



BOX
2.78

MUSTIKAINEN

RAUTKOSKI

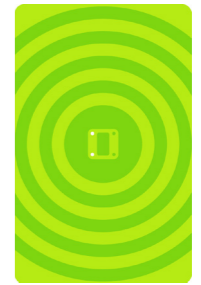
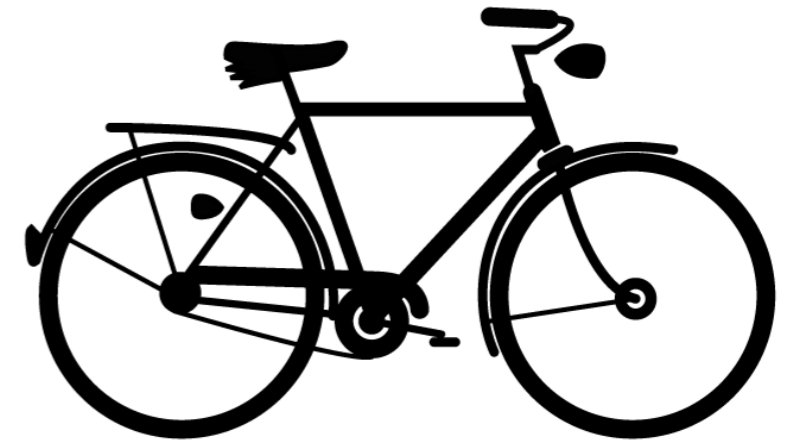
HEIKKINEN

How to move everyday products like shopping bags, small household items, hobby items etc. in easy and simple way **by bicycle** in the city environment with style?

USERS



PEOPLE WHO LIVE IN THE CITY ENVIRONMENT AND USES BICYCLE IN THEIR EVERYDAY LIFE TO MOVE AROUND





EXISTENSE TRAILER SOLUTIONS



IN YEAR 2012 TWO DESIGNS WAS
MADE FROM THE SAME TOPIC



Hänninen, Järvinen, Raudaskoski ja Venäläinen

BUGGY consentrated
moving things in
light and easy way.



The **T r i g o**

Simply, take it further...



Ville Hela-Aro
Jarno Lindberg
Rochale Yates

THE TRIGO consentrated
how to move children by
bicycle easy and safe way.

The product is fixable
on average bicycle

The product is designed for city
so it doesn't look like
camping equipment

Match with the
bicycle look

QUALITIES

Achievable
price

The attachmet is
easy and quick to use

Narrow and light construction



The Weber Monoporter

“Designed for cycling tours in the nature especially for cycling travel.”

One wheel, joins into the hub axle from both side
Quick assembly
Folding

Price 430€
Max weight: 22kg
Trailers weight: 5,75kg
Overall length: about 150cm



Extrawheel

“Is very practical set for both short trips and long journeys.”

The luggage is on the both side of the wheel in bike packers
Quick assembly to the hub axle from both side

Price: 360€
Max weight: 35kg
Trailers weight: 4,75kg
Overall length: about 70cm



The Heavy Duty Trailer

“A large trailer designed to haul your heavier supplies. Shopping for the family, camping supplies, business supplies, gardening stuff.”

