

<b>N.B.: Some of the parts of this knitting machine - especially the parts that need to be 3D printed and lasercut - don't have any tolerances. We really don't want you to make wrong prints or lasercuts, so please read the following tips carefully:</b>						
- This design includes many parts that need to be printed many times. Make sure you first make a test print to see if your print comes out well. If not you could change either the settings of the printer or the dimensions of the part.						
- The perspex that needs to be cut is sensitive. When we first cut it, some parts were bended and not accurate because of the settings of the laser. Perspex is not cheap, so first make sure the settings of the lasercutter are right!						
- Try to order as much parts as possible at the same website. This will save you shipping and service costs.						
<b>FRAME</b>						
Component		Amount	Description			
Framepart A		2	20x20 aluminium profile, 1785 mm			
Framepart B		1	30x30 aluminium profile, 1785 mm			
Framepart C		2	30x30 aluminium profile, 1200 mm			
Framepart D		4	30x30 aluminium profile, 400 mm			
Connecting plate A		2	2 mm aluminium plate (see solidworks model)			
Connecting plate B		4	2 mm aluminium plate (see solidworks model)			
Nut A		24	M5 head screw, 12 mm			
Connecting part A		40	rose krieger 30x30 M5			
Angled profile A		4	aluminium 2mm (DXF bestand)			
Screw A		16	M5 head screw, 12 mm			
Encoder rack		15	ultimaker print (STL file)			
<b>NEEDLEBED</b>						
Component		Amount	Description			
Needles		340	clean with degreaser and spray with silicone spray			
Printbed A		2	3 mm perspex, lasercut in 2 parts (DXF bestand)			
Printbed B		2	3 mm perspex, lasercut in 2 parts (DXF bestand)			
Printbed C		2	3 mm perspex, lasercut in 2 parts (DXF bestand)			
T-frame		2	aluminium T-profile, 1738 mm			

Needlebedframe A	2	20x20 aluminium profile, 1745 mm			
Needlebedframe B	2	30x30 aluminium profile, 1745 mm			
Needlebedframe C	4	20x20 aluminium profile, 215 mm			
Siliconespray	1	300 ml local hardware store			
Bears	2	ultimaker print (STL file)			
Legs	18	ultimaker print (STL file)			
Teeth-17	18	ultimaker print (STL file)			
Teeth-16	2	ultimaker print (STL file)			
Metal screw + nut	50	M3 x 20 mm			
Metal screw + nut	50	M3 x 10 mm			
Hexagonale nut	16	M8			
Washer	16	M8			
CARRIAGE					
Component	Amount	Description			
Carriage	2	ultimaker print (STL file)			
Carriage servo mount	4	ultimaker print (STL file)			
Encoder pinion	1	ultimaker print (STL file)			
N mount	2	ultimaker print (STL file)			
Servo beam mount	2	ultimaker print (STL file)			
Slider	2	ultimaker print (STL file)			
Slider guide	2	ultimaker print (STL file)			
Sled	2	ultimaker print (STL file)			
Sled arm	4	ultimaker print (STL file)			
Sled mount	4	ultimaker print (STL file)			
Top plate	1	ultimaker print (STL file)			
Top plate bearing	1	ultimaker print (STL file)			
Top plate servo mount	1	ultimaker print (STL file)			
Servomotor SG90	5	mini micro servo modelnumber 50X SG90 9gram 21.5x11.8x22.7 mm			
V-slot bearing 623	24	diameter 13 mm, diameter inside bore 3 mm, 4 mm width			
Stepper driver A4988	1	capacity 35 volt and max power 2 ampere, 0.019 kg weigth			

Thread		2	1 meter x 8 mm				
<b>OTHER</b>							
Component		Amount	Description				
2020 nut		37	ultimaker print (STL file)				
3030 nut		11	ultimaker print (STL file)				
Arduino mount		1	ultimaker print (STL file)				
Arduino		1	Arduino Leonardo				
Bearing 608 mount A		1	ultimaker print (STL file)				
Bearing 608 mount B		1	ultimaker print (STL file)				
Bearing 608		1	diameter 20 mm locale skateshop				
Belt		1	HTD open end, 4M diameter 6 mm				
Belt clamp		1	ultimaker print (STL file)				
Timing pulley		1	aluminium 6mm width with 20 teeth, 5mm width bore				
Stepper motor		1	stepper motor nema 17 4leads 40 mm motor bodylengthe, shaft diameter 5 mm				
Stepper mount front		1	ultimaker print (STL file)				
Stepper mount back		1	ultimaker print (STL file)				
Tensor		1	carbon bore 2 mm diameter, 1000 mm length				
Tensor holder A		1	ultimaker print (STL file)				
Tensor holder B		1	ultimaker print (STL file)				
Wax		1	yarn wax				
Wax holder		1	ultimaker print (STL file)				
Tie wraps		50±	100 mm				