

EXECUTIVE SUMMARY

At the request of ErgoGenesis, LLC., The Ergonomics Center of North Carolina evaluated the pressure distribution characteristics of seven seat pans and foam types. The seat pans under investigation included five different BodyBilt models (J757x Slab, J757N1 Slab, J2507 S'port, J2508 Slab, J757 Molded) and two competitor models (Humanscale Freedom, Steelcase Leap). The project involved human subject recruitment and scheduling, data collection, data and statistical analysis, and report development. The pressure distribution characteristics assessed included average peak pressure and average contact area. Discomfort ratings associated with each seat pan were assessed using a subjective survey.

Thirty human subjects participated in this laboratory study and performed four different office tasks while seated: sitting, typing, writing, and reading tasks at a height adjustable workstation. Subject anthropometric dimensions were also recorded and analyzed. Analysis of these variables indicated that certain anthropometric dimensions had significant effects on measures of peak pressure, contact area, and discomfort. Task variability, however, did not significantly affect these measures.

The results of the competitor comparison using the J757x Slab, J757N1 Slab, Humanscale Freedom, and Steelcase Leap are presented in the attached document. The remaining BodyBilt models included seatpan significant variations in foam type and contour. As a result they were removed from the competitor comparison for discussion clarity.

Data from the competitor comparison support the following conclusion:

The BodyBilt seat pans are recommended over both Humanscale and Steelcase due to lower levels of peak pressure, greater average contact area, and lower discomfort ratings.