Two wheels
Joins into the hub axle from one side

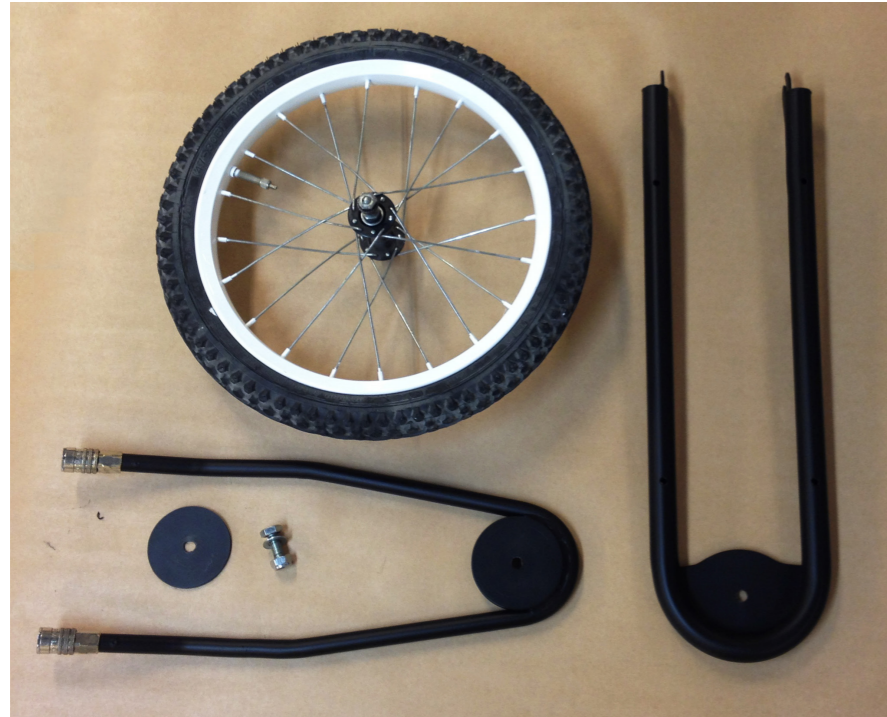
Price 260€
Max weight: 68kg
Trailers weight: 8kg
Overall length: about 152cm

TEST MODEL



We made a rough model from an old bicycle parts to test how the frame would work and see the proportions.





