



## Manufacturing Standards

- Unless otherwise specified, tolerances are industrial standards

- . X =  $\pm .03$
- . XX =  $\pm .010$
- . XXX =  $\pm .005$

In cases where prints have been converted from metric to english, refer to the metric dimension to determine the number of digits (.XXX), not the hand written english conversion.

- Precision tolerances and critical features are highlighted. Grind features are marked with a “**G**” or “**Jig**”
- Grind stock allowances:
  - Normally .007 per side on flat sides
  - .003 on shoulders of round parts
  - .010 in Jig ground holes (.156 & smaller)
  - .015 in Jig ground holes (.188-.750)
  - .020 in Jig ground holes (.750-2.000)

\*Exceptions: As parts get longer, larger or geometrically unstable, additional grind stock is required. You can usually add 50% more grind stock to help clean up after heat treat.

- Chamfer all holes 1/32 per side larger than the major  $\varnothing$  you are installing.
- Do not break edges on gage surfaces or flush pin holes.
- All parts not requiring heat-treat must be deburred.
- All parts requiring heat-treat must be tapped +.005 oversize (GH-11)
- Any dimensional deviations or improvements must have The Organization’s approval.
- No configuration changes are permissible unless approved in writing by The Organization.
- By accepting P.O., you grant The Organization or our customer the right to access all facilities and/or applicable records.
- Any sub-vendor operations must have flow down requirements including key characteristics, ITAR, and DFAR regulations.
- Provide objective evidence when required on P.O. e.g. dimensional certification, test reports, etc.

- Retain records of all work performed, for five years or as dictated by The Organization, from shipment date, unless specified on purchase order or contractual, regulatory or statutory requirements.
- The Organization reserve the right to perform an inspection and/or audit at venders or sub-vendors premises.
- Supplier must have The Organization's approval of changes in product, process definition, and/or configuration.