

# **Therapod Office Chair Pressure Mapping Results**

## **Intro**

The pressure mapping was carried out at the premises of Seating Dynamics in Seven Hills, Sydney. Three office chairs designed to provide support and comfort were pressure mapped to gain an indication of comparative performance. Two of the office chairs are manufactured and designed by Therapod. The third office chair (standard office chair) was the office chair being used by the male in his everyday work environment.

For the pressure mapping the XSENSOR® X3 pressure mapping system with a PX100.36.36.02 (size 18" x 18") sensing pad with 0.5" resolution was used. Total number of sensor is 1,296.

For consistency one male aged approximately 30 years old was used to sample each office chair. The floor to seat height was adjusted for each chair. Before sampling a 2 minute period was allowed on each chair.

## **Results**

Below are images of the office chair pressure mapping. The Therapod IT Plus with Medium Back was not an appropriate size for the male subject used so comparison images provided show the Therapod IT Plus Highback against the standard office chair.

In all cases the Therapod office chairs demonstrated better results in terms of interface pressures at the boney prominences. The male subject reported the Therapod IT Plus High back was the most comfortable, while the IT Medium back was not deemed as comfortable due to the inappropriate sizing (leg length of the seat too short for).

Included is a table with the peak pressures for each chair over the boney prominences.

## **Note**

The following results indicate interface pressures for the person used for the purposes of this report. These results cannot be used to assume all persons will have similar results. Different body types, weights and other factors such as skeletal or muscular asymmetries are likely to impact on interface pressures. This report does not intend to imply that the Therapod Office chairs will perform this way for all persons.

	<b>Therapod IT Plus High Back</b>	<b>Therapod IT Plus medium Back</b>	<b>Other brand office chair</b>
<b>Peak Pressure Index * (mmHg) at boney prominence</b>			
Left Ischial Tuberosity	71.52	84.5	113.57
Right Ischial Tuberosity	51.55	87.47	103.84
Average Pressure for both Its	61.53	85.98	108.7

*\* Peak pressure index is the average of 9 cells adjacent to the peak pressure. The details of the recorded pressures at the 9 cells are displayed in the images of the individual office chairs figures 3, 4 and 5.*

## **Conclusion**

In terms of peak pressure index measurements, the Therapod IT Plus with High Back and the Therapod IT Plus with Medium Back offered significant benefit. This was reflected in the comfort rating of the tested male.

