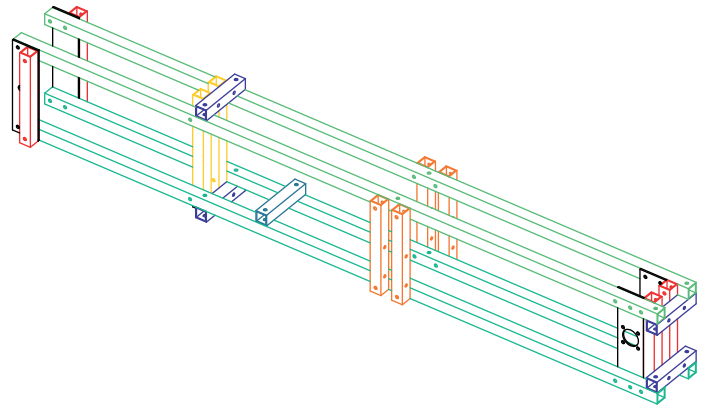




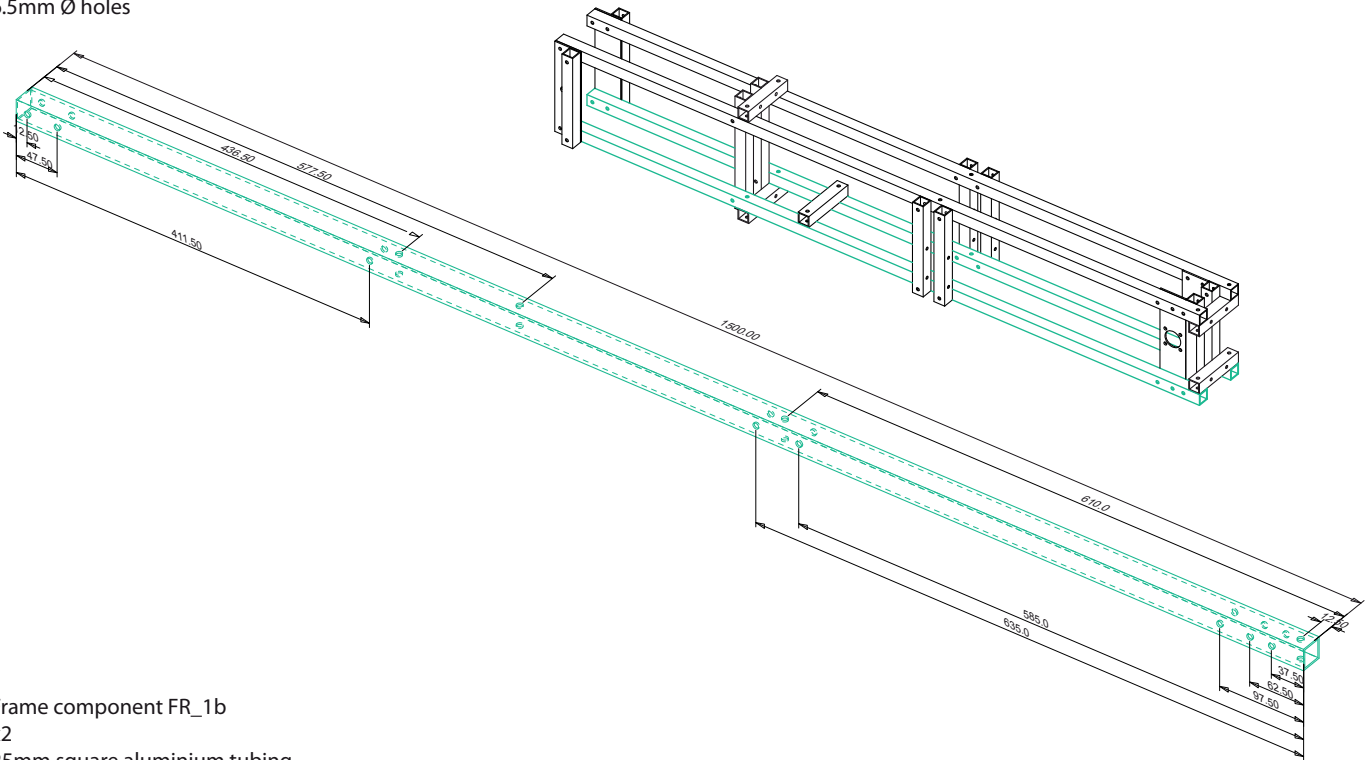
XYZ SPACEFRAME VEHICLES

XYZ SPACEFRAME VEHICLES enables persons to build their own vehicles for transporting persons or goods. XYZ SPACEFRAME VEHICLES is based on a low cost, light weight, highly durable construction requiring only simple hand-held, non specialized tools to produce. With XYZ SPACEFRAME VEHICLES, N55 offers a new alternative to mass produced traditional cycle products, often made from low grade materials and not made to last or being repaired. The designs of XYZ SPACEFRAME VEHICLES including any new construction principle used in the system and the XYZ construction and connection principle are Open Source provided under Creative Commons CC BY-NC-SA 3.0 (Noncommercial — You may not use this work for commercial purposes. Any use of the works must include proper credits to N55 and collaborator Till Wolfer and a link to www.n55.dk). Available construction plans can be downloaded at www.n55.dk. You can also purchase one of our XYZ CARGO models at www.xyzcargo.com and support the further development of XYZ SPACEFRAME VEHICLES. To test ride a XYZ CARGO or to talk to us, please drop by at our spaces in Kopenhagen (DK) or Gaengeviertel/Hamburg (GER). XYZ SPACEFRAME VEHICLES are developed by N55 in collaboration with Till Wolfer.