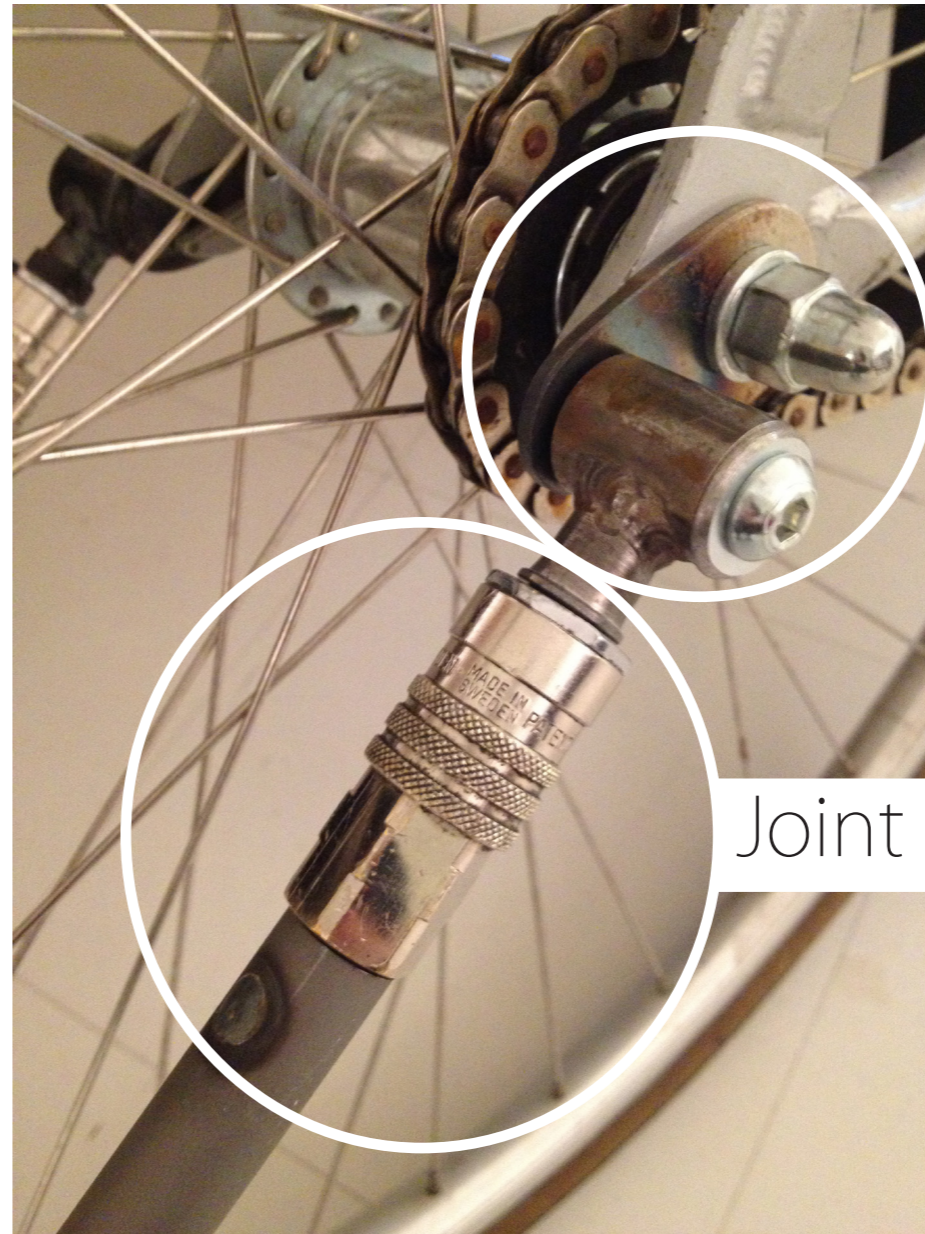
FRAME

Consist from two forks, which are made from steel or aluminium pipe. The forks are attach to each other in the middle. The joint where the trailer turns is in between of them. This is how we were able to keep the frame short and lightweighted.

ATTACHMENTS

There is two parts that will be attached to bicycles hub axle. You can have many of these small parts which can be attached to different bicycles at the same time. The trailer joins into these two parts easy and quick way.

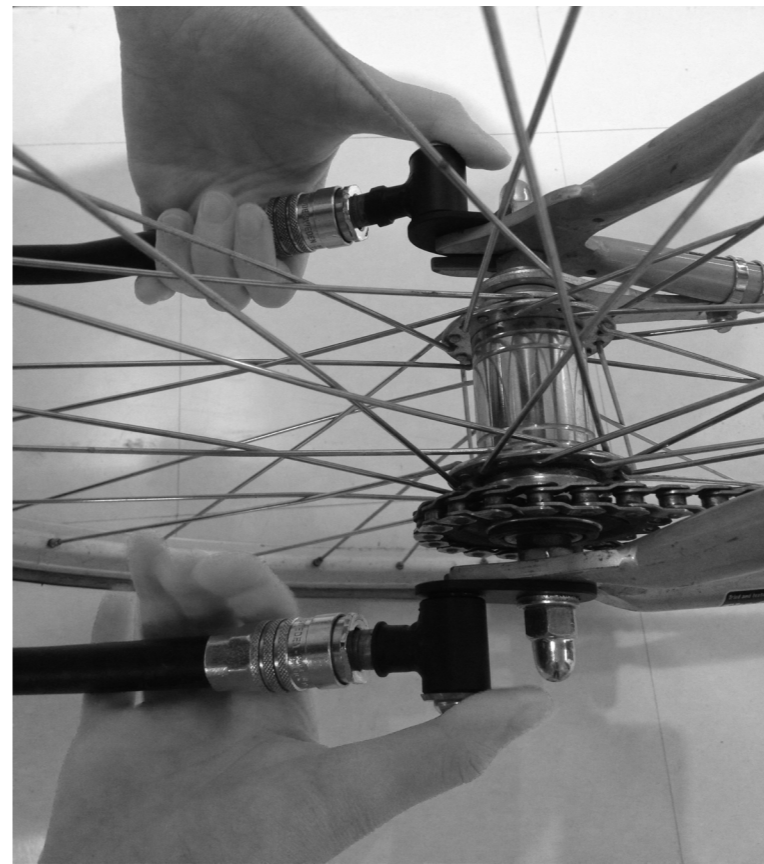
Reason to attach the trailer to hub axle is that the rack remains free for children safe seat and the trailer will be more stabile.



