Mini Velo

How do we make commuting fun?

Which bike is right for you?

Where are you riding

Urban Areas

Road

Off-road

Mixed surface

What do you need your bike to do?

Transportation

Cargo

Sport

How are you riding?

Aggressive & Head Down

vs

Leisurely & Up Right

When are you riding?

For fun

Commuting

Exercise

Why Minicom?

Rider Profile

- Commuting day to day
- Wants to save space
- Bike enthusiast
- Enjoys quirky design

Features

Weighing in under 22 lbs fully built it's **easy to carry**

Shortened wheelbase gives the bike **responsive handling**

Wide tires allow **adaptability** to **various terrain**

Advantages for Minicom user

Frame Design Prioritize:

Ride Quality

Durability

Handling

Compatibility with standard components

Comparison to Competitors

Kyoot Bikes

- Mixed terrain
- Heavy construction
- BMX components

Tern bikes

- Light weight
- Not widely available (JP Market)

Comparison to Competitors

Toyko bikes

- Heavy
- Few Gears

Velo Orange Neutrino

- Mixed Terrain
- Middleweight
- Robust

Design process

V1 Model


cafe
archway
MARKET TABLE ☆ WINE BAR
576 MARKET TABLE - CAFE - WINE BAR 718.522.3455
BROOKLYN BREWERY
OPEN

User Testing

Cole Bennett

Weis MFG

Booklyn, New York

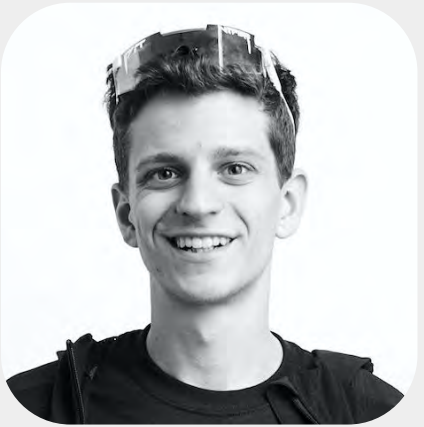
Custom bike maker

Pablo Rivera

King Kog

Booklyn, New York

High end bike shop manager



Max Pratt

Nice Bikes

Providence, Rhode Island

Custom bike maker

User Testing

Pros

- Weight
- Maneuverability
- Fun
- Cool construction
- Unique look

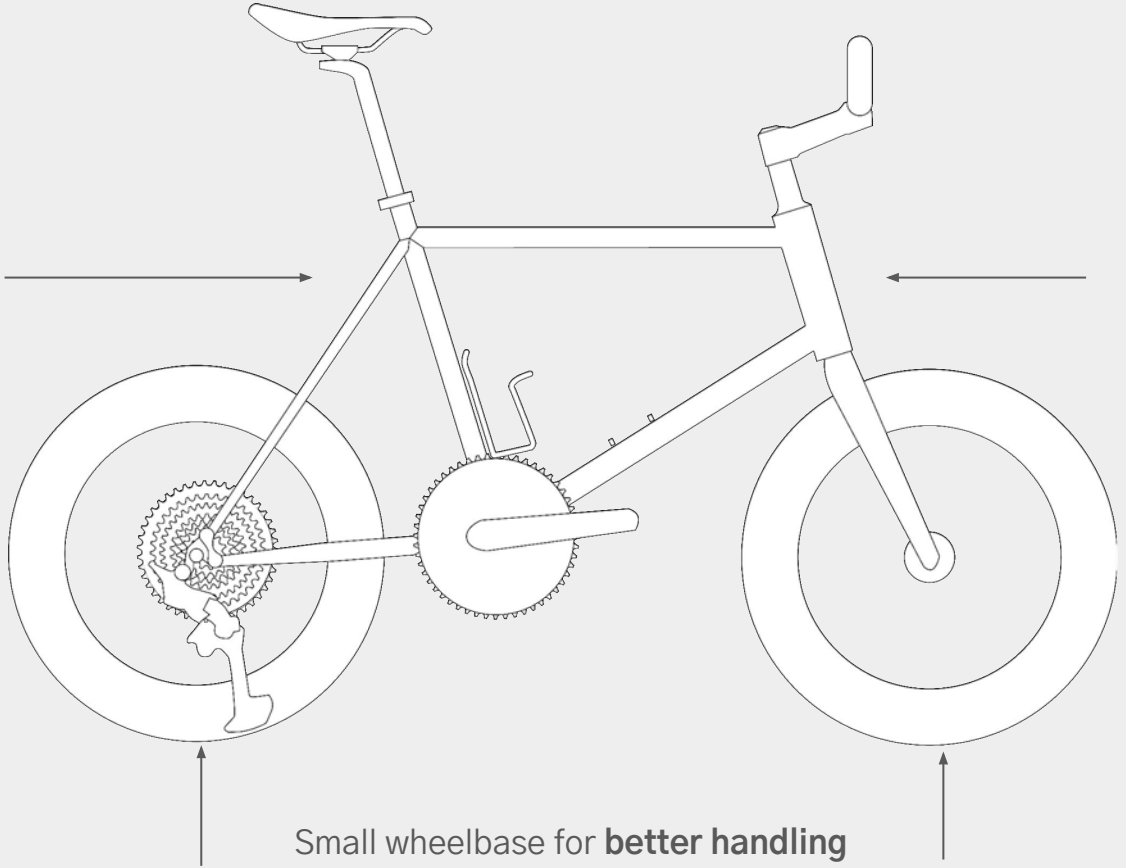
Cons

- Could be lighter
- Stiffness
- Sub par components
- Comfort
- Riding position
- Stability

Geometry

Longer rear triangle compared to V1 to improve **ride quality** through seatstay compliance.