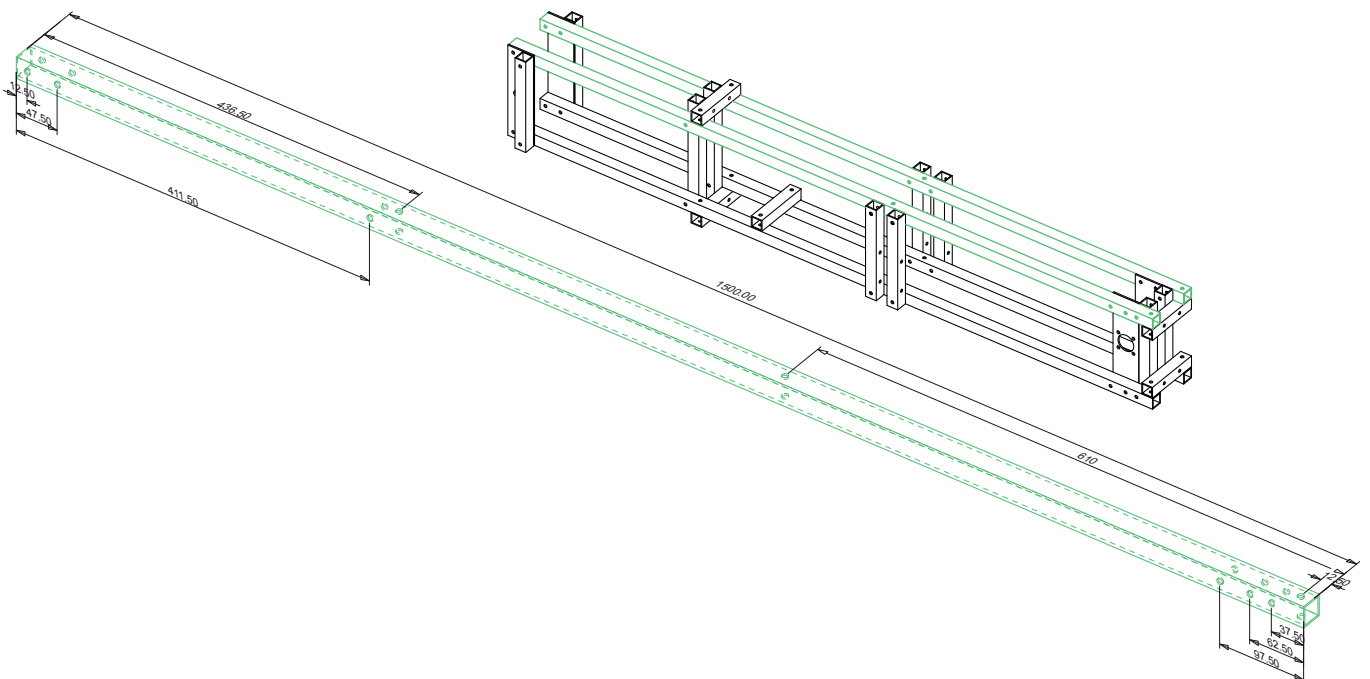
FRAME COMPONENTS



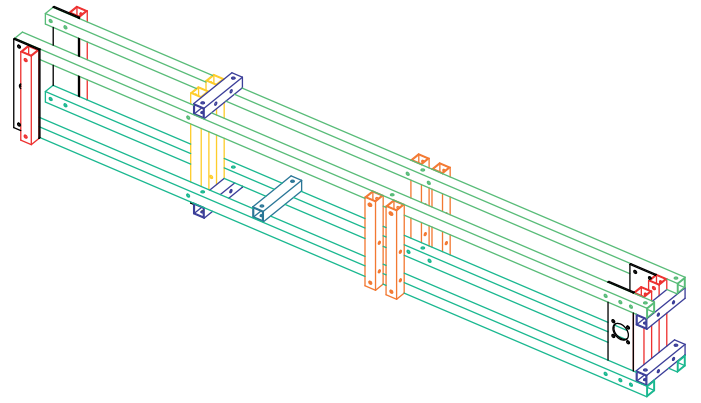
Frame component FR_1a
x2
25mm square aluminium tubing
2mm material thickness
6.5mm Ø holes



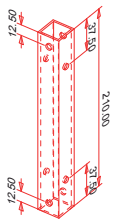
Frame component FR_1b
x2
25mm square aluminium tubing
2mm material thickness
6.5mm Ø holes



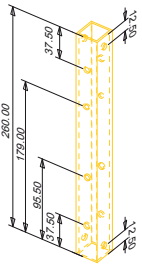
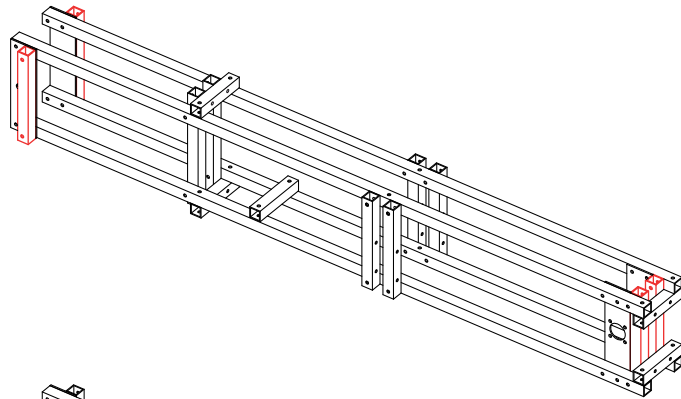
FRAME COMPONENTS



