

## MATERIALS

Resins—much of the growth of the injection molding industry is due to the continuing ability of resin suppliers to offer new and improved engineering materials. Today resins can meet specifications for mechanical, thermal, electrical and impact demands increasingly competitive in performance to metal at reduced processing costs.

EHC's participates in an ongoing evaluation process of new resins. Moldability, ease of processing and decoration are some of the analysis conducted. This process provides for a continuing effort to improve current production needs and prepare for future program demands.

- Good Mechanical Strength and Illumination are of primary concern when choosing our materials. strength is needed numerous reinforcements are used including glass fibers, mineral fillers, glass microspheres, all products that improve impact resistance.
- Electrical Resistance or Insulation make the use of EHC plastic products especially suited in electro-mechanical environments.

The plastic materials used in EHC parts have been carefully selected to meet the functional and aesthetic requirements of each product.

Thermoplastic – Materials with technical characteristics such as polycarbonate unless otherwise requested by customers.

## MATERIAL SPECIFICATIONS

## INSPECTION

*Standard*

Parts are considered commercially non-acceptable if an imperfection is visible when viewed at arm's length distance under normal lighting conditions. Parts will be viewed for a period not to exceed 3-5 seconds in daylight (or fluorescent light of approximately 70 foot candles) with the unaided eye at normal viewing distance of 24 inches, in the normal viewing plane.

*Special*

Jewelry-type inspection will be reflected in a higher unit-cost. Customer to provide EHC with written notice in advance of placement of order.

## CHEMICAL RESISTANCE

Contact manufacturer for resistance factors prior to usage with chemicals.

*Surface Finish*

1. Gloss: Parts produced from a highly polished mold, or
  2. Satin: Parts produced from a textured mold to remove glossiness,
- or
3. Textured: Parts produced from a pattern etched mold, or
  4. Matte-finish: Parts produced from a secondary operation that provides a non-reflective plastic surface.

*Appearance*

Parts to be free of shrinkage in excess of .009" IN/IN on top surface and sides of molded knob, mold flow marks or "cold" spots, molding flash, chips or cracks, excessive gate marks and colors (for knob and skirt assemblies) to be consistent in shade and density for each order lot or release.

## MARKINGS

*Adhesion:*

Markings cannot be removed from plastic surface by an adhesive material comparable to scotch tape.

*Inspection:* See opening paragraph.

*Appearance:*

All characters, lettering, border, and backgrounds must be complete and all lettering must be clear, visible, and legible. Colors to be consistent in shade and density for each order lot or release.

## SET SCREWS

*Hexagon Socket*

1. Material: high grade alloy steel
2. Finish: Corrosion resistant/coating with clear or black finish
3. Hardness: Case hardened
4. Finish: Clear corrosion resistant coating
5. Point Style: Cup point

*Location (nominal) of Screw(s) (if applicable)*

Two screws: 90° and 180° from indicator

*Thread*

Class 3A

*Screw Size and Length*

Determined by manufacturer.

## INSERTS

1. Material: Aluminum or half-hard brass alloy.
  2. Finish Options: Anodized on aluminum or Anodized on nickel plate or Anodized on brass
- Finish to be consistent and free of flaking.

*Thread*

Thread Fit: 2B gauge

## PACKAGING

All products are packaged to insure that quality is not jeopardized during transit. Relative to the complexity of the part, product is:

- A. Individual bags, or
- B. Egg crate box w/ foam pads on top and bottom

