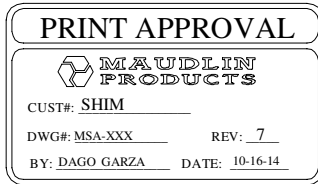
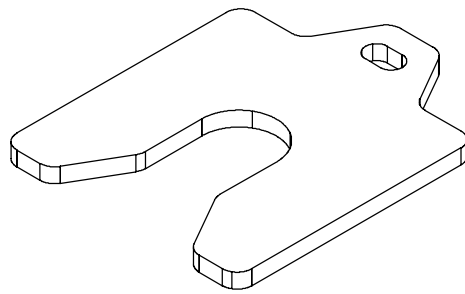
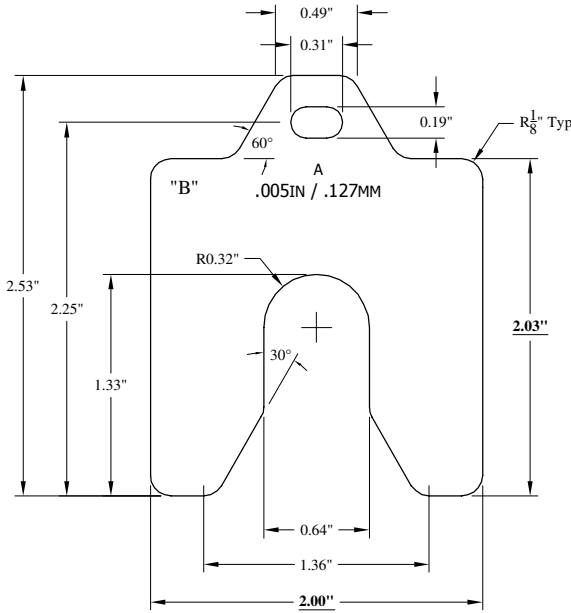


| REVISIONS | | | | | |
|-----------|-----|--|----------|-----|---------|
| ZONE | REV | DESCRIPTION | DATE | BY | APPRVD: |
| ZONE | 1 | INITIAL RELEASE | 6-6-07 | DMG | CLL |
| B7 | 2 | Added comment to optional etch or stamp "302" or "304" if material is SS302 or SS304 | 4-23-08 | DMG | CLL |
| B7 | 3 | See ECO 1011 | 3-19-09 | DMG | CLL |
| D1 | 4 | See ECO 1025 | 3-6-12 | DMG | CLL |
| B3 | 5 | See ECO 1026 - CHANGED TOLERACNE FOR THICKNESS | 6-9-12 | DGS | CLL |
| B3 | 6 | See ECO 1030 - CHANGED TOLERACNE FOR THICKNESS | 12-11-12 | DMG | CLL |
| B7 | 7 | See ECO 1041 - Newly developed Geometry, changed marking information and added barcode | 10-16-14 | DMG | JW |



| THK. | TOL. | P/N 316SS. | P/N 302/304 SS. | P/N STEEL. | FLATNESS. | ALLOWABLE BURR |
|------------------|----------|-------------|-----------------|------------|-----------|----------------|
| .001 | ± .00008 | 316-MSA001. | MSA001. | _____ | N/A | .0005 |
| .002 | ± .0001 | 316-MSA002. | MSA002. | _____ | N/A | .0005 |
| .003 | ± .00015 | 316-MSA003. | MSA003. | _____ | N/A | .0005 |
| .004 | ± .0002 | 316-MSA004. | MSA004. | _____ | N/A | .0005 |
| .005 | ± .00025 | 316-MSA005. | MSA005. | _____ | N/A | .0005 |
| .006 | ± .0003 | 316-MSA006. | MSA006. | _____ | N/A | .001 |
| .007 | ± .00035 | 316-MSA007. | MSA007. | _____ | N/A | .001 |
| .008 | ± .0004 | 316-MSA008. | MSA008. | _____ | N/A | .001 |
| .009 | ± .00045 | 316-MSA009. | MSA009. | _____ | N/A | .001 |
| .010 | ± .0005 | 316-MSA010. | MSA010. | _____ | N/A | .001 |
| .012 | ± .0006 | 316-MSA012. | MSA012. | _____ | N/A | .001 |
| .015 | ± .0005 | 316-MSA015. | MSA015. | _____ | N/A | .001 |
| .020 | ± .0005 | 316-MSA020. | MSA020. | _____ | N/A | .001 |
| .025 | ± .00075 | 316-MSA025. | MSA025. | _____ | N/A | .001 |
| .031 | ± .004 | 316-MSA031. | MSA031. | _____ | N/A | .002 |
| **.050 | ± .001 | 316-MSA050. | MSA050. | _____ | ± .015 | .002 |
| **.062 | ± .006 | 316-MSA062. | MSA062. | _____ | ± .015 | .002 |
| **.075 | ± .002 | 316-MSA075. | MSA075. | _____ | ± .015 | .002 |
| **.100 | ± .002 | 316-MSA100. | MSA100. | _____ | ± .015 | .002 |
| **.125 | ± .0025 | 316-MSA125. | MSA125. | _____ | ± .015 | .002 |
| $\frac{3}{16}$ " | ± .010 | _____ | MSA-187-SS. | MSA-187-S | ± .015 | .005 |
| $\frac{1}{4}$ " | ± .012 | _____ | MSA-250-SS. | MSA-250-S | ± .015 | .005 |
| $\frac{3}{8}$ " | ± .020 | _____ | MSA-375-SS. | MSA-375-S | ± .015 | .005 |
| $\frac{1}{2}$ " | ± .025 | _____ | MSA-500-SS. | MSA-500-S | ± .015 | .005 |
| $\frac{5}{8}$ " | ± .030 | _____ | MSA-625-SS. | MSA-625-S | ± .015 | .005 |
| $\frac{3}{4}$ " | ± .035 | _____ | MSA-750-SS. | MSA-750-S | ± .015 | .005 |
| 1" | ± .050 | _____ | MSA-100-SS. | MSA-100-S | ± .015 | .005 |



- NOTE:**
- *** = For 316 material, STD gauge thickness applies (±.006")
 - "B" = If 316 Shim, Etch or Stamp "316" Here.
 - Mark shim with shim size, thickness in standard and metric.

| | | | | | |
|--|--|-------------------------|--|--|--|
| UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES, AND TOLERANCES SHALL BE: | | DWG TYPE: DETAIL - PART | | 1929 Hwy 146 ph: 281-334-7566 Kemah, TX 77565 fax: 281-334-7560 | |
| .0 = ±.030" .00 = ±.015" .000 = ±.005" Fractions = $\pm \frac{1}{16}$ " Angular = ±30min | | SIGNATURES | | | |
| MATERIAL: See Table | | DWN: DMG | | 6-6-07 | |
| THICKNESS: See Table | | APPRVD: CLL | | 6-6-07 | |
| THIRD ANGLE PROJECTION | | PART NUMBER: See Table | | DESCRIPTION: MSA Shims | |
| SCALE: 1:1 | | DWG No.: MSA-XXX | | Revision: 7 | |
| SIZE | | SHEET: 1 of 1 | | | |