Sorting - Plastic Scrap (A) and Plastic Parts (B) are inspected.

Size Reduction - Oversized plastic scrap and parts are ground.

Identification/Quality Assurance - A cross-probe removes a sample from each container of plastic regrind (C) or pellets (D) entering the identification station. Both the container and sample retain are numbered and tagged.

Laboratory Analysis/Quality Assurance - The tagged retain sample is sent to lab for analysis using ASTM and UL Standards.

Work-in-Process/Resale Inventory - Each container’s ID tag includes lot number, container number, gross/tare/net weights, and content identification. Containers are placed in inventory to await further processing or resale.

Formulation - Formula is prepared for the blending of plastic feedstock with necessary fillers, modifiers, stabilizers, colorants, processability enhancers, etc. to meet exacting performance standards.

Pre-Test/Quality Assurance - Formula prototype is laboratory tested to ensure conformance to Shuman Plastics proprietary and/or customer’s own custom formulation standards.

Blending - Lots of 42,000 lbs. are blended thoroughly into a homogenous mixture.

Storage - Blended feedstock, now ready for extrusion/pelletizing process, is moved into storage.

Extrusion - Finished blend is now processed via melting and extruding into a homogenous resin.

Pelletizing - Extruded compound is pelletized.

Finished Product/Quality Assurance - Throughout each production run, samples of resin output are monitored by laboratory tests to assure that the characteristics of the target formula are met.

Packaging - Final pelletized resin is packaged in boxes, bags or bulk to meet customer needs. Each finished package is marked with product code, container number, identifying lot number, and weight.

Lot Certification - Each 1,000 lbs. of finished resin has a retain sample withdrawn for final lab testing, certification, and historical retention in Shuman Plastics’ “lab resin library”.

Compound Inventory - Finished plastic compound is placed in storage awaiting shipment to customer.

- Additives
- fillers
- modifiers
- stabilizers
- colorants
- enhancers