The Dyna-Form Mercury Advance mattress is a “High / Very High Risk” dynamic replacement system, combined with the benefits of modern foam technology (patent pending). Offering high levels of patient comfort, this unique system has the facility to “step up” to that of a dynamic mattress when clinically required. Similarly, the mattress’s function can be downgraded as the patient’s condition improves.

These features make it particularly beneficial for use within the patient’s home or palliative care environment and help reduce logistic and decontamination costs. The clinical benefits of a single system are equally applicable to those of a modern hospital setting.

All component parts are interchangeable and replaceable, maximising product life and reducing environmental impact. The outer cover comprising a high frequency welded, multi stretch and vapour permeable fabric satisfies the strictest infection control policies.

**Evaluation Methodology.**

A calibrated FSA Pressure mapping system (serial no UT3010-7125) was placed over a Dyna-Form Mercury Advance mattress. For this specific test, a suitable test subject, Patient (A), a female, height 1.65 metres with a body weight of 56kg and a BMI of 20 was utilised.

Patient (A) was placed in both the supine position (lying down on their back) and also the seated position using an electric profiling bed.

Since the Mercury Advance has the ability to both be used as a Static Mattress and as an Alternating type system (a Hybrid system), pressure maps were taken in both positions in Static mode (i.e. no additional alternating air) and alternating mode (with the addition of dual cycle alternating air).
Static Mode

Supine Position
Max Pressure : 45 mmhg
Average Pressure : 16 mmhg

Sitting Up Position
Max Pressure : 54 mmhg
Average Pressure : 14 mmhg

Alternating Mode
In alternating mode, in order to look specifically at certain areas of bony prominence susceptible to pressure damage, the FSA pressure mapping system was specifically targeted at two areas, those of the Sacral Area and the Heels. A graphical analysis of the interface pressures versus alternating pump cycle time, in this case 10 minutes, has been shown below.

Sacral Area Interface Pressures over 10 minute Cycle with System set to High.

Mercury Advance Interface Pressures
Max MMhg

Interface pressures below 30mmhg for 50% of time

Interface pressures below 20mmhg for 50% of time