Shift rider weight to center for **easier handling**.



Long headtube to increase handlebar height for **comfort** and assist in **stiffness** of carbon fork.

Small wheelbase for **better handling**

Design Decisions

Should it fold or have electric assist?

Folding and electric bikes are both over complicated and overweight

They pose too many tradeoffs in terms of weight, handling, and cost, all while degrading the fundamental experience of riding a bicycle

Design Decisions: Wheels and Tires

Larger tires have numerous benefits including cornering, rolling resistance, ride quality, and compliance through rough terrain

Smaller wheels not only **decrease the overall size** of the bike, but also are **stronger**, **lighter**, more compliant over bumps, provide more responsive steering, and accelerate faster than normal wheels.

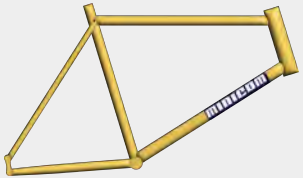
The minicom features a wide range of gears in its rear cassette to accommodate for both **hill climbing and top speed**. Smaller wheels affect the final drive of the bike so the **52x42-11** ratios balance rideability over all terrain while still boasting a moderate top speed of around **15 MPH**

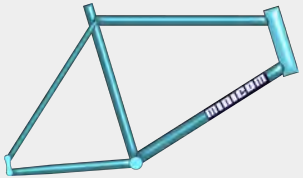
Design Decisions: Weight

- Minimized frame weight through thin .4mm wall butted tubing and full carbon fork for a total frameset weight of 4 lbs, over 2 lbs lighter than the closest competitor model

- This combined with the lightweight 1400g wheelset and quality components further reduce weight, with the final bike tipping the scales at just over 21 lbs despite its robust build

Design Decisions: Paint

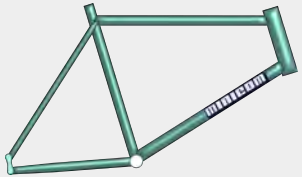

Citrus

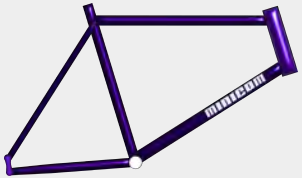

Sea Foam

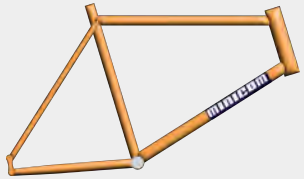

Royal Fade


Midnight


Boreal

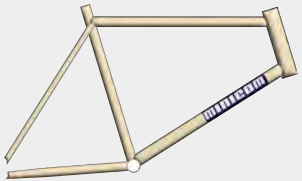

Tundra

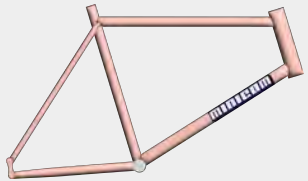

Blackberry


Mandarin

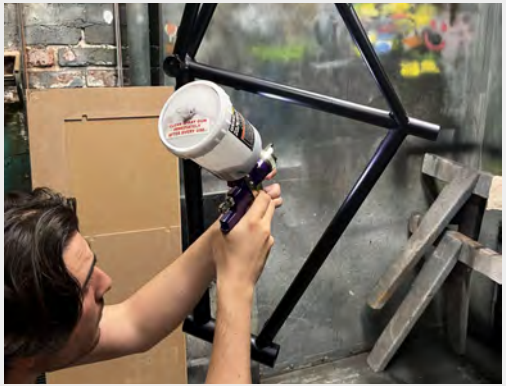

Cranberry

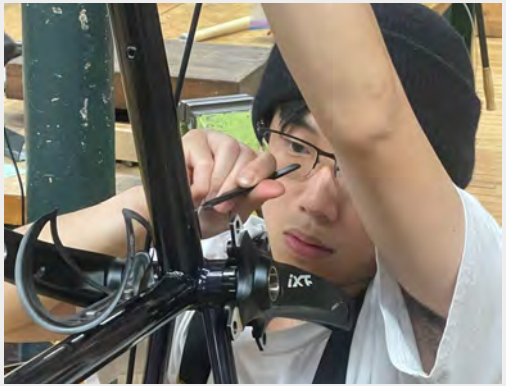

Taro


Creme


Royal

Construction process





Final Product


Grabby
CAUTION
KEEP OFF!
FALLING HAZARD
TIPPING HAZARD
NO PUBLIC DUMPING $500.00 FIN
8yd


Grabby


Grabby
ZIPP
MINIVELO


MINICOM

THANK YOU