Should You Buy a 3D Printer... or Use a 3D Printing Service?

Cost comparison of 3D printing with an in-house printer versus Sculpteo's online service.

3 STL files

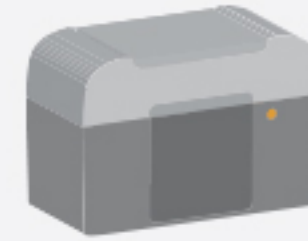### 1 service

Sculpteo.com printing service price per order
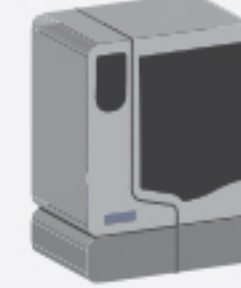
6 printers

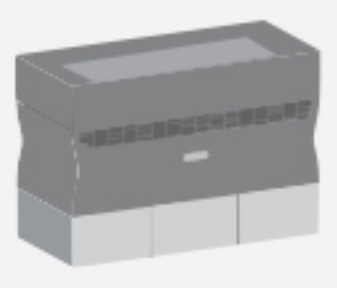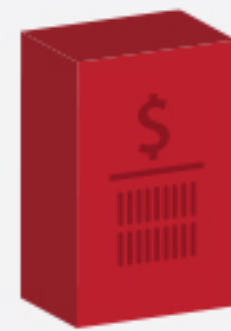|					
MakerBot Replicator 2x $2,799	formlabs Form 1 $3,299	Stratasys Mojo $9,900	Stratasys uPrint SE Plus $20,710	3D Systems ZPrinter 250 $24,900	Stratasys Objet30 Pro $43,000

Cost breakdown

- online price
- printer cost (divided by output over 3 year life)
- materials + maintenance
- labor + electricity
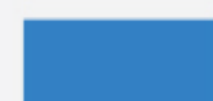

Hobbyst printers No cost added for labor

Professional printers $27 per hour added for labor

designed by Fredrik Aurdal

1" x½" x1"
23 x11.6 x23mm
volume: .4cm³
surface: 9cm²
print space: 6cm³

The cost to print a ring:

$8.37 Sculpteo online service	$9.34 MakerBot Replicator 2x	$11.01 formlabs Form 1	$33.10 Stratasys Mojo	$35.15 Stratasys uPrint SE Plus	$24.35 3D Systems ZPrinter250	$25.16 Stratasys Objet30 Pro

designed by Emmanuel Eymond

1.5" x1" x1"
37 x23 x23mm
volume: 3.8cm³
surface: 37.5cm²
print space: 15.8cm³

The cost to print a mini-figurine:

$8.25 Sculpteo online service	$8.76 MakerBot Replicator 2x	$11.22 formlabs Form 1	$25.14 Stratasys Mojo	$32.93 Stratasys uPrint SE Plus	$32.09 3D Systems ZPrinter250	$29.56 Stratasys Objet30 Pro

designed by Fabrice

2¾" x2¾" x12¾"
70 x70.6 x324mm
volume: 13.3cm³
surface: 179.5cm²
print space: 90.9cm³

The cost to print a GoPro mount:

$22.74 Sculpteo online service	$23.57 MakerBot Replicator 2x	$56.52 formlabs Form 1	$69.25 Stratasys Mojo	$71.37 Stratasys uPrint SE Plus	$57.16 3D Systems ZPrinter250	$60.46 Stratasys Objet30 Pro

Study compares the total cost of printing an object in white plastic on Sculpteo.com versus printing with a purchased 3D printer in the standard material. Printer cost is determined by retail price (before sales tax) of printer and installation costs divided by the total number of units (ie printer capacity) over a three year lifetime For professional printers, a labor cost of $27 per hour was included in the total cost of printing.