Axle hub part

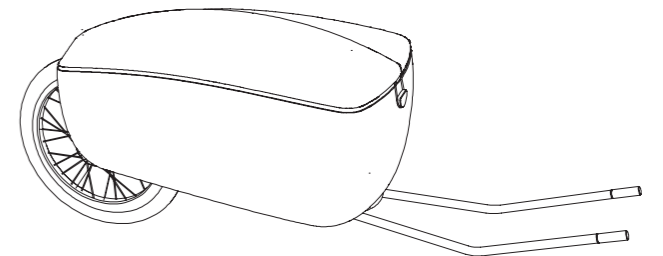
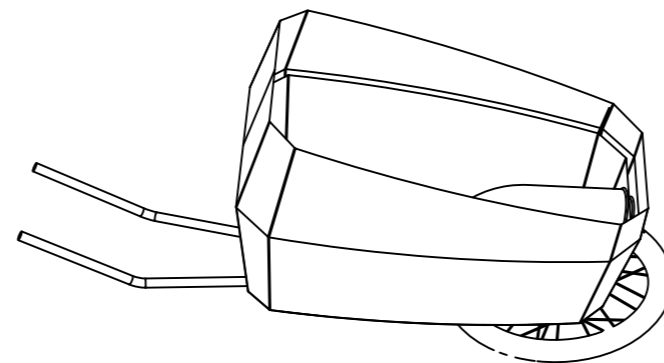
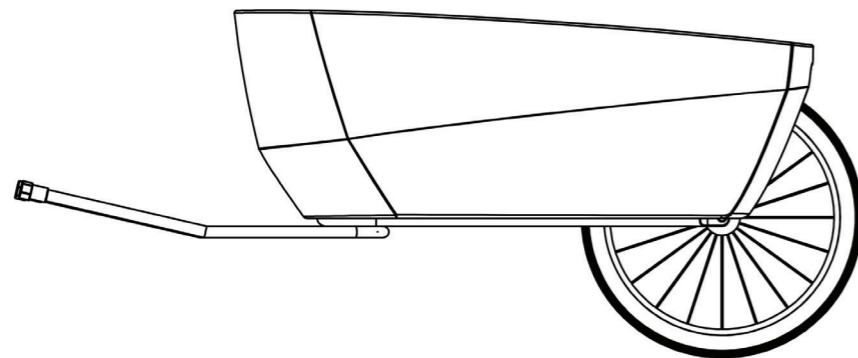
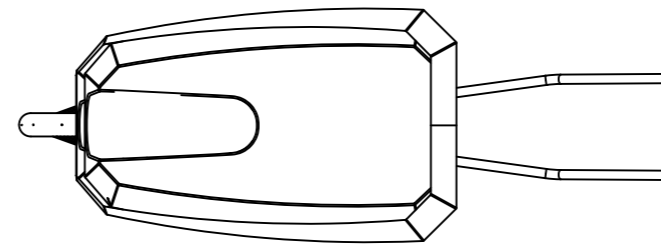
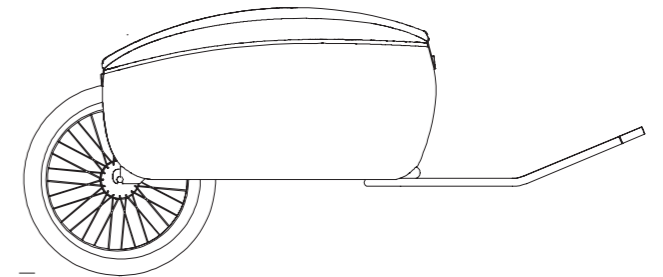
