LAMPSHADE LATTICE

By

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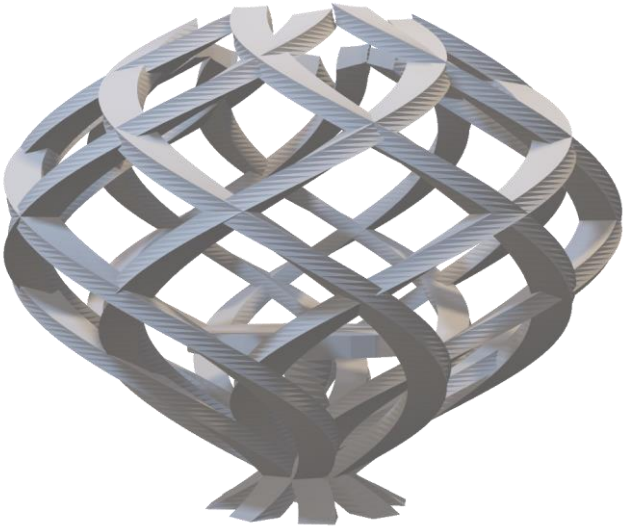
Personal late allowance used: 0 hrs.

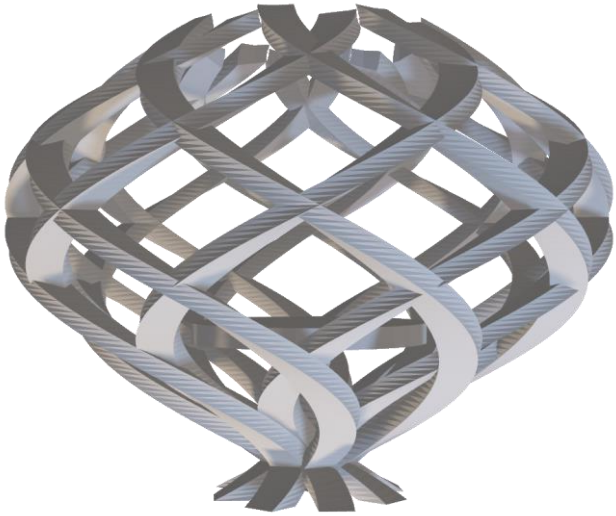
Personal late allowance remaining: 96 hrs.

SECTION-1

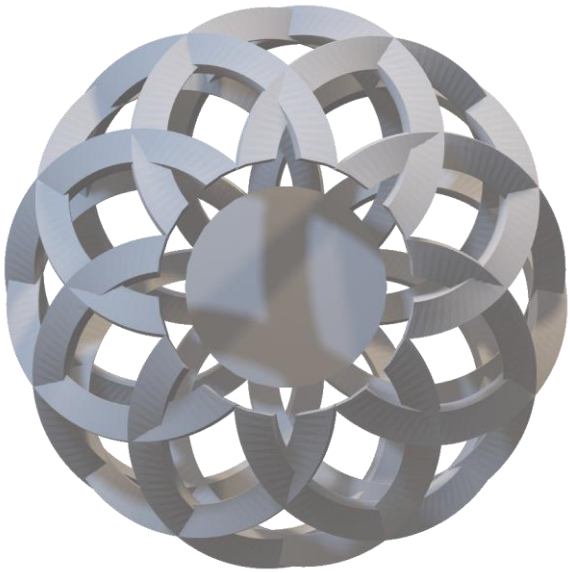
PERSPECTIVE VIEW



SIDE VIEW



TOP VIEW



SECTION-2

Code:

```
difference(){
//Clockwise threads.

for(i=[0:45:360])

   rotate(i)

translate([22,0,0])

linear_extrude(height = 75, center = true, convexity = 10, twist = 360, $fn = 100)

translate([-22, 0, 0])

square(5);

translate([0,0,-30])

cylinder(h = 30, r1 = 17.5, r2 = 17.5, center = true);

}

difference(){

//Counter-clockwise threads.

for(i=[0:45:360])

rotate(i)

translate([22,0,0])

linear_extrude(height =78 , center = true, convexity = 10, twist = -400, $fn = 100)

translate([-22, 0, 0])

square(5);

translate([0,0,-30])

cylinder(h = 30, r1 = 17.5, r2 = 17.5, center = true);

}

//Creating the light stand

  translate([0, 0, 13.5])

       linear_extrude(height = 24.0, twist = 270)

          square([5, 5], center = true);

translate([0,0,15])

cylinder(h = 3, r1 = 17.5, r2 = 17.5, center = true);
```

Algorithm:

