|  |  |  |
| --- | --- | --- |
| Part | Dimensions | Centroid |
| Small Gear | 2" diameter 0.0508 m | 0.0254, 0.0254 |
| Medium Gear | 3" diameter 0.0762m | 0.0381, 0.0381 |
| Large Gear | 4" diameter 0.1016m | 0.0508, 0.0508 |
| Small Gear Holder | 4.375" x 4.375" square 0.111125 | 0.0555, 0.0555 |
| Medium Gear Holder | 6.375 x 6.375 " square 0.161925 | 0.0809625, 0.0809625 |
| Large Gear Holder | 8 .625" x 4.3125" rectangle  0.219075 x 0.1095375 | 0.1095375 , 0.05476875 |
| Kit2 | 0.022x0.0165 | 0.011,0.00825 |

## Small Vessel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Meta | Type | State | Distance from Centroid |
| Slot1 | Small  Gear  Slot | Holder | Filled/  Empty/  Null | 0.028575, 0.028575, 0.0 |
| Slot2 | Small  Gear  Slot | Holder | Filled/  Empty/  Null | -0.028575, 0.028575, 0.0 |
| Slot3 | Small  Gear  Slot | Holder | Filled/  Empty/  Null | 0.028575, -0.028575,0.0 |
| Slot4 | Small  Gear  Slot | Holder | Filled/  Empty/  Null | -0.028575, -0.028575,0.0 |

## Medium Vessel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Meta | Type | State | Distance from Centroid |
| Slot1 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | 0.0396, 0.0396, 0.0 |
| Slot2 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | -0.0396, 0.0396, 0.0 |
| Slot3 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | 0.0396, -0.0396,0.0 |
| Slot4 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | -0.0396, -0.0396,0.0 |

## Large Vessel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Meta | Type | State | Distance from Centroid |
| Slot1 | Large  Gear  Slot | Holder | Filled/  Empty/  Null | 0.055, 0.055, 0.0 |
| Slot2 | Large  Gear  Slot | Holder | Filled/  Empty/  Null | 0.165, 0.055, 0.0 |

## Kit2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Meta | Type | State | Distance from Centroid |
| Slot1 | Large  Gear  Slot | Holder | Filled/  Empty/  Null | 0.055, 0.055, 0.0 |
| Slot2 | Large  Gear  Slot | Holder | Filled/  Empty/  Null | 0.165, 0.055, 0.0 |
| Slot3 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | .01365,0.075, 0 |
| Slot4 | Medium  Gear  Slot | Holder | Filled/  Empty/  Null | .01365, 0.015 |

Small Gear Base Height – 0.75"



Medium Gear Base Height – 0.75"



Large Gear Base Height – 0.75"