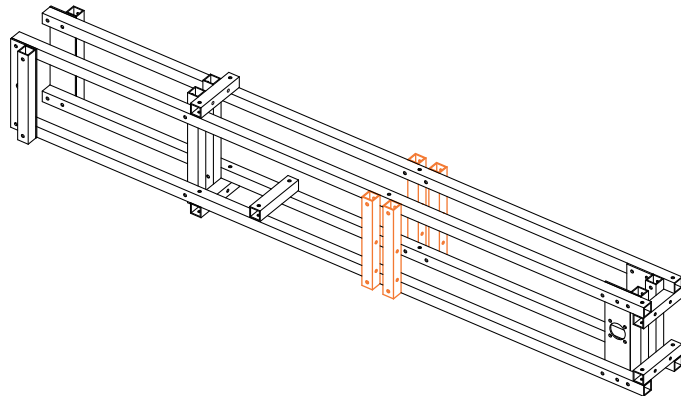
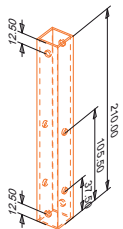
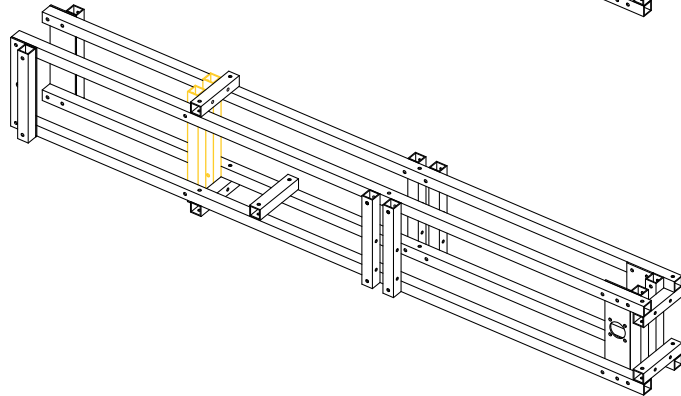
Frame component FR_2a
 x4
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



Frame component FR_2b
 x2
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes

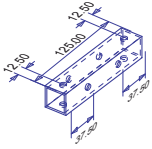


Frame component FR_2c
 x4
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes

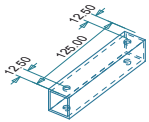


FRAME COMPONENTS

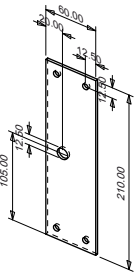
Frame component FR_3a
 x4
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



Frame component FR_3b
 x1
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes

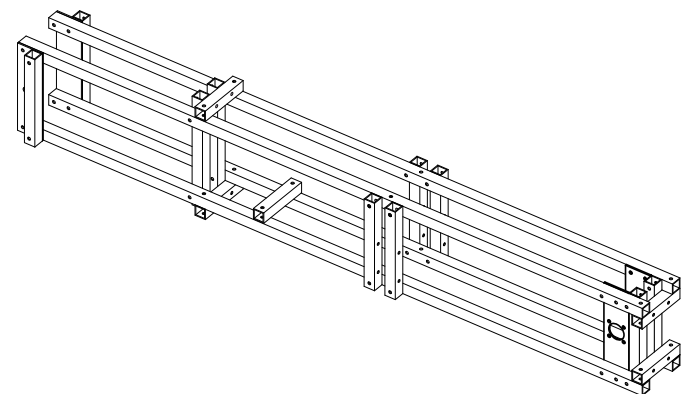
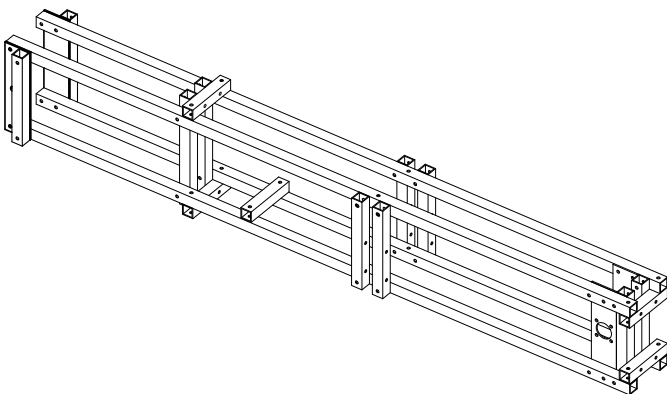
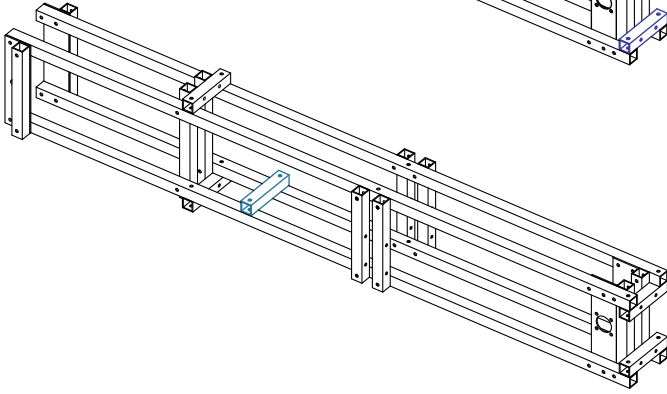
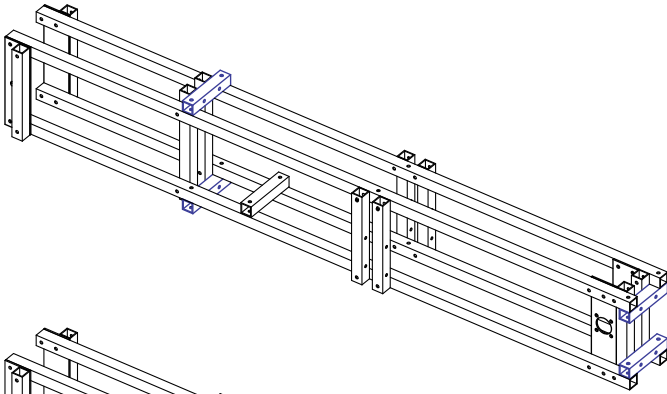
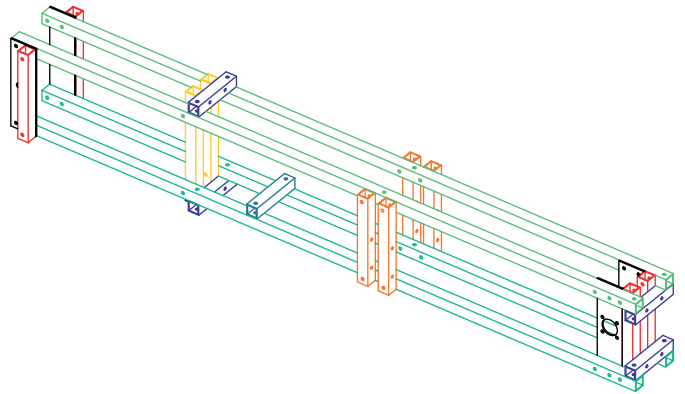
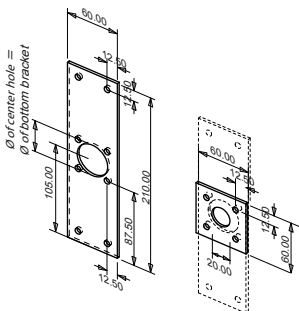


