

RESULTS OF FEA

FEA was performed on the current and modified Model 700 designs. In each analysis, the trigger model was constrained with a rotational constraint at the pivot and a constraint on movement at the area where the trigger contacts the overtravel screw tip. The model was loaded with a 20 pound load spread over a line across the center of the trigger bow.

Figure 1 contains the Von Mises stress distribution on the current Model 700 trigger. The areas of high stress at the end of the hoop ribs are visible in red.

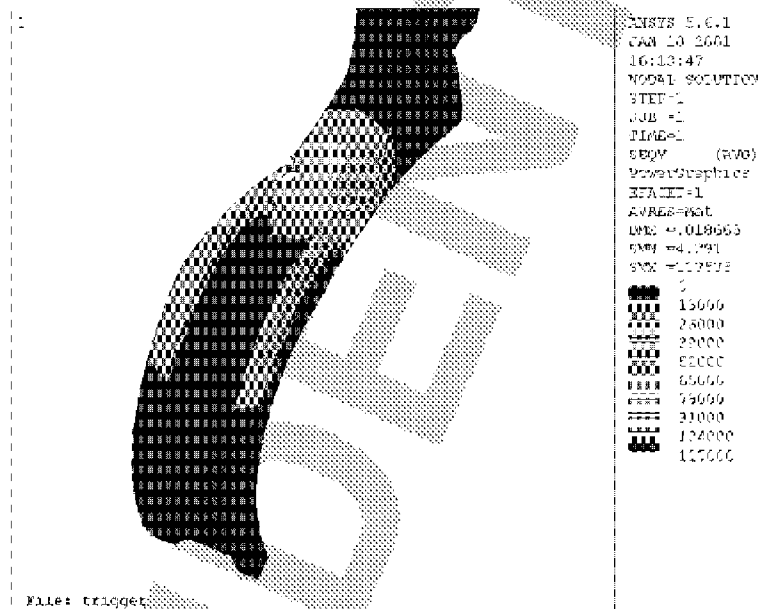


Figure 3. Von Mises stress distribution in current trigger.