

0702 QS: Avtech Quality System Requirements for Plastic Injection Molded Parts

In addition to the quality requirements in 8801QS, the following apply to injection molded parts.

1. Certification reports are to be provided with all part lots delivered to Avtech Corporation, and shall include the following:

- a. Part Number of molded part, revision level, and purchase order number.
- b. Fabrication date and molder's run number.
- c. Material manufacturer's name and specific designation for raw material used.

2. The molder shall document inspection data covering the material and/or processes used to mold each part lot. These files shall be maintained for a period of at least five years and be available for review by Avtech at any time. This inspection data shall include the following:

- a. Molding material manufacturer's current product data sheet that is specific to the resin being molded, complete with recommended processing parameters. The print date on the product data sheet shall not be more than twelve months prior to the mold date for a part lot.
- b. Maximum percent regrind used for each molding lot shall be documented at zero %, as all parts are to be molded with 100% virgin material.
- c. Percent moisture after drying and any data used to make this determination shall be documented and be within the recommended limits as specified on the current product data sheet provided by the manufacturer of the material being molded.
- d. Shot size as a percentage of the machine capacity for each molding lot produced shall be documented and be within the recommended limits as specified on the current product data sheet provided by the manufacturer of the material being molded.
- e. Average residence time of the plastic, defined as the time required for plastic to travel from the point of molding machine entry where melting is initiated until the injection molding cycle is completed, shall be documented and not exceed five minutes for any part produced.
- f. Mold temperature readings shall be documented throughout each molding run and be within the recommended limits as specified on the current product data sheet provided by the manufacturer of the material being molded.
- g. All other recommended processing parameters shall be followed as specified on the current product data sheet provided by the manufacturer of the material being molded. However, Avtech Corporation does not require that molder documentation be supplied for these other recommended processing parameters.