Frame component FR_4a
 x2
 3mm aluminium plate
 rear wheel cradle
 6.5mm Ø holes
 12.50 Ø rear wheel hub screw



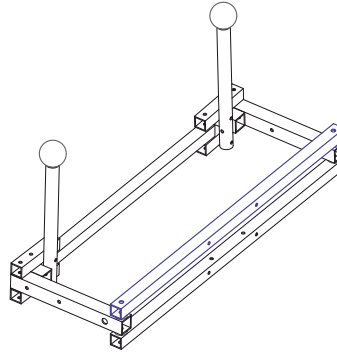
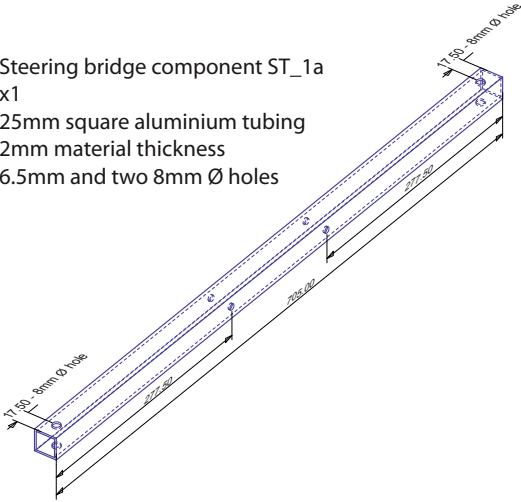
Frame component FR_4b
 x2
 Frame component FR_4c
 x2 (mounted on the outside of FR_4b)
 3x60mm aluminium plate
 6.5mm Ø holes

NOTE: The diameter of the big center hole has to equal exactly the size of the outer diameter of the bottom bracket's end caps:

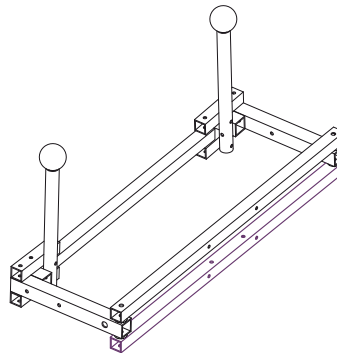
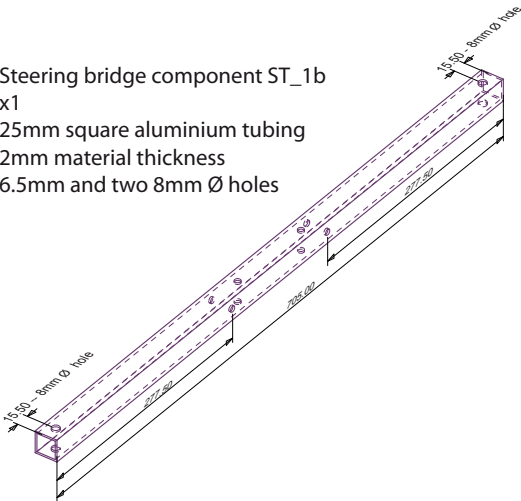


