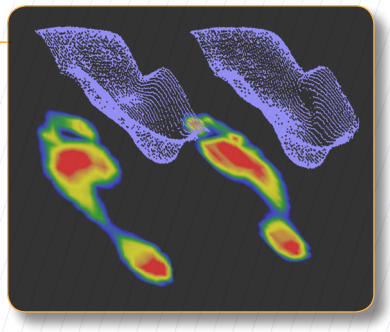
CLIENT: **Medical Tactile, Inc. [MTI]**
APPLICTION: ***SureTouch***™ system for Early Breast Cancer Detection

- 12x16 tactile array sensor is 4x more sensitive than the sense of touch
- Digitally images masses in the breast without discomfort or radiation
- Detects lesions as small as 5 mm under the skin's surface
- Complete turnkey system developed and manufactured by PPS

BIOMECHANICS

BIOMECHANICS

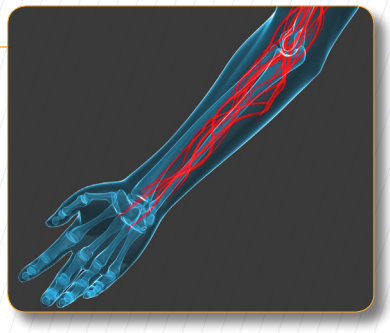
Self-Serve Foot Scanning



CLIENT: **eSoles, LLC**
APPLICATION: ***3D TruCapture® Kiosk*** for Automated Custom Insole Design

- Self-serve kiosk combines tactile sensing and 3D scanning
- Algorithms extract anatomical data and identify appropriate insoles
- Recommends modular components for optimal in-store assembly
- High-resolution data may be used for custom CNC matching
- Complete kiosk system developed and manufactured by PPS

Pulse Waveform Monitoring



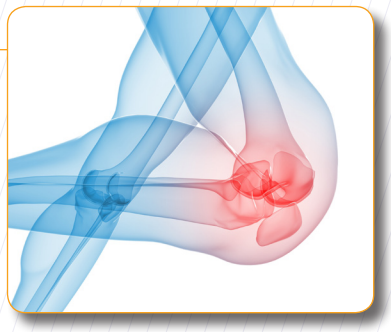
CLIENT: **Confidential**
APPLICATION: Pulse-monitoring Watch with Mobile Connectivity

- Tactile sensor captures pulse waveform without precise positioning
- Low-power design with digital output integrates into watchband
- Mobile broadband module uploads pulse data for analysis
- Sensor design, integration, and manufacturing by PPS

SURGICAL

SURGERY

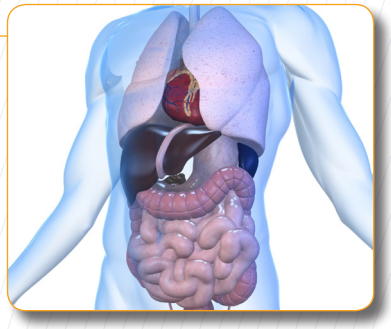
Knee Joint Replacement



CLIENT: **Confidential**
APPLICATION: Knee Replacement Surgery

- Embedded tactile sensor for real-time measurement of ligament balance
- Reduces surgical procedure duration and incidence of follow-up
- Sensor design and manufacturing by PPS

Laparoscopic Palpation



CLIENT: **Confidential**
APPLICATION: Remote Palpation in Laparoscopic Surgery

- "Remote sense of touch" for haptic and visual feedback
- Enables palpation for surgeon without open surgical procedure
- Sensor design and manufacturing by PPS

Join the growing group of companies who have already incorporated PPS sensor technology into their medical applications:

P&G

Johnson & Johnson

Sierra Scientific Instruments

Medtronic

tyco Healthcare

BD

MTI

eSoles™ Custom Footbeds

NIOSH

How Can PPS Help Your Organization?