# COMPARISON IMAGES

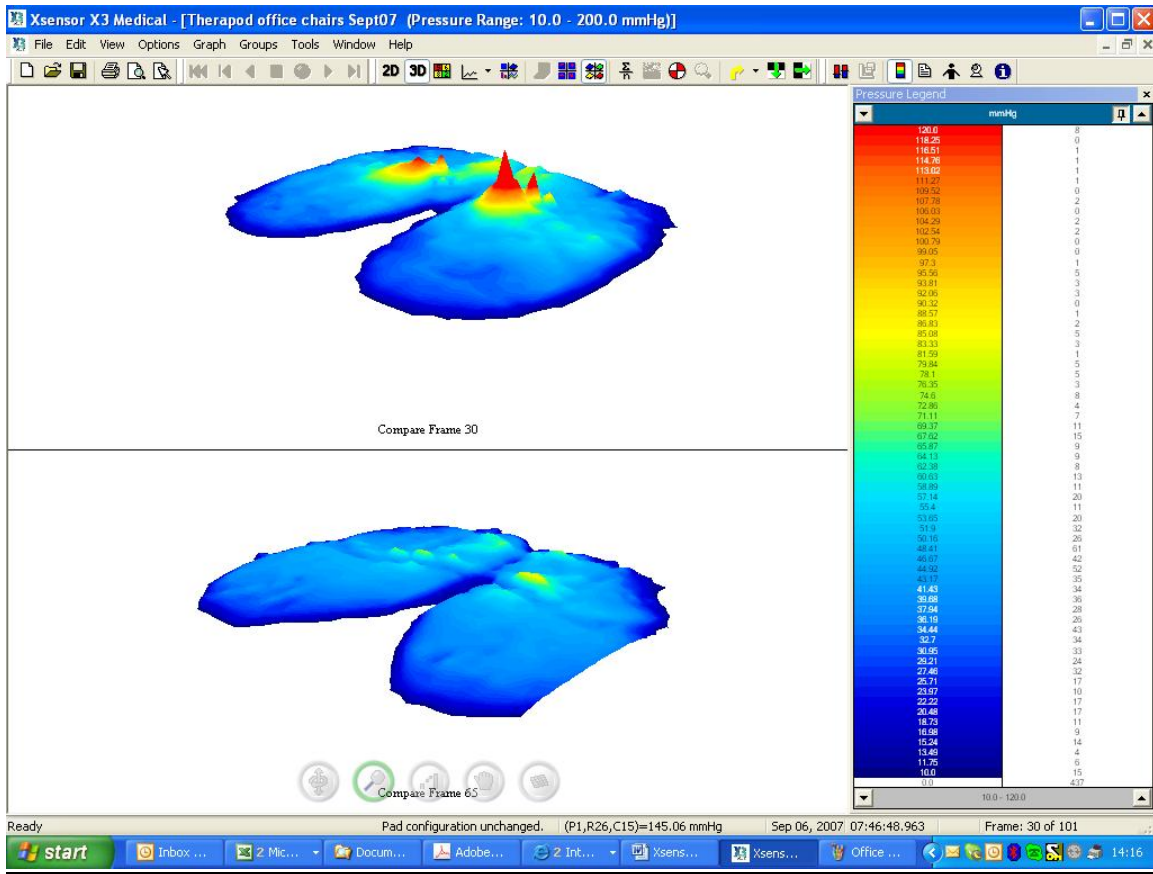


Figure 1. Top image standard office chair, bottom image Therapod IT Plus with High Back office chair

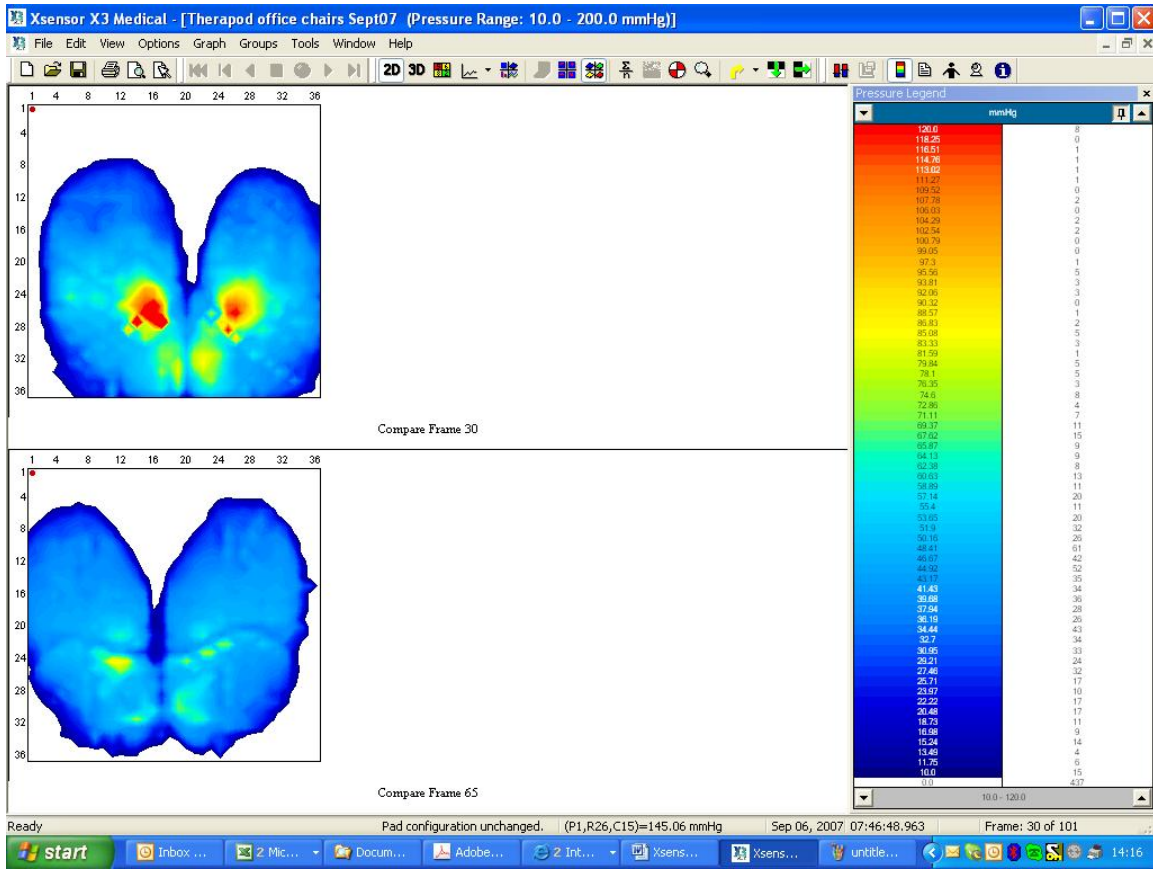
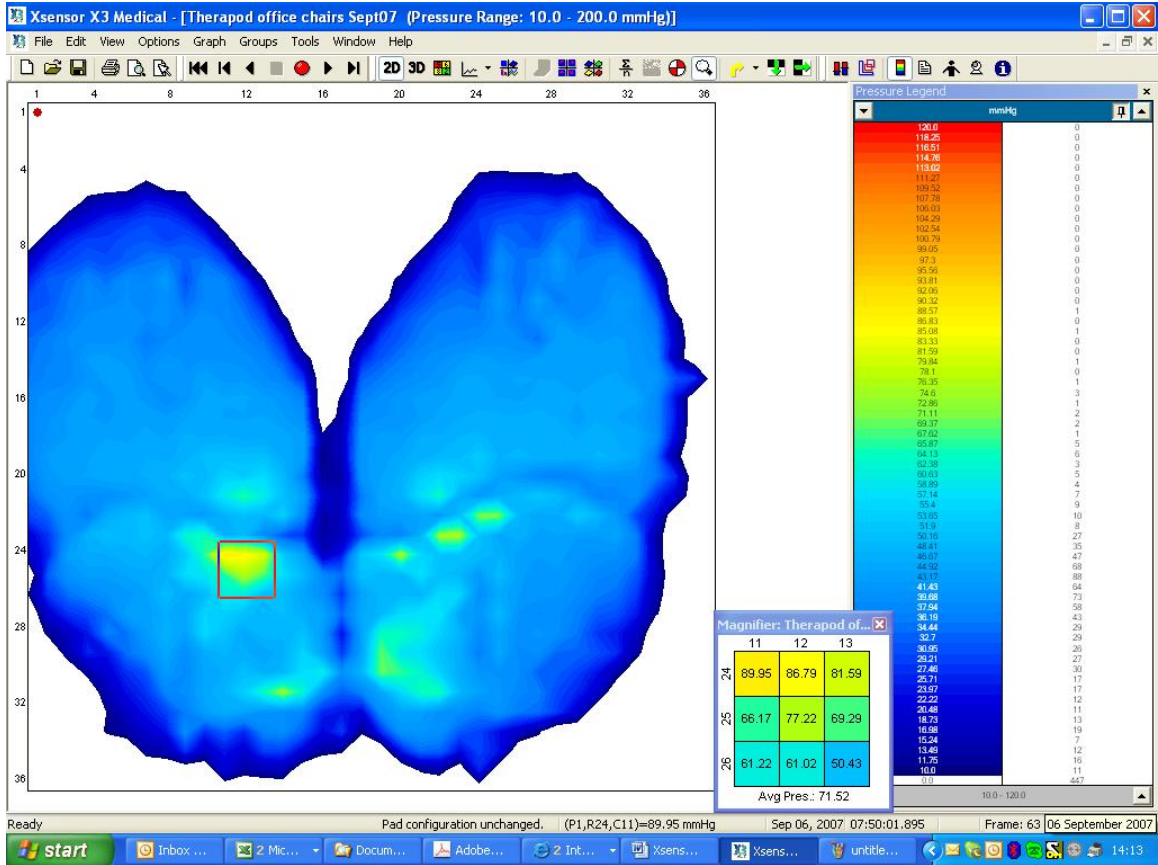