STEERING BRIDGE COMPONENTS

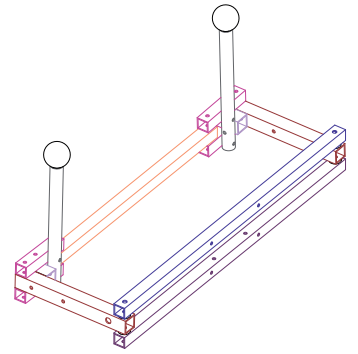
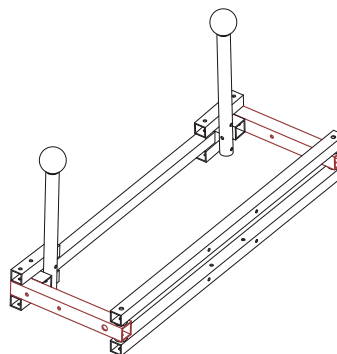
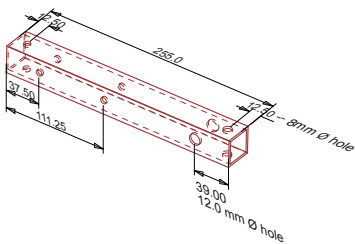
Steering bridge component ST_1a
 x1
 25mm square aluminium tubing
 2mm material thickness
 6.5mm and two 8mm Ø holes



Steering bridge component ST_1b
 x1
 25mm square aluminium tubing
 2mm material thickness
 6.5mm and two 8mm Ø holes

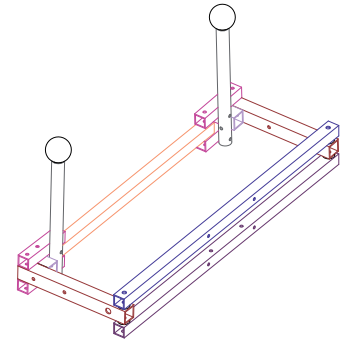
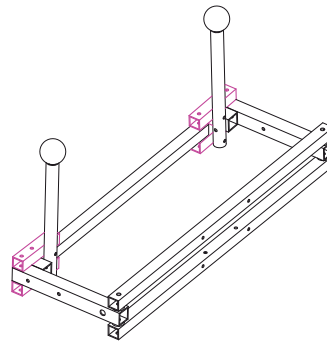
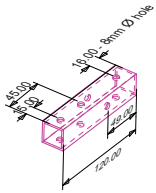


Steering bridge component ST_2
 x2
 30mm square aluminium tubing
 3mm material thickness
 6.5mm, 8mm and 12mm Ø hole

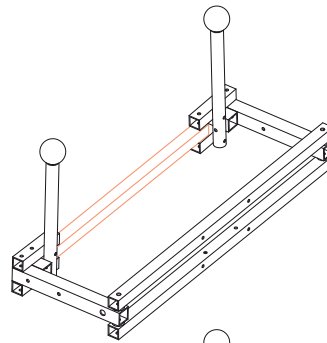
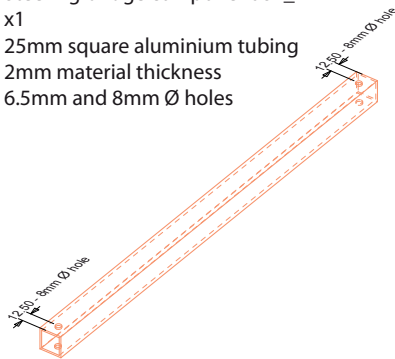


STEERING BRIDGE COMPONENTS

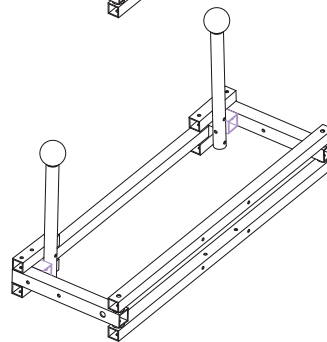
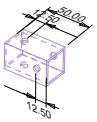
Steering bridge component ST_3
 x4
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



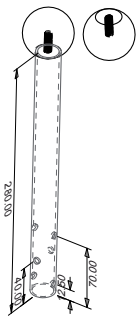
Steering bridge component ST_4
 x1
 25mm square aluminium tubing
 2mm material thickness
 6.5mm and 8mm Ø holes



Steering bridge component ST_5
 x2
 3x30x30mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



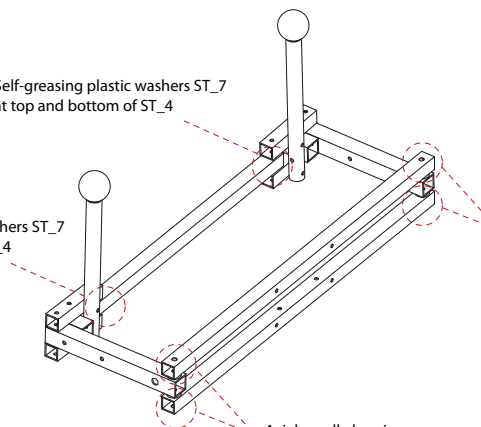
Steering bridge component ST_6
 x2
 20mm diameter round aluminium tubing
 2mm material thickness
 6.5mm Ø holes
 Frame component ST_6
 x2
 50mm diameter nylon sphere w. thread



Self-greasing plastic washers ST_7
 at top and bottom of ST_4

Self-greasing plastic washers ST_7
 at top and bottom of ST_4

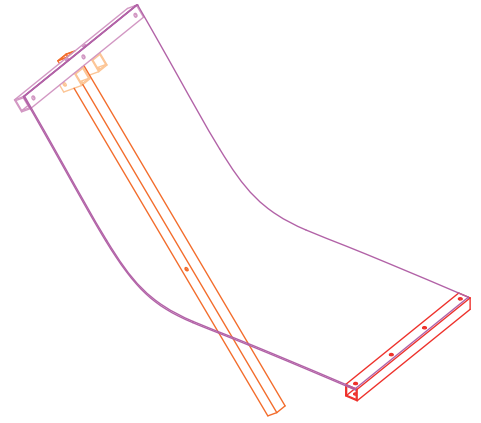
Axial needle bearings
 or self-greasing plastic washers
 at top and bottom of ST_2



