Project Name: **Thermal Cycler Pressure Calibrator**
Customer: Joint Genome Institute-Instrumentation Group
Date: 4/30/2001 to 6/15/2001
Project team members:

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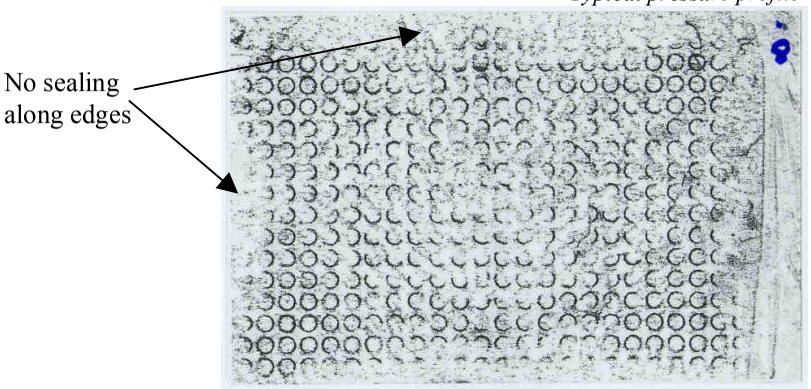
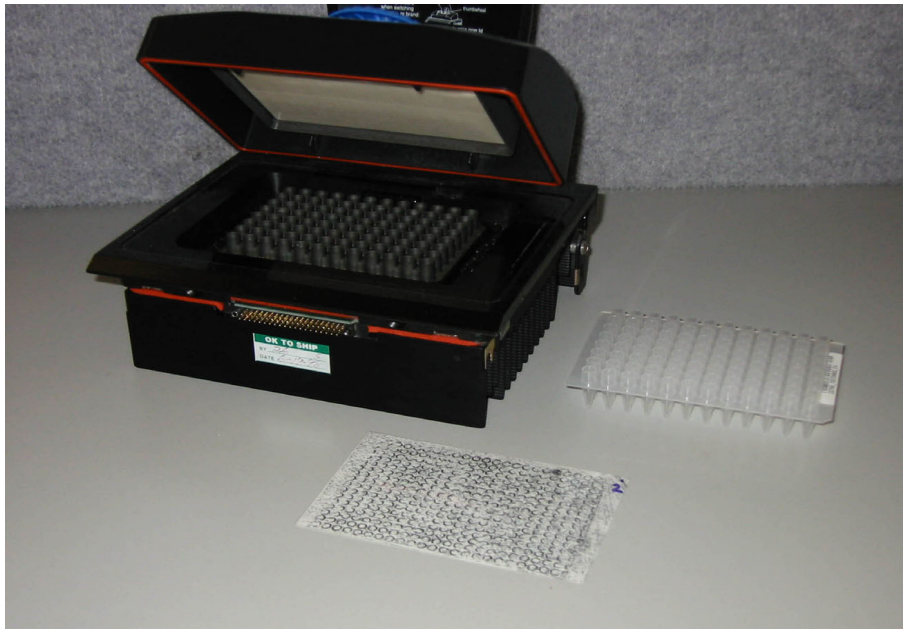
Project:

Thermal cyclers at the Joint Genome Institute showed signs of evaporation in the wells along the perimeter of the microplates. To determine if the problem was due to uneven pressure applied by the thermal cycler bonnet, a system to determine the pressure profile along the sealing surfaces was needed. DesignWorks developed a procedure involving pressure sensitive film to measure the quality of the seals in the thermal cyclers.

Typical pressure profile



Thermal cycler, microplate, and pressure sensitive film



Keys to success:

- Understanding customer request
- Early requirements definition
- Brainstorming different solution paths
- Testing and data interpretation