



# Shop Standard Cut/Grinding Tolerances

| SHEAR – SHEET/PLATE               |                   |                                                                                                                                                                                                                |
|-----------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Thickness                         | Tolerance         | Notes                                                                                                                                                                                                          |
| Up to 0.100" incl.                | +0.062"/-0"       |                                                                                                                                                                                                                |
| 0.100" excl. to 0.250" incl.      | +0.125"/-0"       |                                                                                                                                                                                                                |
| PLATE SAW - PLATE                 |                   |                                                                                                                                                                                                                |
| Thickness                         | Tolerance         | Notes                                                                                                                                                                                                          |
| 0.250" incl. to 2.000" incl.      | +0.187"/-0"       |                                                                                                                                                                                                                |
| 2.000" excl. and above            | +0.250"/-0"       |                                                                                                                                                                                                                |
| BANDSAW - PLATE                   |                   |                                                                                                                                                                                                                |
| Thickness                         | Tolerance         | Notes                                                                                                                                                                                                          |
| Up to 0.750" incl.                | +0.062"/-0"       |                                                                                                                                                                                                                |
| 0.750" excl. to 2.000" incl.      | +0.125"/-0"       |                                                                                                                                                                                                                |
| 2.000" excl. and above            | +0.187"/-0"       |                                                                                                                                                                                                                |
| BAND SAW - BAR                    |                   |                                                                                                                                                                                                                |
| Diameter                          | Tolerance         | Notes                                                                                                                                                                                                          |
| Up to 6" incl.                    | +1/8"/-0"         |                                                                                                                                                                                                                |
| 6" excl. to 10" incl.             | +1/4"/-0"         |                                                                                                                                                                                                                |
| 10" excl. and above               | +3/8"/-0"         |                                                                                                                                                                                                                |
| ABRASIVE SAW - BAR                |                   |                                                                                                                                                                                                                |
| Diameter                          | Tolerance         | Notes                                                                                                                                                                                                          |
| Up to 1.500" incl.                | +1/8"/-0"         |                                                                                                                                                                                                                |
| STOCK - BAR                       |                   |                                                                                                                                                                                                                |
| Diameter                          | Tolerance         | Notes                                                                                                                                                                                                          |
| 0.125"Ø to 0.3125"Ø excluding     | +0.001"/-0.001"   | This table references AMS 2241T Table 4a for centerless-ground or polished bars for Steel Alloys.<br>This table references AMS 2261J Table 7A for centerless-ground or polished bars for Nickel/Cobalt Alloys. |
| 0.3125"Ø to 0.500"Ø excluding     | +0.0015"/-0.0015" |                                                                                                                                                                                                                |
| 0.500"Ø to 1.000"Ø excluding      | +0.002"/-0.002"   |                                                                                                                                                                                                                |
| 1.000"Ø to 1.500"Ø including      | +0.0025"/-0.0025" |                                                                                                                                                                                                                |
| Over 1.500"Ø to 3.250"Ø including | +0.003"/-0.003"   |                                                                                                                                                                                                                |
| Over 3.250"Ø to 4.062"Ø           | +0.005"/-0.005"   |                                                                                                                                                                                                                |

**Please note:** If the diameter is larger than what is listed on this form, contact the salesperson. If the customer is requesting a tighter tolerance, contact the salesperson. (Custom tolerances will require additional selling costs).



# Shop Standard Cut/Grinding Tolerances

| WATERJET – ALL FLATS (NON-PREMIUM) |                 |                                                                                                                                                                                                                             |                                             |
|------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Thickness                          | Tolerance       | Notes                                                                                                                                                                                                                       |                                             |
| Up to 0.375" incl.                 | +0.062"/-0"     | All tolerances should be agreed upon between Buyer and Sales on any material that is drawn into a part. Otherwise, the shop will use the following tolerances by thickness of material.                                     |                                             |
| 0.375" excl. to 1.500" incl.       | +0.125"/-0"     |                                                                                                                                                                                                                             |                                             |
| 1.500" excl. to 3.000" incl.       | +0.187"/-0"     |                                                                                                                                                                                                                             |                                             |
| 3.000" excl. and above             | +0.250"/-0"     |                                                                                                                                                                                                                             |                                             |
| WATERJET – ALL FLATS (PREMIUM)     |                 |                                                                                                                                                                                                                             |                                             |
| Thickness                          | Tolerance       |                                                                                                                                                                                                                             | Notes                                       |
|                                    | Not ID/Arc      | ID/Arc                                                                                                                                                                                                                      |                                             |
| Up to 0.5" excl.                   | +0.005"/-0.005" | +0.010"/-0.010"                                                                                                                                                                                                             | Discuss lead-in and lead-out with customer. |
| 0.5" incl. to 1" excl.             | +0.010"/-0.010" | +0.015"/-0.015"                                                                                                                                                                                                             |                                             |
| 1" incl. to 2" excl.               | +0.015"/-0.015" | +0.020"/-0.020"                                                                                                                                                                                                             |                                             |
| 2" incl. to 3" excl.               | +0.030"/-0.030" | +0.030"/-0.030"                                                                                                                                                                                                             |                                             |
| 3" incl. to 3.5" incl.             | +0.050"/-0.050" | +0.050"/-0.050"                                                                                                                                                                                                             |                                             |
| PLASMA CUTTER – RINGS              |                 |                                                                                                                                                                                                                             |                                             |
| Thickness                          | Tolerance       |                                                                                                                                                                                                                             | Notes                                       |
|                                    | Not ID/Arc      | ID/Arc                                                                                                                                                                                                                      |                                             |
| Up to 0.375" incl.                 | +0.187"/-0"     | -0.187"/-0"                                                                                                                                                                                                                 |                                             |
| 0.375" excl. to 1.000" incl.       | +0.250"/-0"     | -0.250"/-0"                                                                                                                                                                                                                 |                                             |
| PLASMA CUTTER – SHEET/PLATE/DISKS  |                 |                                                                                                                                                                                                                             |                                             |
| Thickness                          | Tolerance       | Notes                                                                                                                                                                                                                       |                                             |
| Up to 0.500" incl.                 | +0.187"/-0"     | Plasma cutting creates a beveled edge. Most material is set to cut at +0.125" on top in order to meet the required tolerance on bottom. Maximum pierce is 1.25" in order to have a good pierce as well as a successful cut. |                                             |
| 0.500" excl. to 1.000" incl.       | +0.250"/-0"     |                                                                                                                                                                                                                             |                                             |
| 1.000" excl. to 2.500" incl.       | +0.375"/-0"     |                                                                                                                                                                                                                             |                                             |

**Please note:** If the diameter is larger than what is listed on this form, contact the salesperson. If the customer is requesting a tighter tolerance, contact the salesperson. (Custom tolerances will require additional selling costs).