1.1 Methodology for Successful Failure Analysis

Determining a strategy for evaluating a stamping failure is a very complex task, however there are common stages to every successful failure analysis. Part failures can be broken into 3 different groupings: die and part analysis, press analysis and material analysis.

**Methodology for Successful / Failure Analysis**

![Methodology for Successful Failure Analysis Diagram]

- **Failure**
  - Die & Part Analysis
  - Press Analysis
  - Material Analysis
  - PM & Repair, CGA/TSA & Part Documentation
  - Die & Press Set-up Documentation
  - Coil Steel Mechanics
  - Material Testing by The Steel Supplier
  - Cause of Failure
  - Repair
  - Corrective Action
  - Document / Report
  - Procedure or Specification Change

*Figure 1-1. Methodology for Successful / Failure Analysis*
The following is a brief list of major items that are addressed by a stamping manufacturer when conducting a failure analysis.

1. Collection of preventative maintenance and die repair records
2. Reference to CGA parts and recorded documentation
3. Reference to part history records, QC and engineering specifications
4. Visual inspection of die(s)
5. Reference to die set-up documentation and procedures
6. Reference to press set-up documentation and procedures
7. Reference to coil steel mechanicals