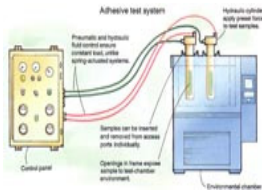

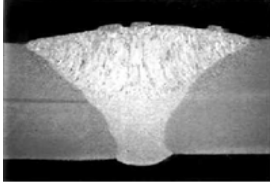


Case Histories: Special Testing

Biach engineers respond to one of a kind problems encountered by customers in many diverse industries.

Tensile Testing	
<p>Customer: Rohr Industries</p> <p>Problem: Customer was seeking a simple, low cost, quick method of testing strength of adhesive bonded test specimens.</p> <p>Solution: Biach provided a small, economical, hydraulically operated, testing tool to replace customer's massive, electro-mechanical tensile testing machine.</p>	
Magnetic Resonance Imaging Machine - Assembly Tooling	
<p>Customer: GE Medical</p> <p>Problem: During the MRI assembly process giant magnets must be aligned in perfect concentricity. Manually adjusting each fastener was a costly and time consuming process.</p> <p>Solution: Biach developed a special tensioner and computer controlled pumping system to provide quick and accurate alignment during the MRI assembly process.</p>	
Stud Weld Testing	
<p>Customer: Chicago Bridge & Iron</p> <p>Problem: During the fabrication of certain pressure vessels, threaded studs must be welded to the outside surface of the vessel for subsequent attachment of insulation. After welding studs, customer had no way of knowing if welds would hold.</p> <p>Solution: We designed a quick acting hydraulic tool which would slip over the stud, be pressurized to a specific test load value, then slipped off, leaving the properly welded studs on the vessel and removing the defective studs.</p>	
Stud Testing	
<p>Customer: Fluor Engineering and Construction</p> <p>Problem: Customer was interested in determining if repeated tensioning would have any effect on a stud's elongation.</p> <p>Solution: Biach, using a 2" diameter x 21 3/8" stud and two nuts provided by customer, applied strain gages to the stud. With the stud in a simulated joint, the stud was tensioned and retensioned a number of times. Tests proved that the stud gave no indication of unusual elongation due to repeated tensioning.</p>	