

DSA327 Shell Welding Experiment Procedure

- 1) Measure all strain gauges: collar pack and shell gauges.
- 2) Slowly increase the press pump pressure until the upper tooling contacts the magnet. Record strain gauge data.
- 3) Increase the press pump pressure to the next multiple of 100 psi at least 200 psi above the pressure in step 2. Record strain gauge data.
- 4) Increase the press pump pressure to 1000 psi and then in 500 psi increments to 3500 psi. Record strain gauge data at each step.
- 5) Decrease the press pressure to 0. Stop to record strain gauge data at each pressure used in steps 4, 3, 2, and 1.
- 6) Increase the press pump pressure to the same as in step 3. Record strain gauge data.
- 7) Weld the shell. Record strain gauge data after each weld pass.
- 8) Open the press. Record strain gauge data.