1. For loop is used to make each strand. The first for loop is for clockwise strands.

2. Each strand is rotated by the specific angle ‘i’. The rotation angle ‘i’ determines the number of strands.

3. The linear_extrude of the square is used to make the strands.

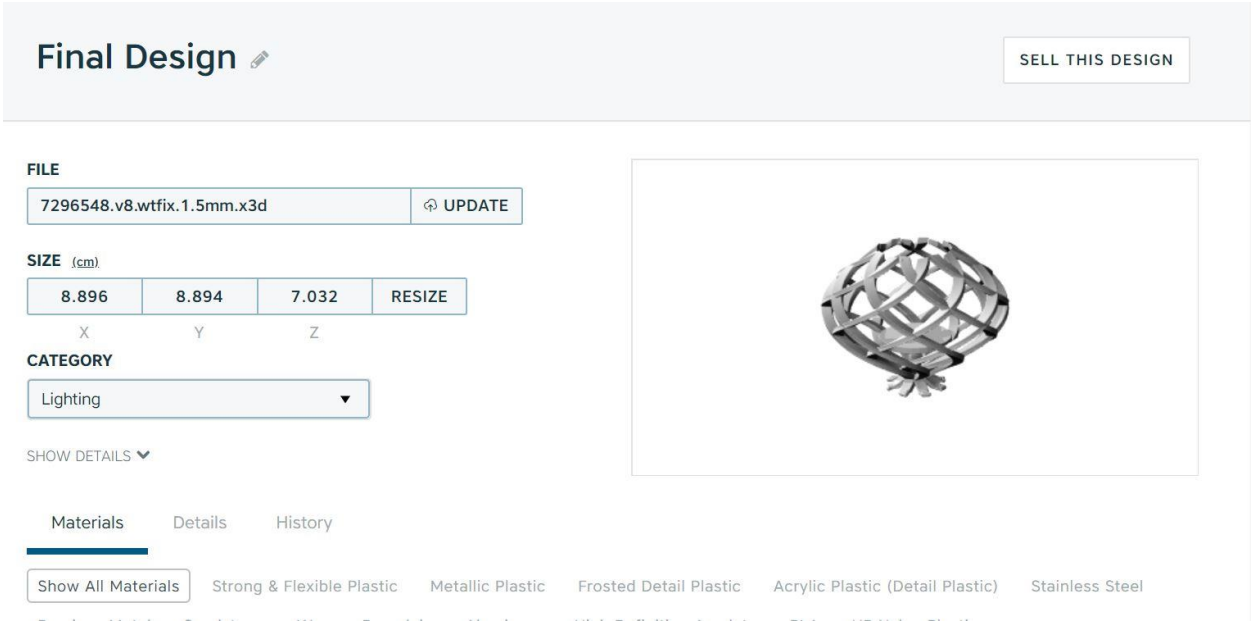
4. The difference of strands and cylinder taken to create a hole for putting in the given light inside lamp.

5. Second for loop is used to make anti-clockwise strands but is extruded till 400^{o} to make the bottom stand.

6. Last part of code is used to make a light stand inside the lamp shade.

SECTION-3

Shape ways Screenshots:



products.

- Jewelry

Material Finish	Auto Checks	Manual Checks	Success Rate	Price	Qty.	
White View 3D tools	Passed	—	—	$38.94	1	ADD TO CART
Black View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
White Polished View 3D tools	Passed	—	—	$39.44	1	ADD TO CART
Purple Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
Red Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
Pink Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
Blue Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
Elasto Plastic View 3D tools	Passed	—	—	$49.82	1	ADD TO CART
Yellow Polished	Passed	—	Screenshot (27).png - Photos	$39.94	1	ADD TO CART
Green Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
Orange Polished View 3D tools	Passed	—	—	$39.94	1	ADD TO CART
White Premium View 3D tools	Passed	—	—	$79.88	1	ADD TO CART
Black Premium View 3D tools	Passed	—	—	$79.88	1	ADD TO CART

Metallic Plastic

OVERVIEW

This nylon plastic filled with aluminum particles is suitable for both functional and decorative products. Slightly more brittle than Strong and Flexible.

