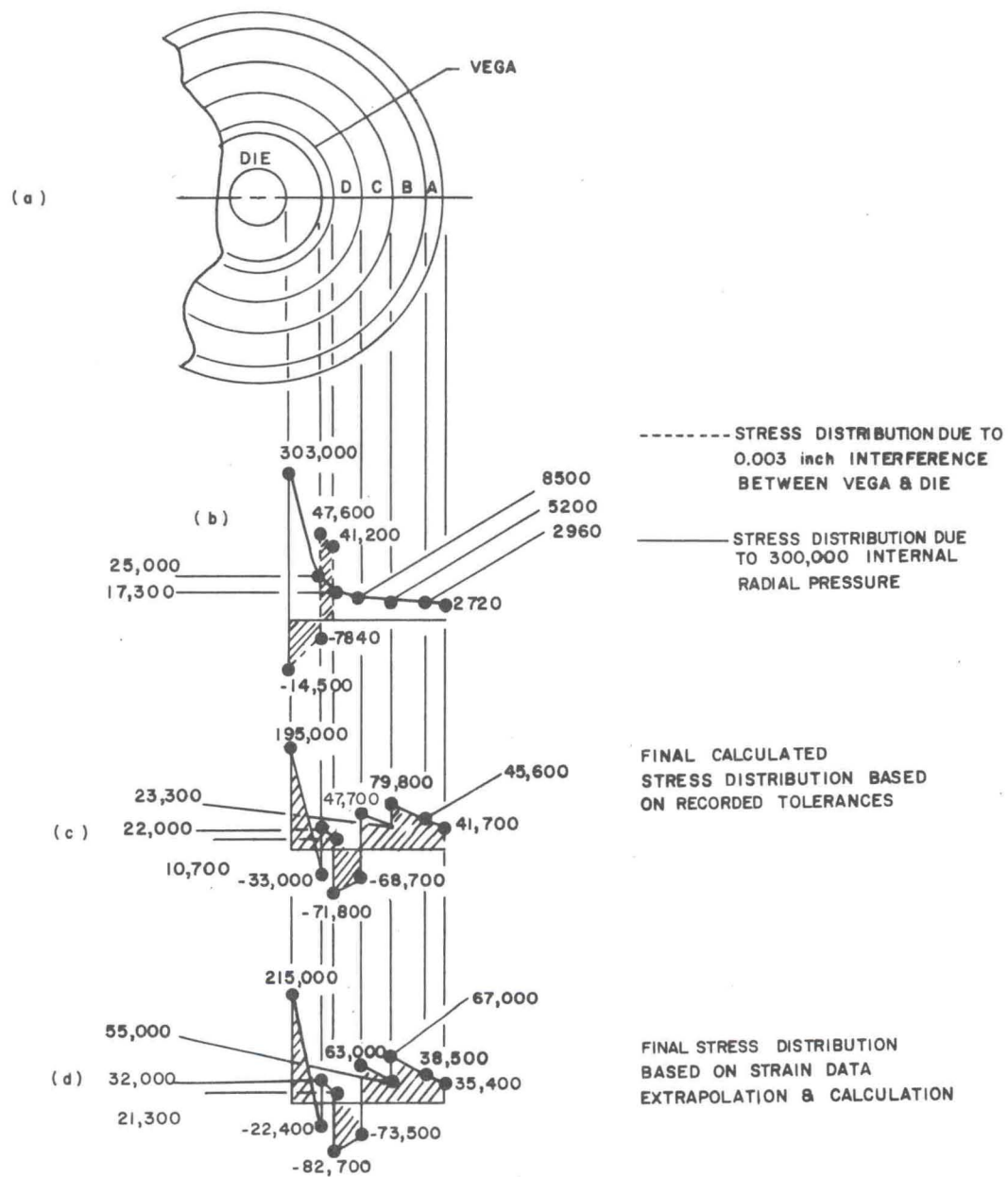
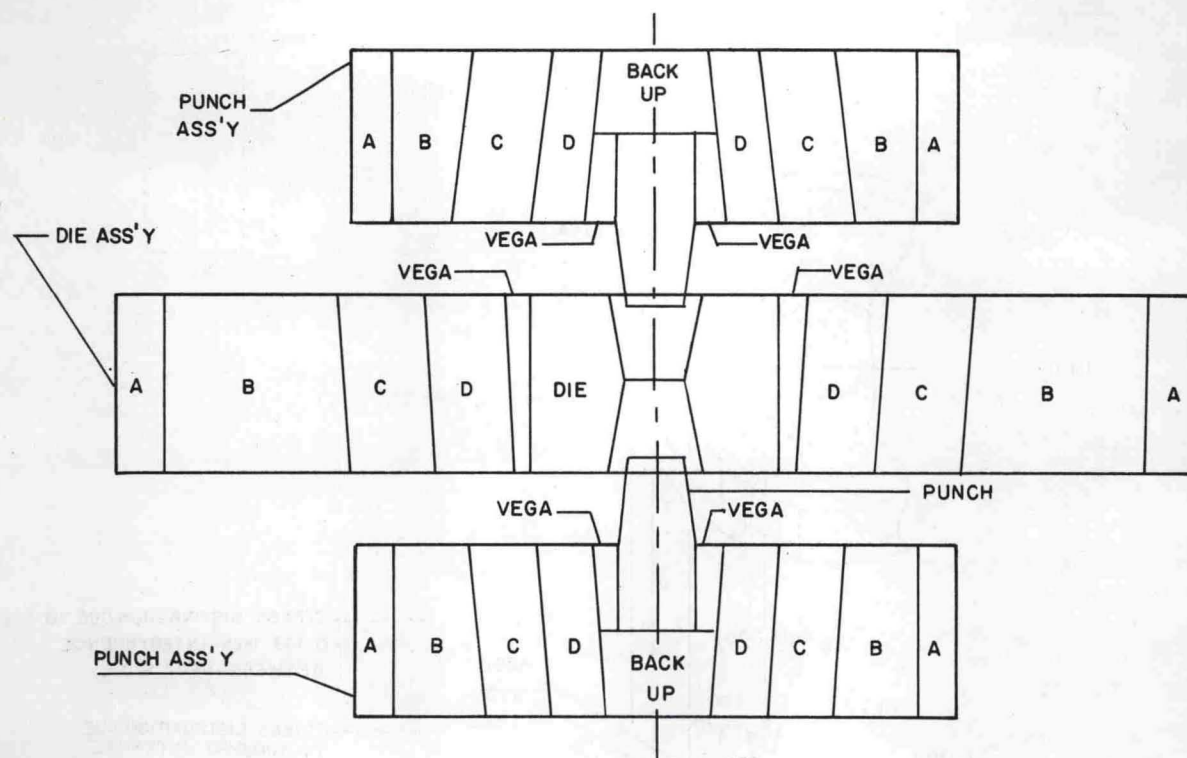




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Figure A-7 FINAL STRESS ANALYSIS OF DIE ASSEMBLY WITH 300,000 psi
INTERNAL RADIAL PRESSURE



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Figure A-8 SCHEMATIC OF HIGH-PRESSURE APPARATUS AND RELATIVE HARDNESS OF RINGS

Punch Assembly

Ring A: 4340 steel, RC 32-36

Ring B: 4340 steel, RC 40-45

Ring C: 4340 steel, RC 48-52

Ring D: 4340 steel, RC 48-52

Back Up: At least as hard as punch, RC 60-61

Vega: Vega steel, RC 55-58

Punch: 0.7500" Diameter with 5 degree taper, nondeforming steel
Containing 0.90 to 1.10 percent Carbon, 5 percent Cr, RC 58-60.

Die Assembly

Ring A: 4340 steel, RC 32-36

Ring B: 4340 steel, RC 40-45

Ring C: 4340 steel, RC 48-52

Ring D: 4340 steel, RC 48-52

Vega: Vega steel, RC 55-58

Die: 0.7500" i.d. with 5 degree taper, nondeforming steel containing
0.90 to 1.10 percent Carbon, 5 percent Cr, RC 58-60.