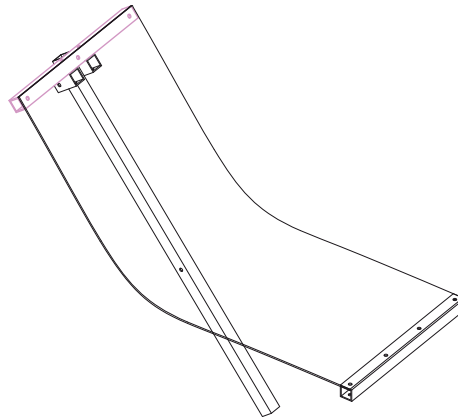
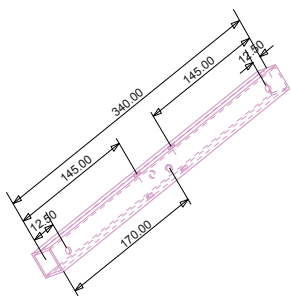
Steering bridge component ST_7
 x4
 ca. 23.50 mm Ø plastic washer (M8-hole), 5mm thickness
 or Axial needle bearings with M8-hole



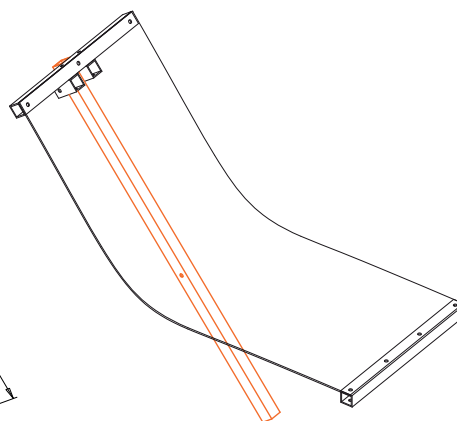
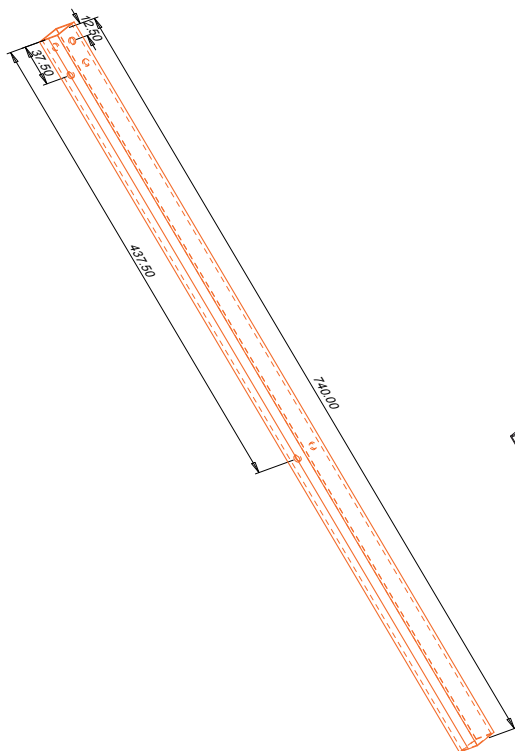
SEAT COMPONENTS



Seat component SE_1
x1
25mm square aluminium tubing
2mm material thickness
6.5mm Ø holes

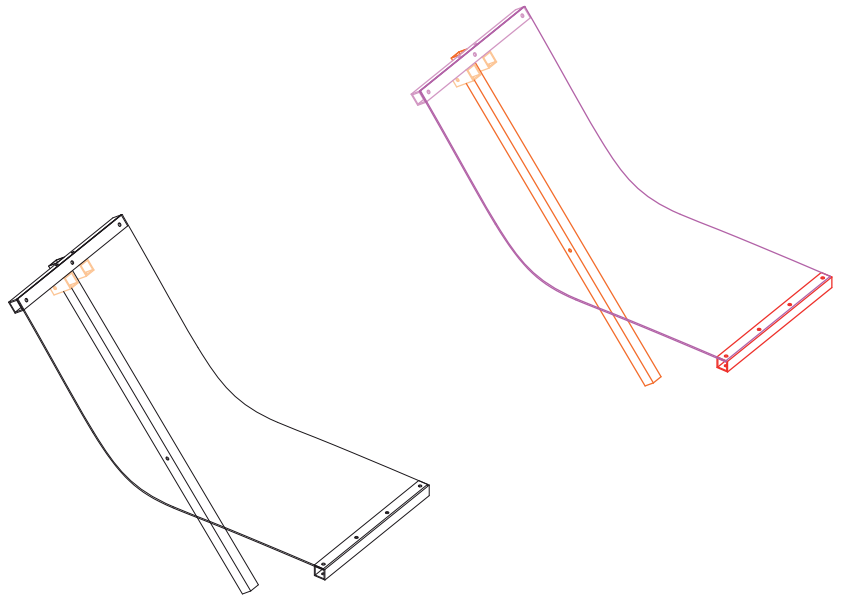
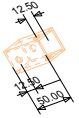


Seat component SE_2
x1
25mm square aluminium tubing
2mm material thickness
6.5mm Ø holes

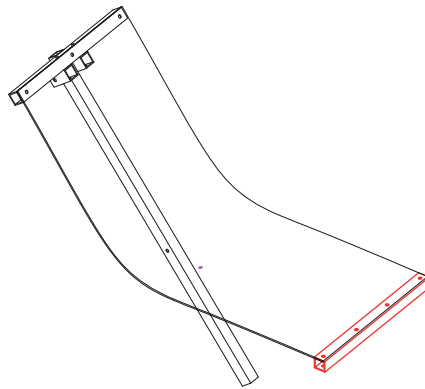
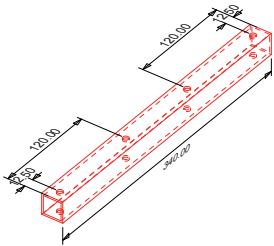


SEAT COMPONENTS

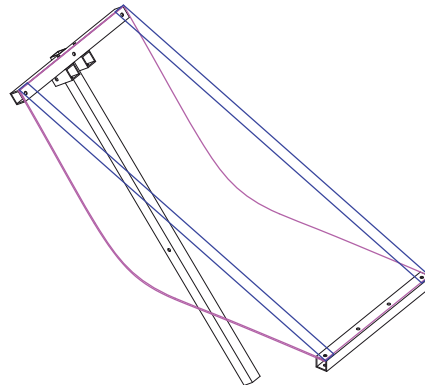
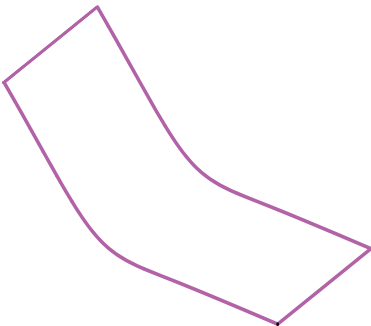
Seat component SE_3
 x2
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



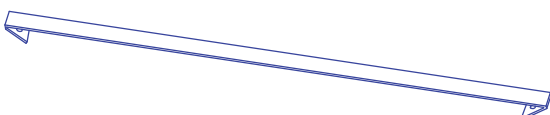
Seat component SE_4
 x1
 25mm square aluminium tubing
 2mm material thickness
 6.5mm Ø holes



Seat component SE_5
 x1
 3mm polycarbonate plate
 340.00 x 880.00 mm



Seat component SE_6
 x2
 25mm nylon ribbon black
 total length ca. 820mm



STANDARD COMPONENTS

BACK WHEEL 26"x1.75

preferably:

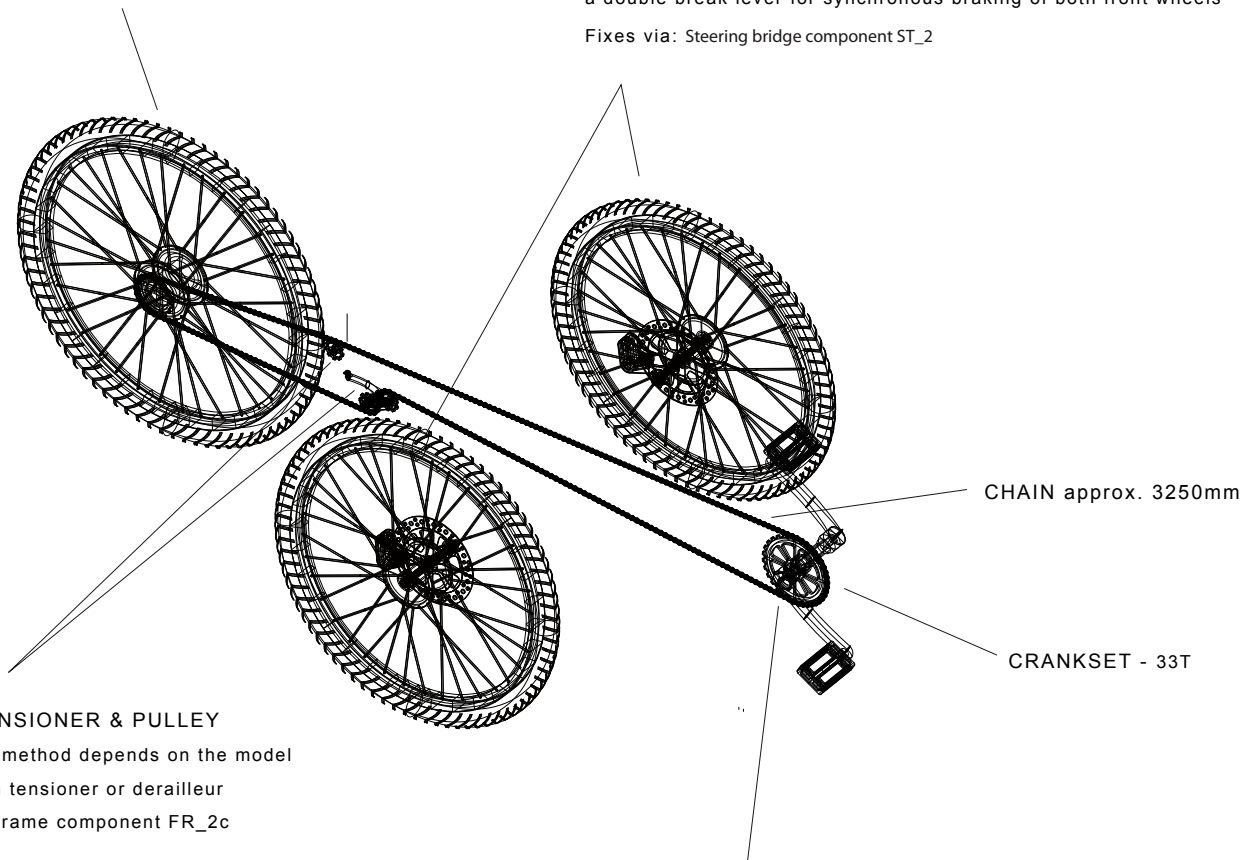
Shimano Nexus 8 gear internal hub with GripShift,
including rollerbrake system and brake lever,
wheel: reinforced spokes 2.34mm, double wall rim
and punctureproof tires