CHARACTERISTICS

- Strong and durable
- Supports complex geometry

COMMON USES

- Phone cases
- RC car chassis
- Jewelry

TECHNOLOGY

Selective Laser Sintering

Material Finish	Auto Checks	Manual Checks	Success Rate	Price	Qty.	
Metallic Plastic View 3D tools	Passed	—	—	$62.13	1	ADD TO CART
Polished Metallic Plastic View 3D tools	View Issues	—	—	$62.63	1	ADD TO CART

 Raw Silver View 3D tools	✔ Passed	—	—	$1,010.41	1	ADD TO CART
 Raw Silver (Interlocking) View 3D tools	✘ View Issues	—	—	—	-	ADD TO CART
 Polished Silver View 3D tools	✔ Passed	—	—	$1,095.42	1	ADD TO CART
 Polished Silver (Interlocking) View 3D tools	✘ View Issues	—	—	—	-	ADD TO CART
 Premium Silver View 3D tools	✔ Passed	—	—	$1,350.44	1	ADD TO CART
 Raw Brass View 3D tools	✔ Passed	—	—	$502.93	1	ADD TO CART
 Raw Brass (Interlocking) View 3D tools	✘ View Issues	—	—	—	-	ADD TO CART
 Polished Brass View 3D tools	✔ Passed	—	—	$658.77	1	ADD TO CART
 Polished Brass (Interlocking) View 3D tools	✘ View Issues	—	—	—	-	ADD TO CART
 Raw Bronze View 3D tools	✔ Passed	—	—	$502.93	1	ADD TO CART
 14K Gold View 3D tools	✔ Passed	—	—	$14,004.51	1	ADD TO CART
 14k Rose Gold View 3D tools	✔ Passed	—	—	$14,004.51	1	ADD TO CART
 14k White Gold View 3D tools	✔ Passed	—	—	$14,004.51	1	ADD TO CART
 18k Gold View 3D tools	✔ Passed	—	—	$20,728.41	1	ADD TO CART
 Platinum View 3D tools	✔ Passed	—	—	$47,235.65	1	ADD TO CART
 14k Gold Plated View 3D tools	✔ Passed	—	—	$772.11	1	ADD TO CART
 14k Rose Gold Plated View 3D tools	✔ Passed	—	—	$772.11	1	ADD TO CART
 18k Gold Plated View 3D tools	✔ Passed	—	—	$772.11	1	ADD TO CART
 Rhodium Plated View 3D tools	✔ Passed	—	—	$772.11	1	ADD TO CART

White View 3D tools	View Issues	—	—	$18.23	1	ADD TO CART
Gray View 3D tools	View Issues	—	—	$18.23	1	ADD TO CART
Orange View 3D tools	View Issues	—	—	$18.23	1	ADD TO CART

HP Nylon Plastic

OVERVIEW

This nylon plastic has excellent material properties and is recommended for mechanical and functional products.

CHARACTERISTICS

- Superior strength
- Improved properties in the z-axis
- Supports complex geometry

COMMON USES

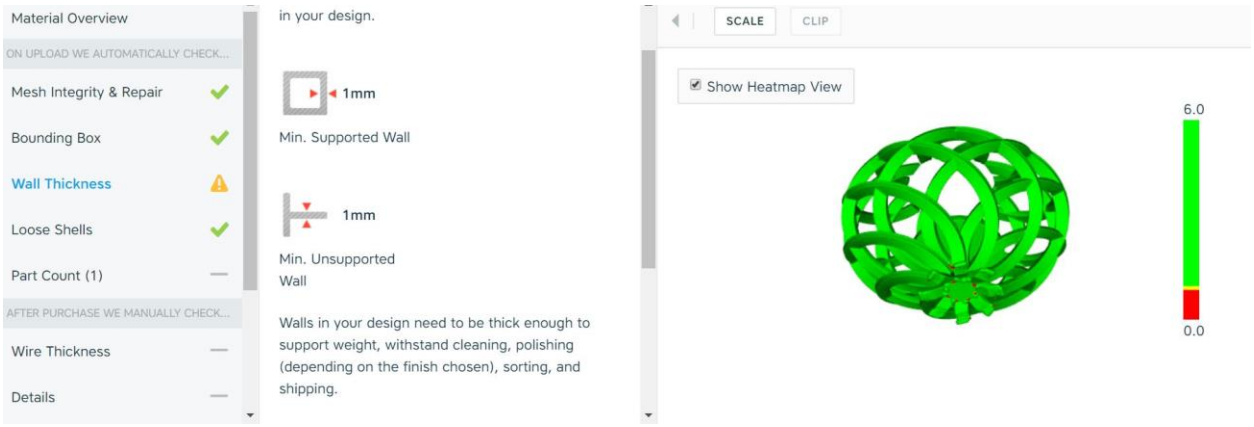
- Fixtures
- RC car chases
- Mechanical parts

TECHNOLOGY

Multi Jet Fusion

Material Finish	Auto Checks	Manual Checks	Success Rate	Price	Qty.	
Gray View 3D tools	Passed	—	—	$79.88	1	ADD TO CART
Black View 3D tools	Passed	—	—	$79.88	1	ADD TO CART

All the warnings are min. wall thickness which occurs at the corners:



SECTION-4

3D Printed Lampshade: