

hubsmith®
Mini Wheels

Hubsmith wheelset with high rigidity and unhindered riding experience is the best choice from most of wheel brands to upgrade your racing bike. Hubsmith R&D team brings up Hubsmith cycle hubs and cycle wheels' excellent performance from innovative ideas and high-quality insistence. Every cyclist can feel Hubsmith's brand spirit in the riding.

Alloy Wheelsets

[16"]

HS-Bumbee A349 2SP [Brompton Spec] / 16.17

HS-Bumbee A349 3SP [Brompton Spec] / 18.19

[18"]

HS-Mantis A355 [Birdy Spec] / 20.21

HS-Locust A355 [Birdy Spec] / 22.23

[20"]

HS-Mantis A406 [Birdy Spec] / 24.25

HS-Mantis A406 / 26.27

HS-Locust A406 [Birdy Spec] / 28.29

HS-Locust A406/30.31

[22"]

HS-Mantis A451 [Reach Spec] / 32.33

HS-Mantis A451 / 34.35

HS-Locust A451 / 36.37

Carbon Wheelsets

[18"]

HS-Humbird CS355 [Birdy Spec] / 44.45
[CERAMICSPEED LIMITED EDITION]

[20"]

HS-Humbird CS406 [Birdy Spec] / 46.47
[CERAMICSPEED LIMITED EDITION]

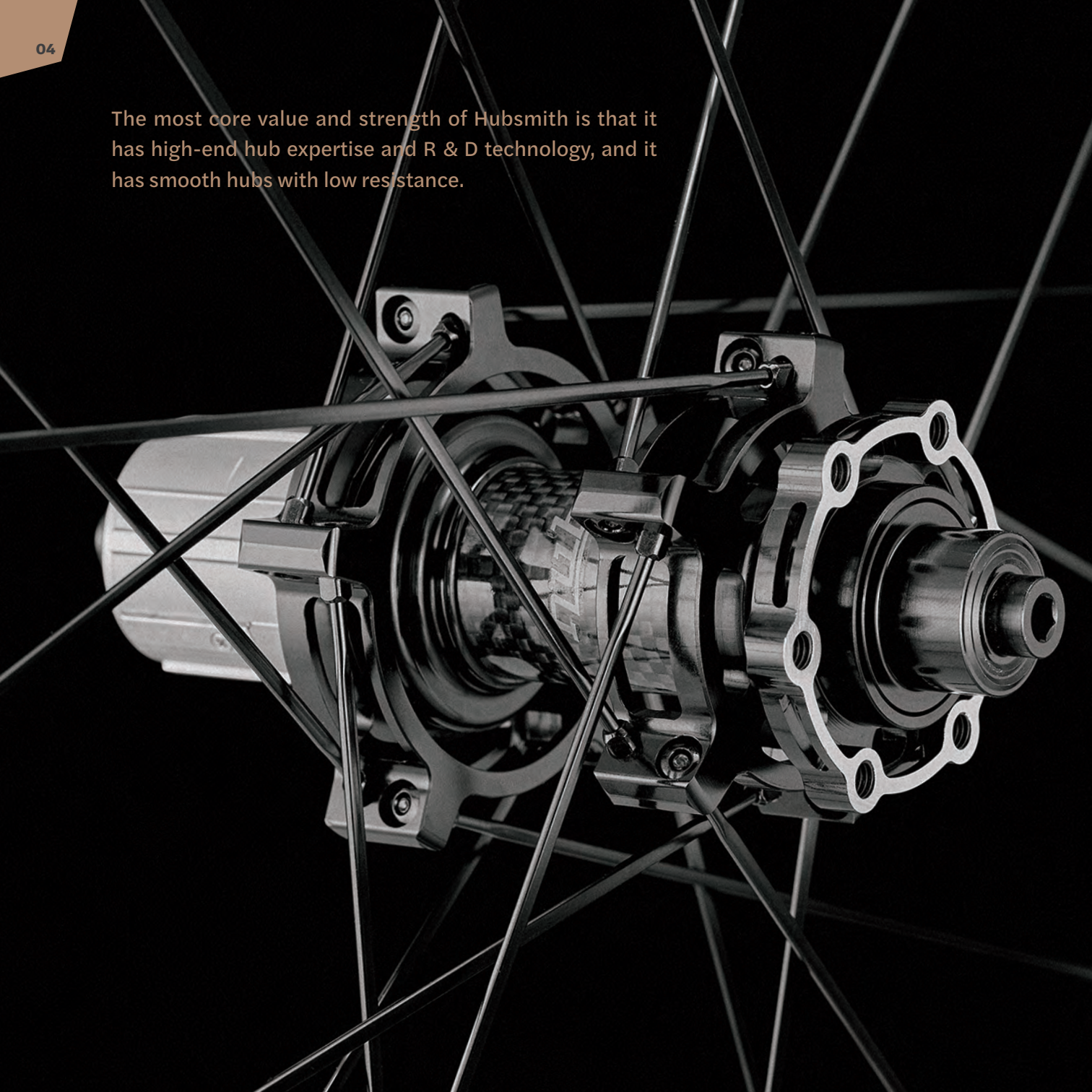
[18"]

