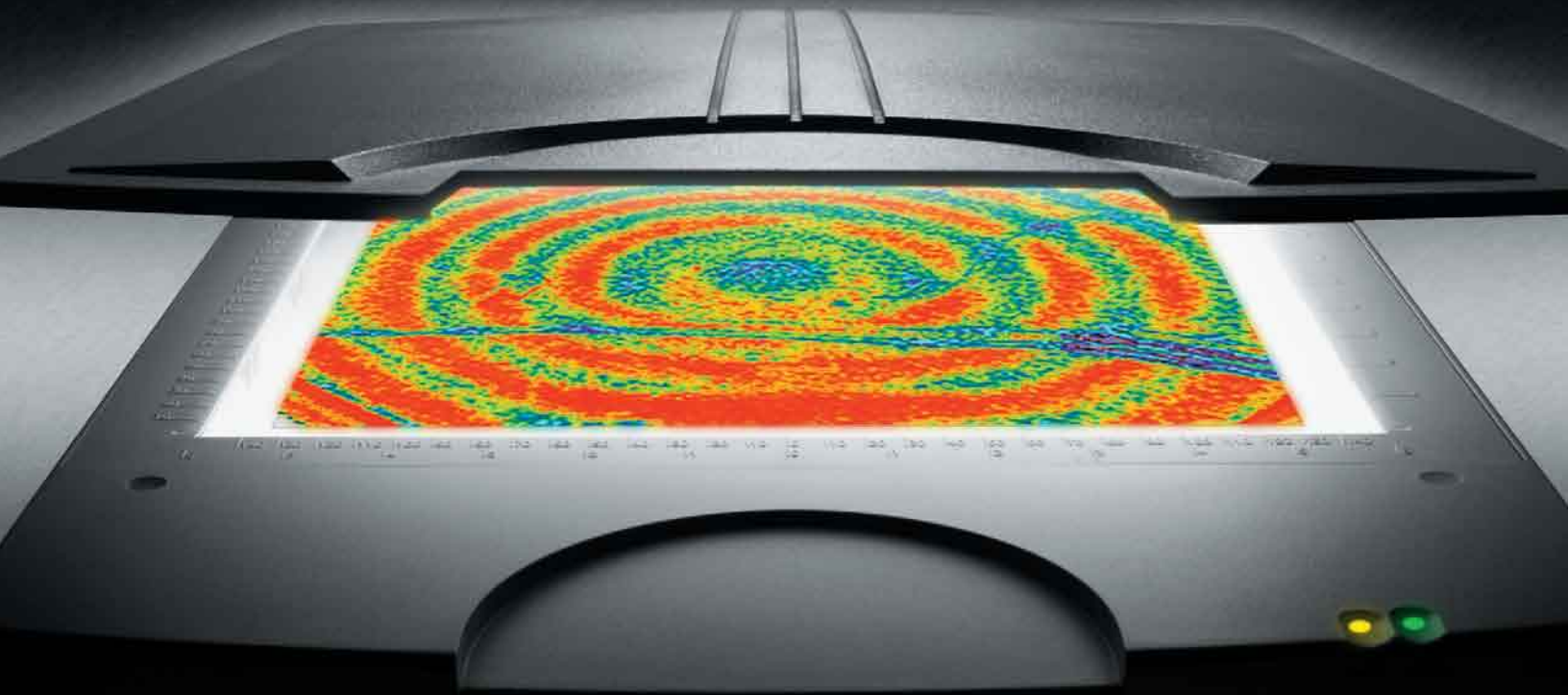
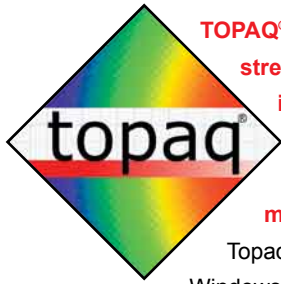


TOPAQ® TACTILE FORCE ANALYSIS SYSTEM

High performance under pressure.



# Imagine a sensor as large



TOPAQ® is a revolutionary stress measurement instrument for analyzing force distribution and magnitude..

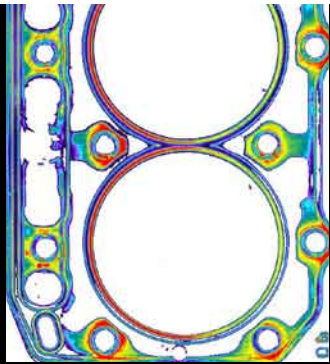
Topaq's user-friendly Windows based software enables the characterization of how force is disbursed in any process or assembly where two surfaces contact or impact. Sensor Products Inc. is a world leader in the design and manufacture of sensor systems exclusively for tactile pressure monitoring and analysis.