Figure 2. Top image standard office chair, bottom image Therapod IT Plus with High Back office chair

# INDIVIDUAL IMAGES



*Figure 3. Therapod IT Plus with High Back*

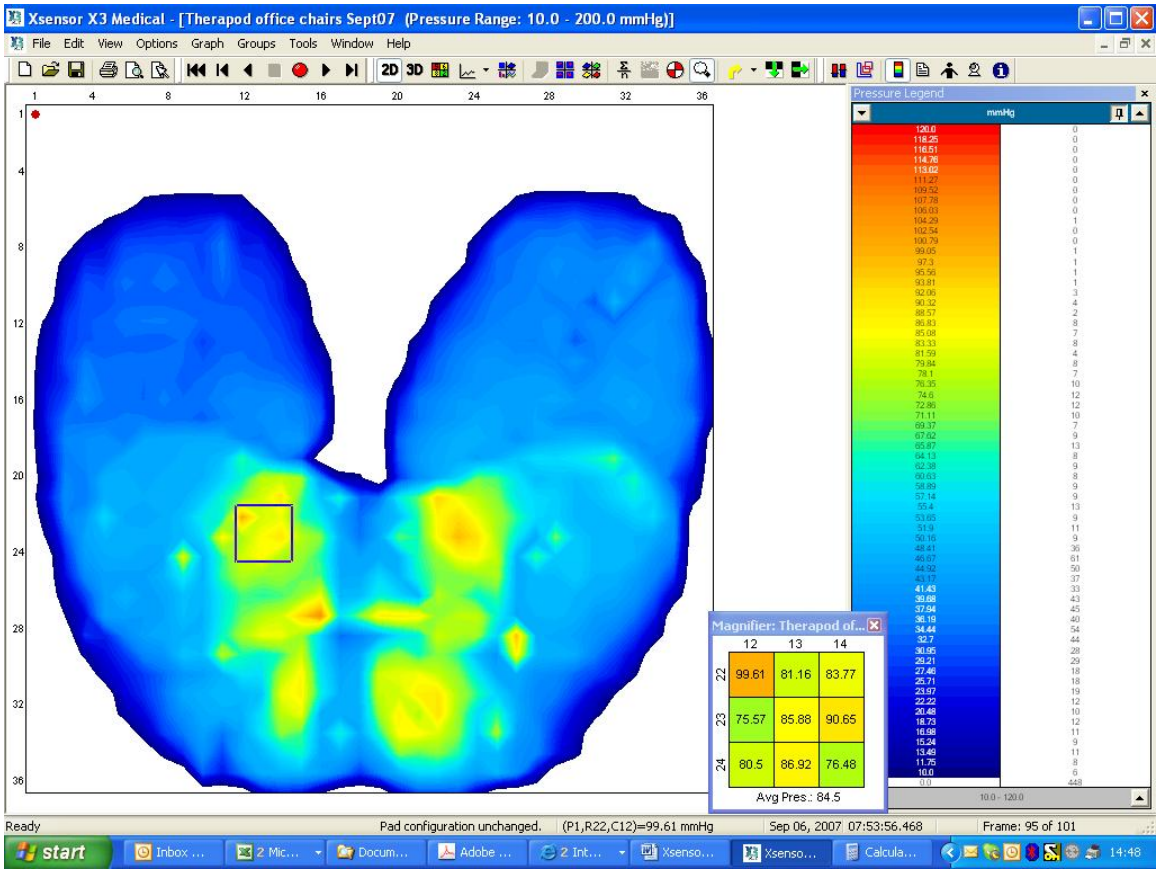


Figure 4. Therapod IT Plus with Medium Back

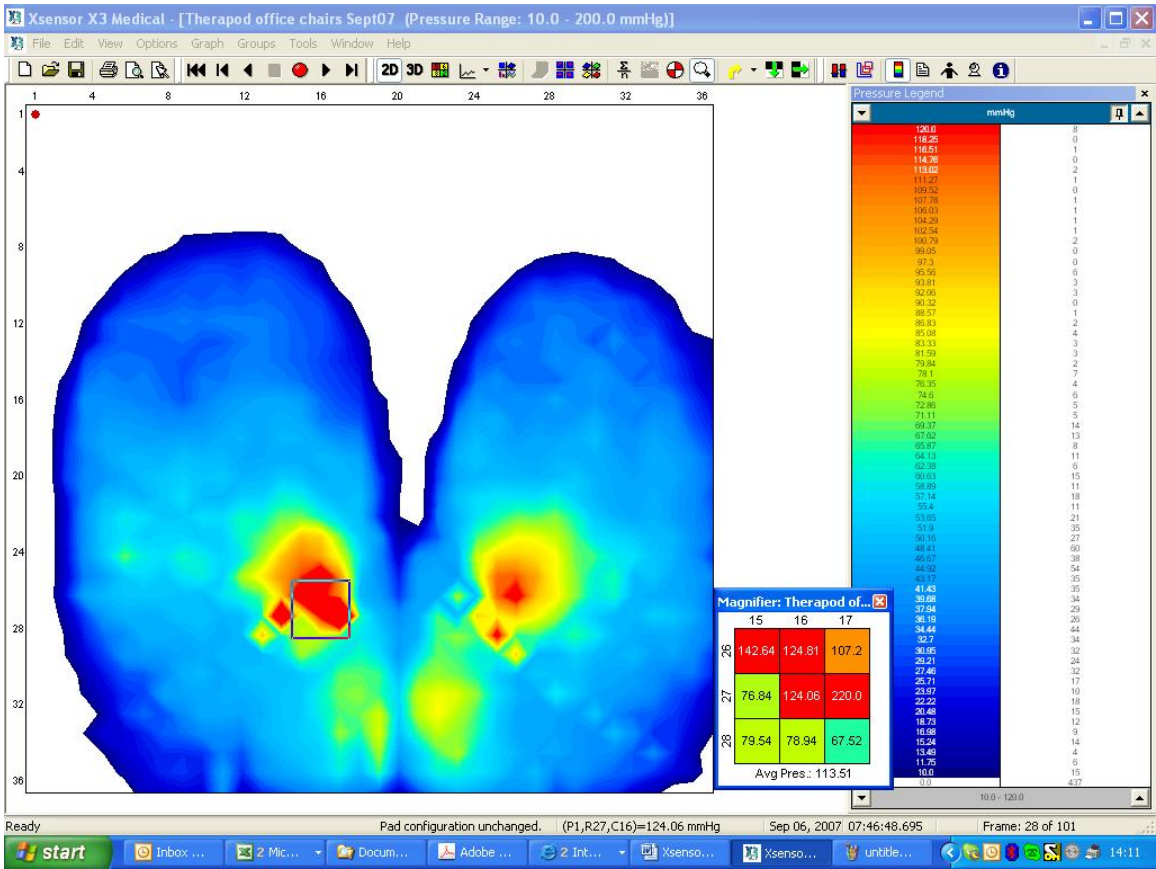


Figure 5. Standard office chair