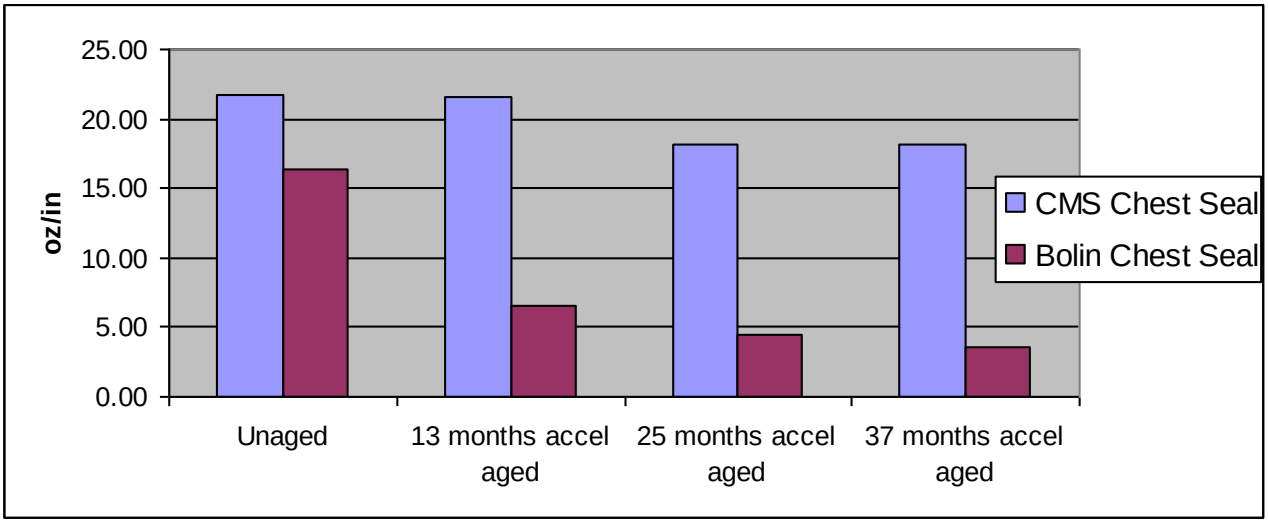
The purpose of this experiment is to compare the Combat Medical System Chest Seal with 10x adhesive to the BCS Bolin Chest Seal. The main point of interest is how the chest seal peel adhesion will perform over time using accelerated aging. All chest seals were accelerated aged according to ASTM standard F1980-07. Chest seal peel adhesion was tested from the skin of a 30 year old white male. The chest seal material was removed at a rate of 127"/min from the skin after a 5min dwell time. Below is a chart showing the peel adhesion of the CMS chest seal vs. the Bolin chest seal un-aged, 13 months accelerated aged, 25 months accelerated aged, and 37 months accelerated aged.



Initially the two chest seals have similar peel adhesion from skin. A large difference in peel adhesion is observed after accelerated aging the two chest seals. The CMS chest seal has a slight decrease in peel adhesion after accelerated aging up to 37 months. It can be assumed that the chest seal won't have any adverse effects after being exposed to heat over time. The Bolin chest seal has a large drop in peel adhesion after only 13 months of accelerated aging. This could lead to potential problems or even failure after being exposed to heat for a short amount of time.