



Application for the Measurement & Analysis of the Contact Pressure in Sealing Jaws

A poor quality seal, produced by a packaging machine, can result in large quantities of product waste for a manufacturer. This can be a result of uneven bars, low forces or worn parts in the clamp sealing assembly. The **I-Scan**® System has been utilized in packaging applications to help troubleshoot these mechanical problems.

In the application below, Tekscan sensor model 5570 was used, which contains 44 sensing points and covers the length of the sealing bars (*Figure 1*). The sensor was inserted between the sealing bars, the bars were closed, and the *I-Scan* software displayed the 3-D pressure profile while recording. The lower heights on both ends corresponded to lower or weaker sealing forces (*Figure 2*). Mechanical adjustments were made to the bars, while being viewed dynamically. When the 3-dimensional pressures became more even (*Figure 3*), the sealing bars were in alignment to provide a more uniform contact seal.



Figure 1 - *I-Scan* sensor placed between sealing jaws

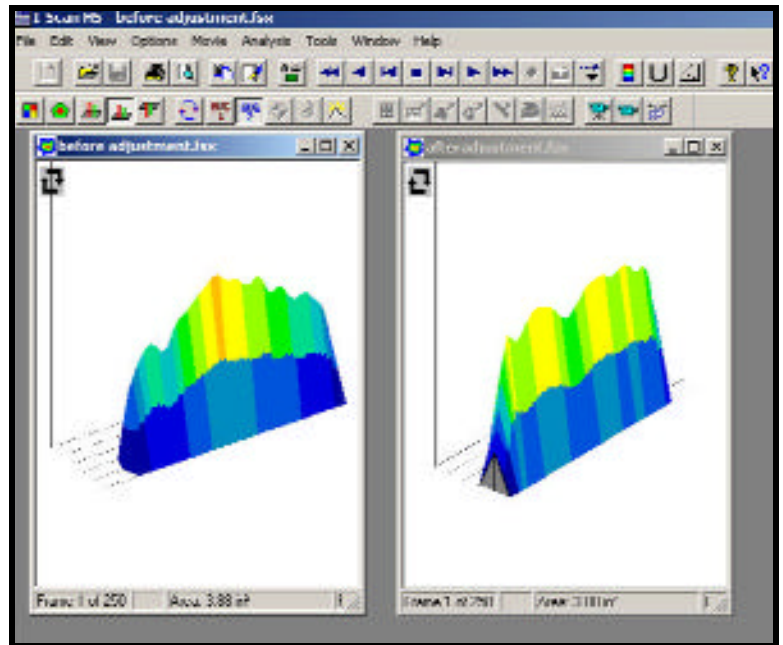


Figure 2 - Before Adjustment

Figure 3 - After Adjustment

The *I-Scan* system, in this application, proved to be a very useful set up tool. By adjusting the sealing forces before the start of a production run, large amounts of product waste can be avoided. The *I-Scan* can also be used to inspect worn parts, set up new machines, and improve overall quality control in the production area. Sensors are available in different shapes, are reusable, and provide accurate pressure readings. With the help of Tekscan's highly qualified Sales and Engineering Support Team, each system may be configured to meet your specific needs.

Tekscan, Inc. 307 West First Street South Boston, MA 02127-1309 USA
tel: 800.248.3669 / 617.464.4500 fax: 617.464.4266 email: marketing@tekscan.com website: www.tekscan.com