## Contours LPS

## STABLE CONSTRUCT DESIGNED TO RESIST SIGNIFICANT LOADS



**Tested Load** = 1000 Newtons (equal to approx 250lbs)

## **Test Results**

- The maximum displacement for the Competitor was 27.57mm and for the Contours LPS it was 12.81mm
- The stress for the Competitor was 22.11x109 N/m2 and for the Contours LPS it was 7.59x109 N/m2
- The thickness of the Competitor is 1.55mm and the Contours LPS is 1.61mm (minimum) to 1.96mm (maximum)

## **Test Method**

- Finite element analysis (FEA) was performed on both the Contours LPS and the Competitor
- SolidWorks 2011 Simulation software package was utilized for the FEA
- Six degree of freedom fixed constraints were applied to the proximal screw holes in both plates so that the screw holes were not allowed to translate or rotate in any direction during the simulation
- 1,000 N loading applied axially (along the screw hole axis) at the distal screw holes in both plates
- Displacement results showed the distance each part of the plate moved from its original location
- Stress results demonstrated the force per area for the entire plate and the concentration of stresses on the plate





