

STANDARD INSPECTION GUIDELINES AND PROCEDURES

RESPONSIBILITIES

As a Xometry partner, it is your responsibility to provide full inspection reports on parts using the guidelines outlined in this document, and to provide all needed documentation by uploading it all on to the partner portal.

INSPECTION PROCEDURES

Inspection of Parts With a Provided Print

When a print is provided with the parts, all dimensions and notes on the print must be checked along with the following:

- Correct material to drawing spec
- Material test reports if required
- Plating and certification
- Surface roughness (125 or better unless noted)
- Inserts are installed correctly
- Parts are deburred
- Parts are clean

Inspection of Parts Without a Provided Print

When a part does not have a print provided with it, the following needs to be checked every time to verify correct setup and programming:

- Correct material used
- Material test reports if required
- Plating and certification
- Overall length, width, and height
- Hole diameters and depths
- Thread sizes and depths (note: thread depths are a frequent failure)
- Pocket/step depths (at least 1 depth per face)
- Corner radii correct to model (note: this is a frequent failure)
- Each face should have at least 1 feature check for X and Y location from zero edge
- Surface roughness (125 or better unless noted)
- Inserts are installed correctly,
- Parts are deburred
- Parts are clean and threaded holes do not have chips packed in the bottom

INSPECTION REPORTS

An inspection report is required for every job you do with Xometry. Inspection reports can be hand written or typed on the Xometry inspection report template. All inspection reports are to be uploaded to the appropriate location before shipping. To download a Xometry Inspection Report template for use in your shop, visit the **Resources** section of the Partner Portal or the **Xometry Partner Guide**.

PART ID: Sample

DRAWING: Sample

ORDER ID: Sample

INSPECTOR: Sample

DATE: 01/23/19

- Verify quantity of machined parts is in accordance with purchase order.
- Verify that machined parts are free of burrs, sharp edges, blemishes, or discoloration caused by machining.
- When applicable, verify that the part inserts are installed and that the insert quantities are in accordance with the purchase order.
- When applicable, verify that the threaded and tapped hole quantities are in accordance with the purchase order.
- NA When applicable, verify the part finish is uniform, not flaking, peeling, cracking, or streaking, and free of runs or blisters.
- NA When applicable, verify that the part welded joints are in accordance with the purchase order.
- Verify that all part dimensions are in accordance with the customer-supplied print and/or CAD model. All print dimensions are ballooned and correlated to the inspection report.
- Verify package contains appropriate documentation to include but not limited to the Packing Slip, and any other documentation defined in Purchase Order (such as Material Test Reports, Plating and Finishing Documents, Certificate of Conformance, inspection report, ballooned drawings, etc.)

QC SIGNATURE: 

DATE: 01/23/19

The checklist above is for reference and should not be shipped.



Inspection Report

Form QA2F04 Rev 1

PO Number: 123456	Part ID: 00ABCDE	Date: 3/5/19	Sample Size: 5
		Lot Size: 20	

Inspector: JOE SAMPLE	Material: 6061 AL	Finish: Standard (as milled)
------------------------------	--------------------------	-------------------------------------

No.	Dimension or Print Note	Upper Tolerance	Lower Tolerance	Minimum Results	Maximum Results	Inspection Tool*	Notes
1	.250	.005	.005	.245		Caliper	Pass
2	1.000	.005	.005	1.002		Caliper	Pass
3	.500	.005	.005	.504		Caliper	Pass
4	1.000	.005	.005	.998		Caliper	Pass
5	.500	.005	.005	.504		Caliper	Pass
6	2.000	.005	.005	2.003		Caliper	Pass
7	1.500	.005	.005	1.498		Caliper	Pass
8	3.000	.005	.005	3.004		Caliper	Pass
9	2.000	.005	.005	1.998		Caliper	Pass
10	.625	.005	.005	Pass		Caliper	Pass
11	.500	.005	.005	.500		Caliper	Pass
12	.350	.005	.005	.350		Caliper	Pass
13	4-40 helicials	Go/No Go	Go/No Go	Pass		4-40 Go/No-go Gauge	Pass
14	.600	.005	.005	.603		Caliper	Pass
15	4-40 helicials	Go/No Go	Go/No Go	Pass		4-40 Go/No-go Gauge	Pass
16	.500	.005	.005	.501		Caliper	Pass
17	1.000	.005	.005	1.001		Caliper	Pass
18	.250	.005	.005	.254		Caliper	Pass
19	.500	.005	.005	.501		Caliper	Pass
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							

***Parts are to be inspected using calibrated tooling**