HS-Humbird C355 [Birdy Spec] / 50.51

[20"]

HS-Humbird C406 [Birdy Spec] / 52.53

The most core value and strength of Hubsmith is that it has high-end hub expertise and R & D technology, and it has smooth hubs with low resistance.



Hubsmith transplanted the rigorous specifications of the road wheel set to the small-diameter wheel set, which included a number of tests, such as: running test, vibration test and impact test.



Aluminum rim wheels are produced in nearly 20 processes from the forming of raw materials to the butt welding. Butt welding technology compared with Sleeve and Pin joints, butt welding frame lifting rim has high durability and high strength and rigidity.



Full carbon fiber process technology designs for Hubsmith carbon fiber wheels. That the lightweight carbon fiber interlaminates 3K and UD attributes gives the rider the most direct road cycling feedback.



Hubsmith has professional wheel technicians that fine-tune the tension of the wheel set by technicians' manual adjustment.



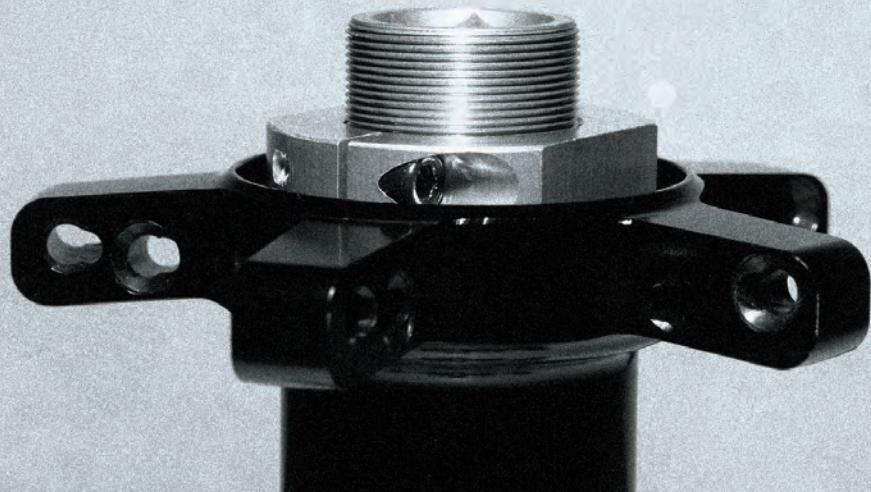
The water decal on the rim of the entire series of Hubsmith wheel sets need to be baked in the oven at low and high temperatures repeatedly and need to be undergone many rigorous tests, such as scratch resistance test.



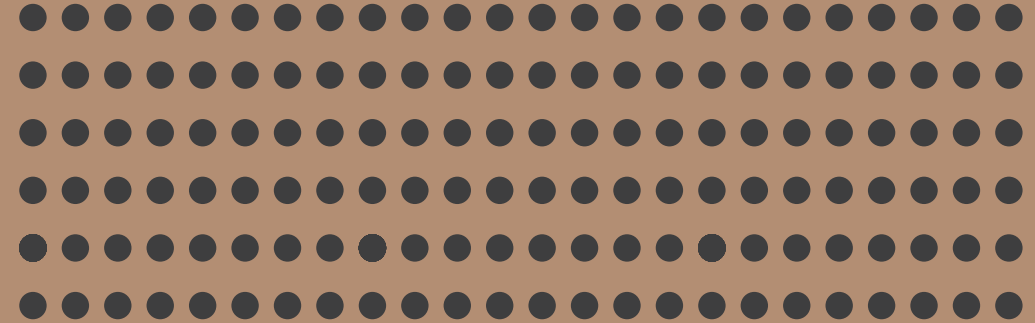
The rear hub from Hubsmith alloy mini wheel set has “One Way Adjustable-Gap System” inside the non-driving side of the hub.

There will occur bearing displacement after a wheel set has been running a certain of time. “One Way Adjustable- Gap System” can adjust the bearings back to their place and reduce the gap by rotating the adjustable ring inward to push the bearings in place by hand and with one 2.5mm screw driver to loosen and lock the adjustable ring up. This concept of design has won the Taipei Cycle d&i award by iF in 2014.

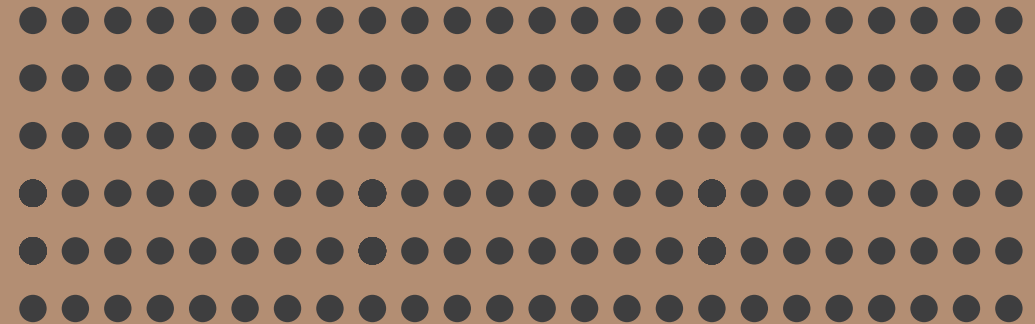
****One Way Adjustable-Gap System: (Applicable models are only for HS-MANTIS · HS-Locust series)****



ONE WAY ADJUSTABLE-GAP SYSTEM



Aluminum rim manufacturing process diagram





Butt Welding

The alloy rim of Hubsmith wheel is built by high-end butt welding technology to largely enhance the stiffness of the wheels.



Special Drilling Angle

To drill the holes with proper angles in precise calculation for mini wheels can optimize the spokes to be built in straight lines.



Sand-Blasting

Mini alloy wheel sets will have been through sand-blast surface treatment to enhance the brakeage of the brake.



Heat-Treatment

Heat treatment to alloy rim makes the hardness of material more rigid.



One Way Adjustable-Gap System

One way gap adjustment ring can be easily operated with one 2.5mm screwdriver in order to push the shifting bearing and reduce the gap to lengthen the lifetime of bearings.



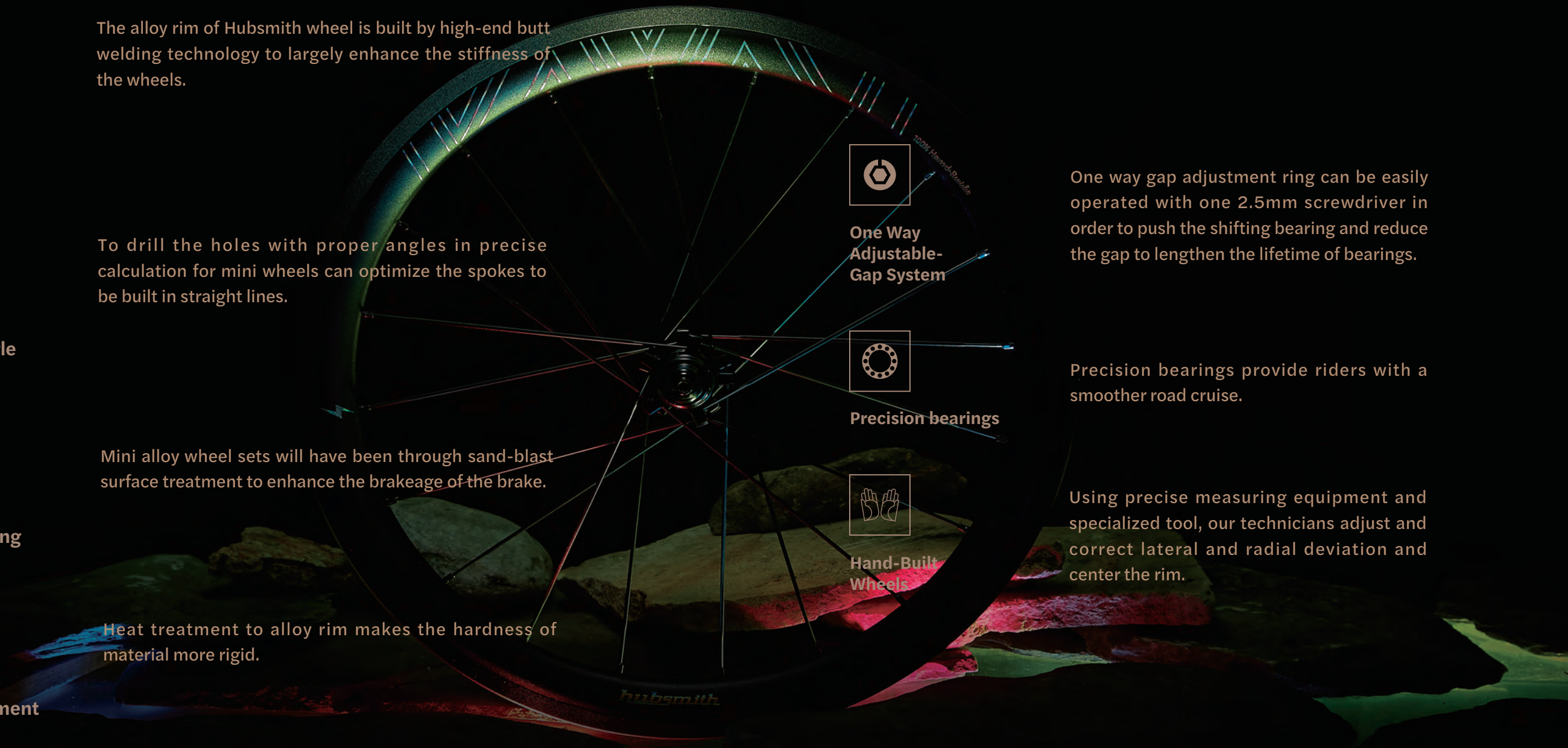
Precision bearings

Precision bearings provide riders with a smoother road cruise.



Hand-Built Wheels

Using precise measuring equipment and specialized tool, our technicians adjust and correct lateral and radial deviation and center the rim.





HS ⚡ MANTIS/LOGUST
 ▲ ▼ // ▲ ▼ // 355/406/451 // ▲ ▼ // ▲



HS-BUMBEE A349 / 2SP

ALUMINIUM RIM

BROMPTON SPEC

Wheels Size	16"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	30mm
Inner Width	19mm
Outer Width	24mm
Fork Width	OD. ø8*74mm
Frame Width	Thru-10*112mm-154L
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 2SP
Quick Release	(F) Cinch Release (CR-MO Axle) (R) Cinch Nuts
Weight	(F) 444±20g / (R) 598±20g (excluding skewers and rim tape)





HS-BUMBEE A349 / 3SP

ALUMINIUM RIM

BROMPTON SPEC

Wheels Size	16"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	30mm
Inner Width	19mm
Outer Width	24mm
Fork Width	OD. ø8*74mm
Frame Width	Thru-10*112mm-154L
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 3SP
Quick Release	(F) : Cinch Release(CR-MO Axle) (R) : Cinch Nuts
Weight	(F) 443±20g / (R) 589±20g (excluding skewers and rim tape)




HS-MANTIS A355
ALUMINIUM RIM
BIRDY SPEC

Wheels Size	18"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 521±20g / (R) 619±20g (excluding skewers and rim tape)




HS-LOCUST A355
ALUMINIUM RIM
BIRDY SPEC

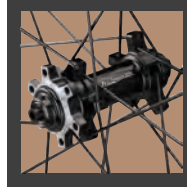
Wheels Size	18"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 511±20g / (R) 613±20g (excluding skewers and rim tape)




HS-MANTIS A406
ALUMINIUM RIM
BIRDY SPEC

Wheels Size	20"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 580±20g / (R) 687±20g (excluding skewers and rim tape)





HS-MANTIS A406

ALUMINIUM RIM

Wheels Size	20"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 593±20g / (R) 687±20g (excluding skewers and rim tape)




HS-LOCUST A406
ALUMINIUM RIM
BIRDY SPEC

Wheels Size	20"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 564±20g / (R) 668±20g (excluding skewers and rim tape)





HS-LOCUST A406

ALUMINIUM RIM

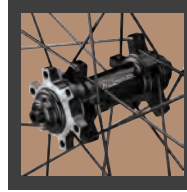
Wheels Size	20"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*100mm
Frame Width	ø5*130mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 571±20g / (R) 667±20g (excluding skewers and rim tape)




HS-MANTIS A451
ALUMINIUM RIM
REACH SPEC

Wheels Size	22"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø15*100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XD with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 618±20g / (R) 718±20g (excluding skewers and rim tape)

****excluding skewers for front wheel.**

HS-MANTIS A451

ALUMINIUM RIM

Wheels Size	22"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 621±20g / (R) 718±20g (excluding skewers and rim tape)

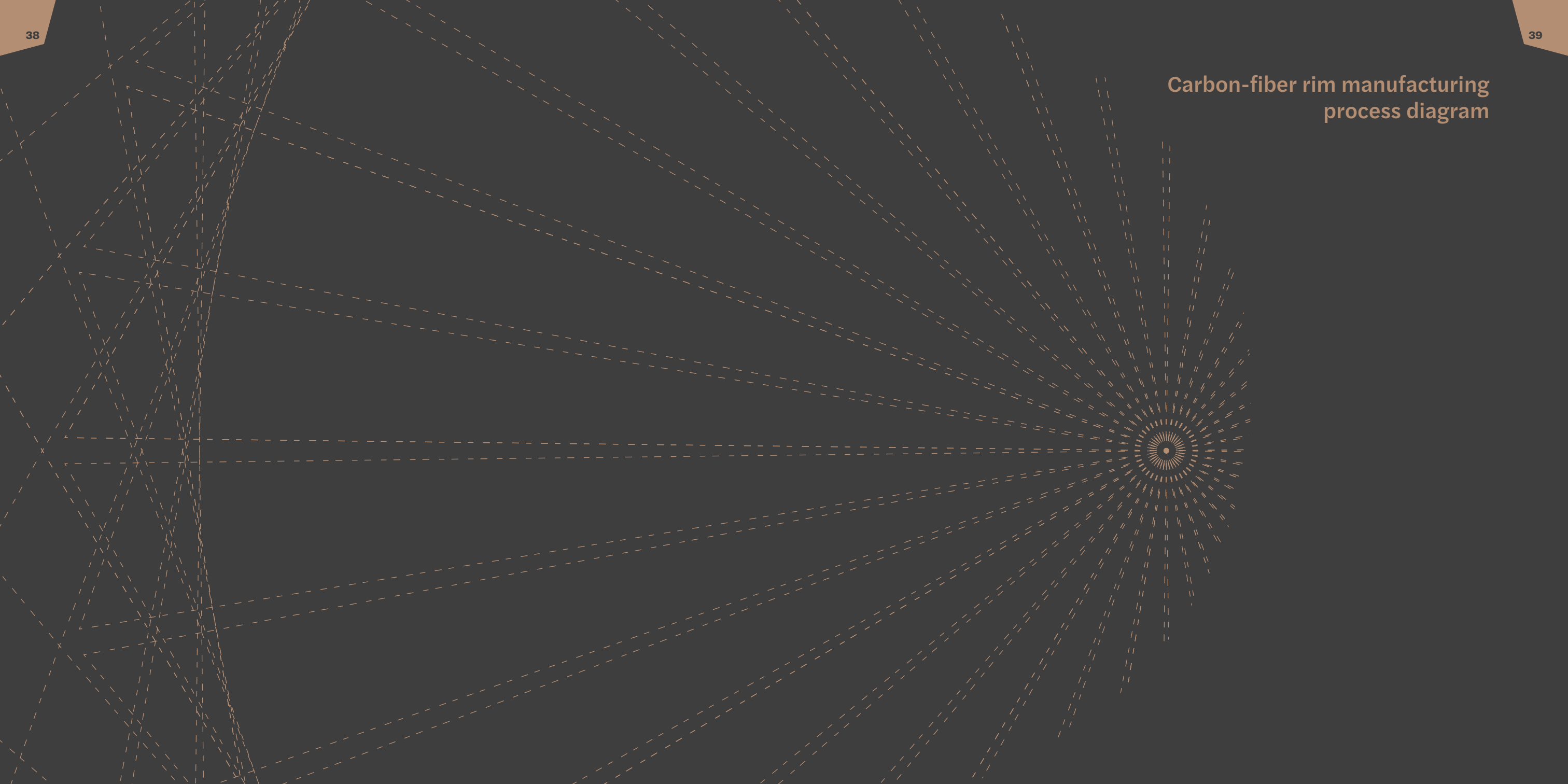



HS-LOCUST A451
ALUMINIUM RIM

Wheels Size	22"
Material	Weld Aluminum
Rim Type	Clincher
Brake Interface	Rim Brake
Rim Depth	34mm
Inner Width	16mm
Outer Width	21mm
Fork Width	ø5*100mm
Frame Width	ø5*130mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (CR-MO Axle)
Weight	(F) 606±20g / (R) 699±20g (excluding skewers and rim tape)