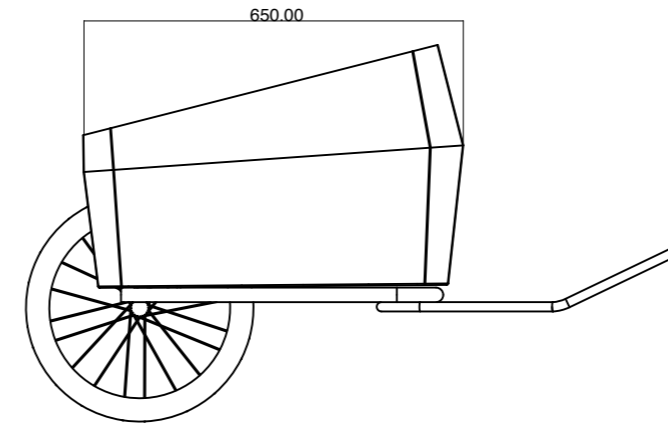
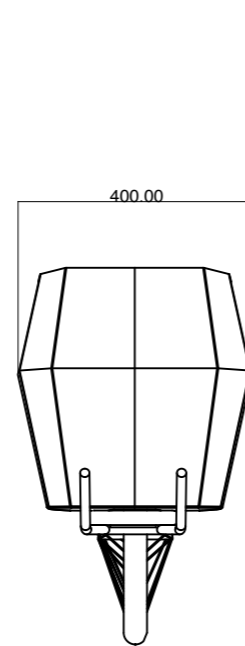
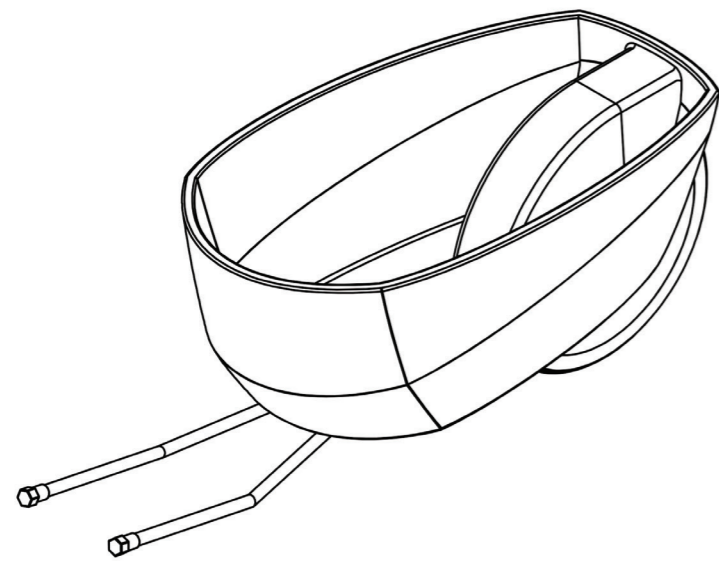
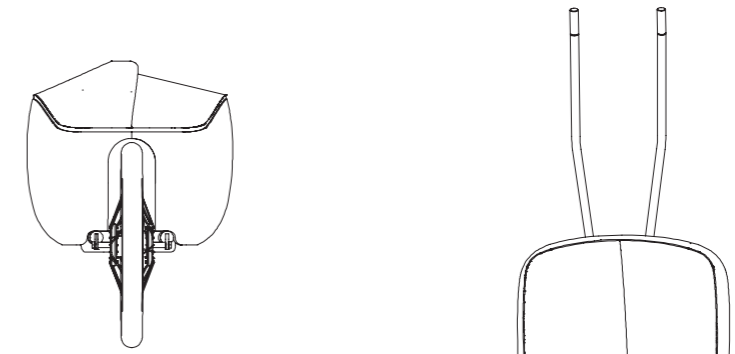
Joint point of the trailer