## A World Of Uses

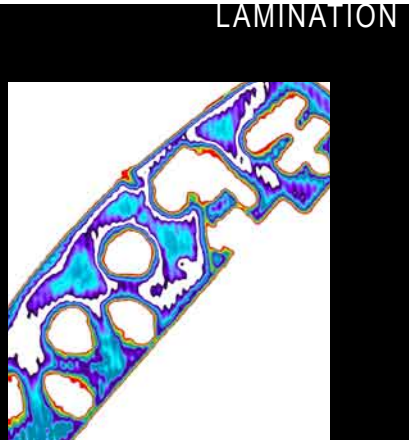
Sensor Products Inc. draws on over ten years of experience to continuously extend the capabilities of tactile pressure management. With the introduction of Topaq®, engineers now have a truly affordable tool of unparalleled power and accuracy. Whether your function is R&D, design or quality assurance, Topaq® improves yield, ensures parallelism, registers the precise characteristics of an impact, validates press uniformity and aids in all types of machine calibration.

**Any situation in your manufacturing process or R&D center where there are two objects or surfaces coming into contact, is an opportunity for Topaq® to perform.**

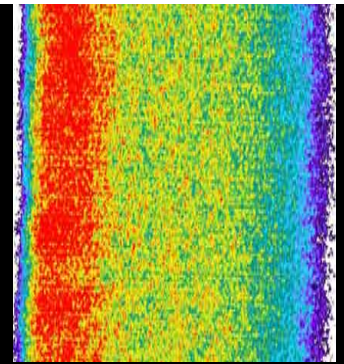
Unlike FEA, Topaq® is a post-process interpretive system that actually collects data from a proprietary tactile transducer.



GASKET



LAMINATION



NIP IMPRESSION

## What exactly is this TOPAQ® system?

Topaq® consists of a specially calibrated densitometric scanner and Windows software. **An essential component of the Topaq® system is the force indicating film commonly known as Pressurex® or Fuji Prescale®.** These sensor films change coloration permanently and instantaneously in response to pressure being applied to them. The Topaq® scanner and software is then used to image and interpret the stress marks on the film. From this, Topaq® renders high resolution, color calibrated images and a wealth of statistical information pertaining to the analyzed film.

## Powerfully simple to use

While Topaq® is equipped with an extensive array of features, you can perform a simple analysis in a matter of minutes. The system makes it extremely easy for a new user to extract and utilize important information. Simply scan in your exposed pressure indicating film, key in a few input variables, and Topaq® instantly generates full-color pressure maps and accompanying statistical data. **Evenmore, Topaq® is accurate to within ± 4% — unprecedented in the field of tactile pressure measurement.**

# and as thin as this page

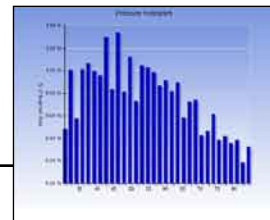
## A better way of looking at pressure

Topaq® enables you to view, rotate and flip your application image in two or three dimensional space while choosing among four different color palettes. Images can be further enhanced by varying the number of colors displayed or by utilizing Topaq's powerful smoothing and thresholding functions. **All in an effort to bring out otherwise unseen detail.**

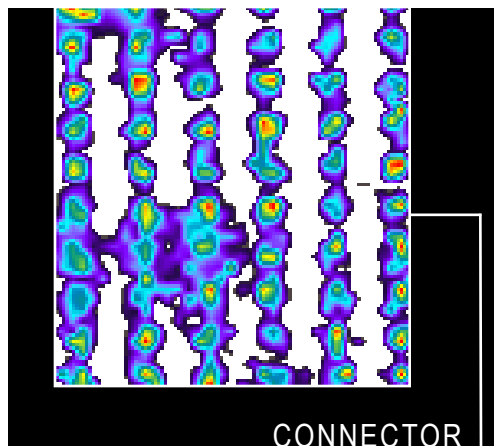
## Statistically speaking nothing beats Topaq®

Topaq® reads and interprets pressure variation by optically analyzing your pressure indicating sensor films and assimilating this data into a series of easy-to-read formats. A single keystroke generates the Histogram, a report that reveals the statistical distribution of pressure levels throughout your image. Of course, as with all Topaq® functions, you can perform a Histogram on a user-defined region of interest.