Fixes via: Frame component FR_4a

FRONT WHEELS 24"x1.75

equipped with a reinforced axle (M12, 8.8) for one-sided attachment,
preferably: mirrored drum brakes or disc brakes and
a double break lever for synchronous braking of both front wheels

Fixes via: Steering bridge component ST_2



CHAIN TENSIONER & PULLEY

attachment method depends on the model
of the chain tensioner or derailleur

Fixes via: Frame component FR_2c

CHAIN approx. 3250mm

CRANKSET - 33T

BOTTOM BRACKET

length min. 127.5mm

casing: full steel (no aluminum or plastics)

Fixes via: Frame component FR_4b

MISCELLANEOUS:

- Brake cables, socks and cable caps: length depending on realized layout
- Gear cables, socks and cable caps: length depending on realized layout
- FlexiPipe: 2 pieces (optional)
- 1x 26" and 2x 24" bicycle tube
- M12 x 160mm axles, strength min. 8.8: 2 pieces, incl. selfsecuring nuts and 4x M12 washers
- Bike light front & rear

B I L L O F M A T E R I A L S :

B O L T S & N U T S

M6 SELFLOCKING NUTS, stainless (DIN985) - ca. 150 pieces (TWOSEATER: 200 pieces)

M8 SELFLOCKING NUTS, stainless (DIN985) - ca. 5 pieces (TWOSEATER: identical)

M8 NUTS NORMAL, stainless - ca. 5 pieces (TWOSEATER: identical)

M6 and M8 BOLTS with Hexagon head, stainless, (DIN931):

6mm x 140 mm - ca. 2 pieces (TWOSEATER: 3 pieces)

6mm x 90 mm - ca. 15 pieces (TWOSEATER: 20 pieces)

6mm x 90 mm - ca. 5 pieces in DIN 933 (full thread) (TWOSEATER: identical)

6mm x 60 mm - ca. 60 pieces (TWOSEATER: 120 pieces)

6mm x 65 mm - ca. 10 pieces (TWOSEATER: identical)

6mm x 40 mm - ca. 25 pieces (TWOSEATER: identical)

8mm x 120mm, 2 pieces (TWOSEATER: identical)

8mm x 100mm, 2 pieces (TWOSEATER: identical)

M6 WASHERS - ca. 300 pieces (TWOSEATER: 400 pieces)

M8 WASHERS - ca. 10 pieces (TWOSEATER: identical)

A L U M I N I U M

2x25x25mm ALUMINIUM SQUARE TUBE: 15m (TWOSEATER: 34m)

3x30x30mm ALUMINIUM SQUARE TUBE: 1m (TWOSEATER: 2.5m)

4x60mm ALUMINIUM FLAT: 1m (TWOSEATER: identical)

2x22mm ALUMINUM ROUND TUBE Ø22mm: 1m

P L A S T I C S

3x880x340mm POLYCARBONATE SHEET (TWOSEATER: 2 times)

ENDCAPS (PE), black, for 2x25x25 tubing: ca. 70 pieces (TWOSEATER: 100 pieces)

ENDCAPS (PE), black, for 3x30x30 tubing: ca. 10 pieces (TWOSEATER: 15 pieces)

POM or PE black, round Ø 25mm: ca. 0,3m (TWOSEATER: 0,5m)

POM or PE black, square 21x21mm: ca. 0,6m (TWOSEATER: 0,5m)

POM or PE WASHERS M8: ca. 20 pieces (TWOSEATER: identical)

M I S C E L L A N E O U S

AXIAL NEEDLE BEARINGS M8: 4 pieces (TWOSEATER: identical)

NYLON SPHERE w. screwthread, black, diameter 50mm: 2 pieces (TWOSEATER: identical)

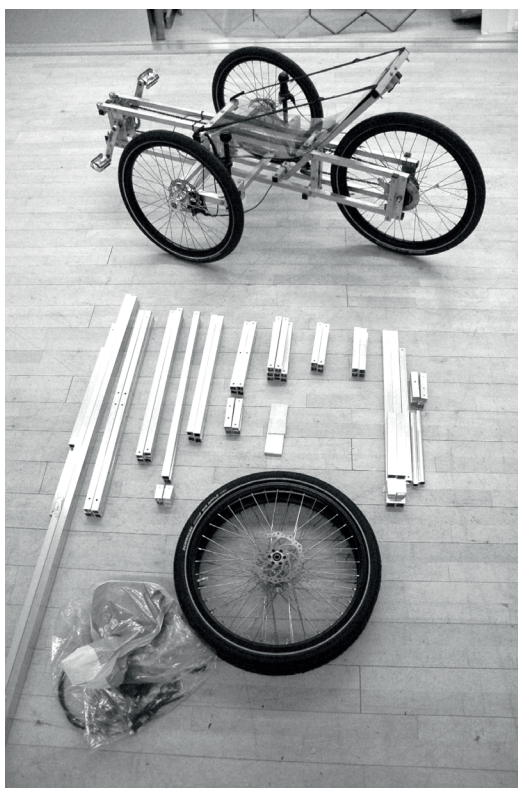
NYLON RIBBON, black, width 25mm, for seat side support: 1,7m (TWOSEATER: 3,5m)

All amounts include some spare pieces.

Nonetheless: please consider ordering extra amounts.

Mistakes during production of parts as well as

new developments will need more bolts & tubing.



N55 art etc.

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www.xyzcargo.com

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