



providing world-class leak test and assembly verification solutions

## ENGINE BRACKET CASTING LEAK TEST AND ASSEMBLY VERIFICATION

### Market driver:

100% Quality assembly of components being shipped from customer to OEM manufacturer. Past sub-assemblies have had incidents of pressed bushings and screws working loose after assembly and during shipment. Causing downtime with line stoppages when components do not perform as designs. Causing re-work and warranty repair in the field.

### Test requirement:

Proper fit of the two components. Must meet established tolerances to create acceptable "signature" curve, to assure proper alignment and fit. Bolt torque specification varied from several different levels based on screw and component specification.

### CTS Solution:

Dual air-over-oil presses to provide a very smooth and repeatable press stroke. Compression load cell to measure the force generated during the press. Linear position transducer to measure the precise position of the press head. Monitoring of signature press curve generated by CTS SAM-100 to provide immediate signature analyses of each press assembly and provide pass/fail feedback. A torque gun mounted on a tool balancer monitored bolt torque applied.