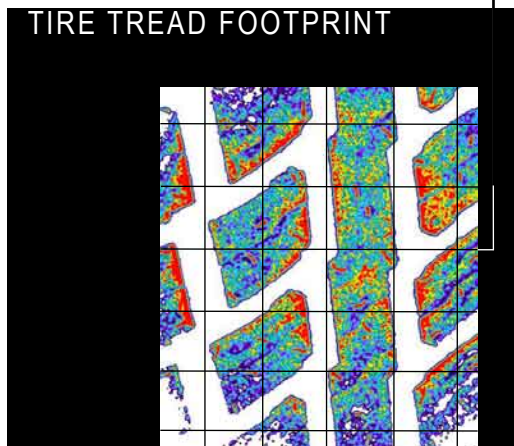
HISTOGRAM



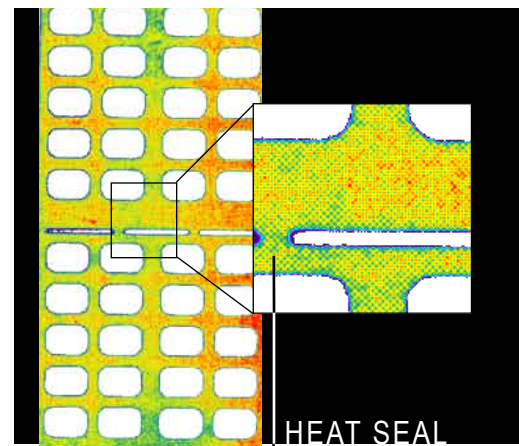
Topaq's Grid-maker function can divide your image into any number of user-defined quadrants. The software then automatically calculates statistical information for each segment.



CONNECTOR



TIRE TREAD FOOTPRINT

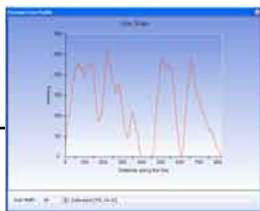


HEAT SEAL

## Information at the touch of a button

One example of Topaq's powerful, single keystroke features is the ability to determine the pressure profile along a user-defined line. This line can be reduced to the width of a pixel, or expanded as wide as the image itself. **This is a useful tool for assessing narrow bands of pressure over unusual or intricate shapes.**

LINE SCAN



STATISTICS



The region statistics function yields total force, average PSI (or metric Kg/cm) and standard deviation for the entire image or a user-defined region.

## Take a closer look

This heat seal impression is magnified 300%, enabling a pixel by pixel analysis of its high pressure areas (shown in red). With Topaq, images can be expanded or reduced from 25% to 400%. Topaq's manual and auto-cropping features allow you to quickly slice off extraneous parts of an image, enabling detailed examination of a specific region of interest.

Topaq's Duplicate zoomed image function utilizes a proprietary algorithm that can enlarge an image without the typically accompanying increase in graininess.





## TOPAQ® TACTILE FORCE ANALYSIS SYSTEM

From gaskets to flanges, bolted joint analysis to machine calibration, the unmatched TOPAQ® TACTILE FORCE ANALYSIS SYSTEM has proven itself to engineers the world over.

“ This product has allowed us to identify the actual pressure at given locations, low pressure areas, and potential open seal locations. This has enabled us to take corrective actions to improve our packaging operation at Becton Dickinson. ”

**ANIL SODHI,**  
**BECTON DICKINSON**

“ We are enthusiastic about using the TOPAQ® system as a new analytical tool. This takes our press profiling to the next level. ”

**PATRICIA CALE,**  
**ROGERS CORPORATION**

“ The TOPAQ® system is a very simple package that allows infinite analysis of the pressure indicating film. It has been a very useful tool to monitor the amount of pressure applied to our products. TOPAQ® has helped us to advance to the next level of excellence. ”

**THOMAS JOUGHIN,**  
**PILKINGTON NORTH AMERICA**

### Specifications:

Optical Resolution:	100 - 1,000 DPI
Imaging Area:	12" x 17" (A3)
Scanning Mode:	36-bit color
Weight:	26 lbs. (12 Kg.)
Power Consumption:	49 Watts
Interface:	USB
Scanning Time:	40 seconds
AC Line Voltage:	100-240 VAC
Light Source:	Cold Cathode Lamp
Linearity:	0-2 O.D.
Wavelength:	400-750 nm
Absorbance Range:	0-3.2 O.D.
Image Processing:	Gamma Adjustment, Filtering
Networkable:	Unlimited # of users

Represented by:

LEARN how Topaq® has helped companies from Boeing to Intel improve quality in the manufacturing process and increase production yields by calling 800.755.2201 (or 973.884.1755 from outside the USA) for a free product demonstration.

TACTILE PRESSURE EXPERTS



SENSOR PRODUCTS INC.

SURFACE  
STRESS ANALYSTS®

**SENSOR PRODUCTS INC.**

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