this is how the attachment works



the box

Made from high-density polyethylene. The box is attached to the frame from the bottom. The cover is made from fabric.





frame proto

test
box



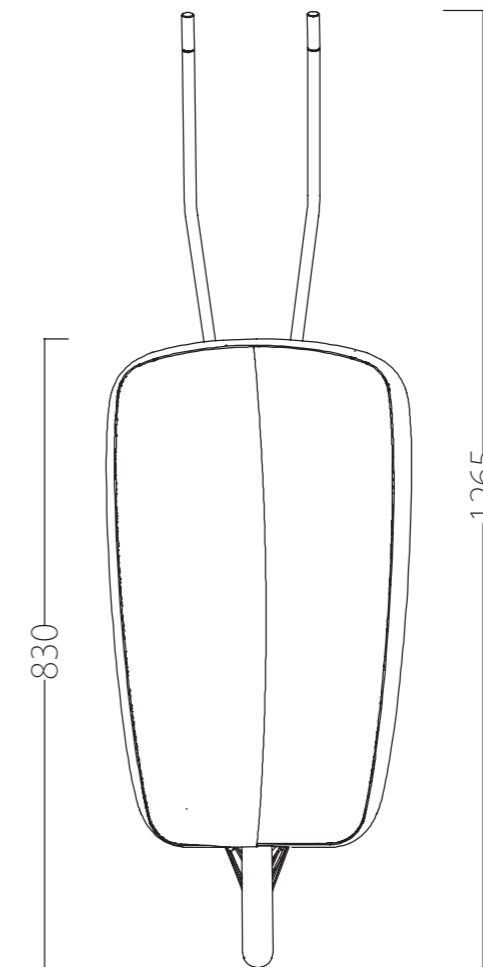
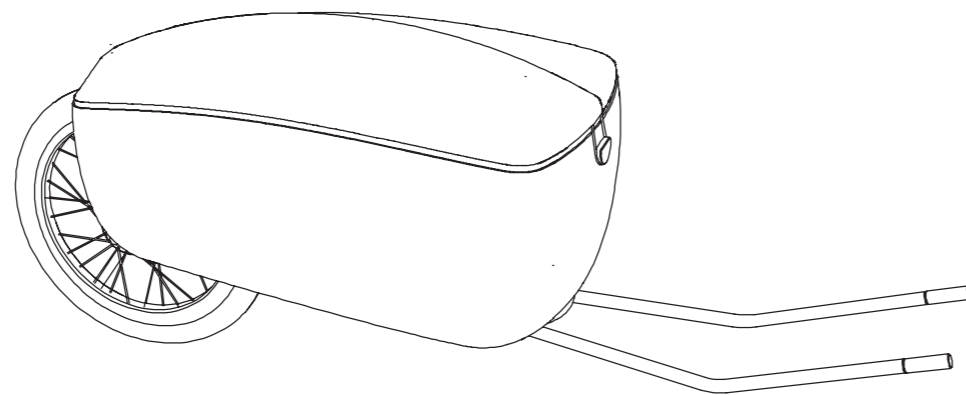
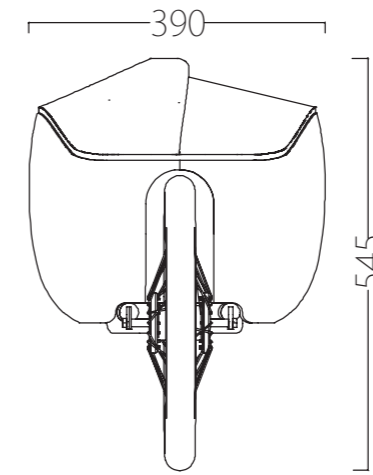
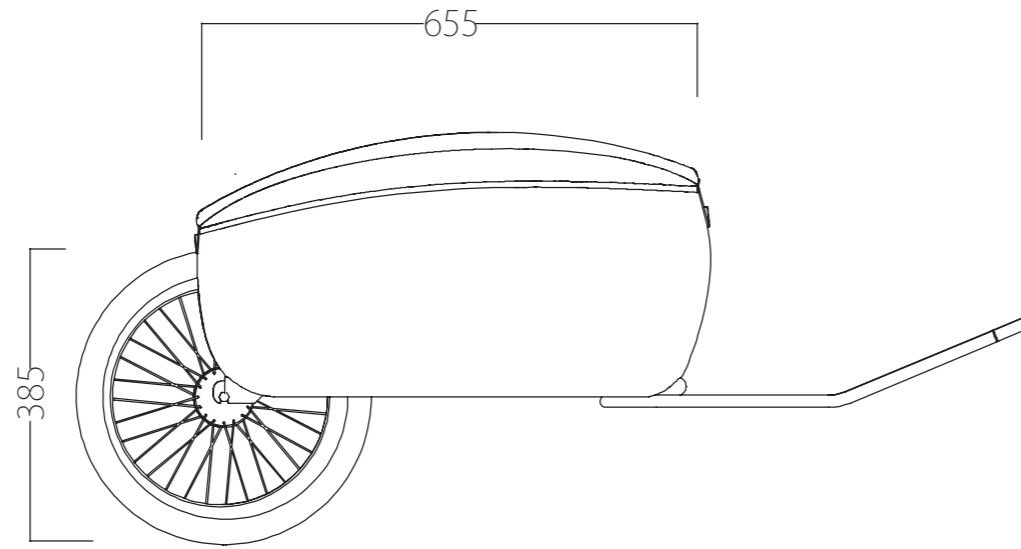
BOX2.78

“Designed for daily use, specially for grocery shopping, in city environment”

One wheel, joins into the hub axle from both side
Quick assembly
Narrow construction

Price: 80-150€
Max weight: ~25kg
Trailers weight: 6kg
Overall length: 80cm

CONSEPT LOOK



1:10 DIMENSIONS





Liikkuvan Arjen Design



Helsinki
Metropolia
University of Applied Sciences



Uudenmaan liitto
Nylands förbund

Leverage from
the EU
2007-2013



European Union
European Regional Development Fund