

■ Rivet Monitoring: Advanced Press Monitoring Using Signature Analysis Techniques

**Overview:**

A major aircraft manufacturer selected Sciometric®'s Signature Analysis System to monitor the entire press force applied on rivets as they are inserted into parts.

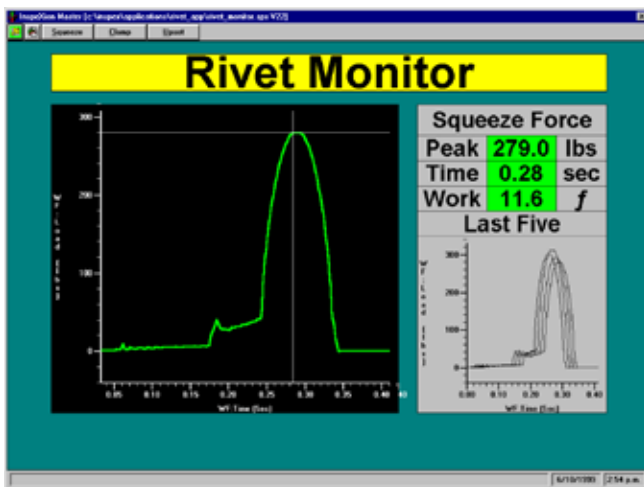
**Highlights:**

- On the spot reports (easy to read for the technician)
- All test data saved for 100% traceability
- MIN/MAX/AVG/LOAD are all measured
- Rise time, load, decay are also measured
- Clamp pressure, upset pressure and squeeze force are all monitored

A technician uses a hydraulic rivet gun mounted on a portable cart to fasten parts of an aircraft together. "Squeeze Force", "Upset Pressure" and "Clamp Pressure" are all monitored (1000 points per second) to verify proper installation and rivet integrity. Sciometric®'s Signature Analysis System learns the acceptable force characteristics that a rivet requires for correct installation. Every subsequent rivet is monitored as it is installed to ensure that the force characteristics fall within the acceptable limits.



The system can also save test results to disk, including the complete force waveforms, allowing recall and review of the test data at any time for 100% traceability.



InspeXion Screen showing Squeeze Force Waveform.