Carbon-fiber rim manufacturing process diagram





CeramicSpeed Bearing

The ceramic bearings version of NEW Hubsmith wheel sets adopts the brand, CeramicSpeed high end ceramic bearings from Denmark. Data shows that CeramicSpeed ceramic bearings have excellent abrasion resistance and extremely smooth riding experience. (Applicable models are only for HS-Humbird CS355 (CeramicSpeed Limited Edition), HS-Humbird CS406 (CeramicSpeed Limited Edition))



UD Light Carbon Fiber

UD Carbon-fiber Rim.



3K Light Carbon Fiber

3K Carbon-fiber Rim.



Nano-Elastomer Resin Compound (N.E.R)

Using nano-elastomers within the carbon structure, the carbon's surface area is less affected by fracturing caused by impacts. The nano-elastomers provide an ultra-high toughness to block cracking and withhold the resin from separating from the carbon fiber.



360° carbon fiber rim reinforced ring

360 degree full carbon fiber reinforcement ring can reduce the bump caused by the wheel spoke building.



Particular Spokehole Patching

Differing from old-style precast rings, Hubsmith carbon clincher rim obtains particular spoke reinforcement with isotropic design works to transfer spoke tension away from the spoke hole to the rim body. This design not only decreases spoke tension and spoke fatigue, but provides an overall lighter weight rim.



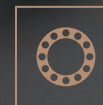
Hand-Built Wheels

Using precise measuring equipment and specialized tool, our technicians adjust and correct lateral and radial deviation and center



Special Drilling Angle

To drill the holes with proper angles in precise calculation for mini wheels can optimize the spokes to be built in straight lines.



Precision bearings

Precise calculation to drill the hole with proper angle especially for small wheels, which is optimized to straighten the spoke line.



CERAMICSPEED

limited edition

HUMBIRD

HS-Humbird CS355
HS-Humbird CS406

[CERAMICSPEED LIMITED EDITION]




HS-HUMBIRD CS355
3K CARBON RIM
BIRDY SPEC
CERAMICSPEED LIMITED EDITION

Wheels Size	18"
Material	3K Carbon Rim
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	38mm
Inner Width	18mm
Outer Width	25mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (Titanium Axle)
Weight	(F) 511±20g / (R) 608±20g (excluding skewers and rim tape)

ceramicspeed
3K
Fiber



HS-HUMBIRD CS406
3K CARBON RIM
BIRDY SPEC
CERAMICSPEED LIMITED EDITION

Wheels Size	20"
Material	3K Carbon Rim
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	38mm
Inner Width	18mm
Outer Width	25mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (Titanium Axle)
Weight	(F) 554±20g / (R) 653±20g (excluding skewers and rim tape)

ceramicspeed
3K
Fiber


HUMBIRD

UD CARBON RIM / CLINCHER WHEELS

C406&C355




HS-HUMBIRD C355
UD CARBON RIM
BIRDY SPEC

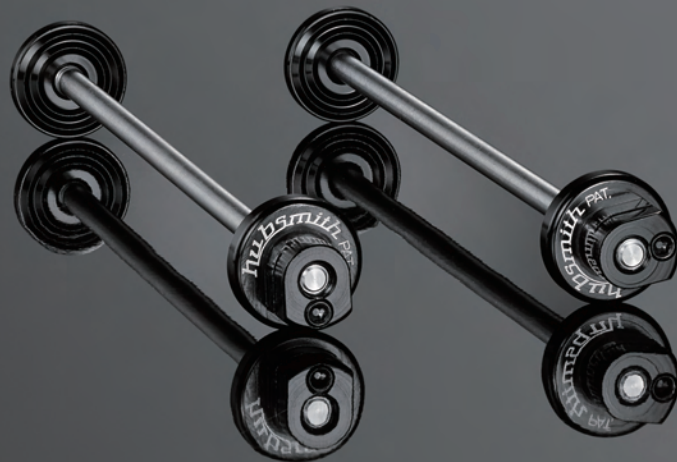
Wheels Size	18"
Material	UD Carbon Rim
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	38mm
Inner Width	18mm
Outer Width	25mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (Titanium Axle)
Weight	(F) 523±20g / (R) 637±20g (excluding skewers and rim tape)




HS-HUMBIRD C406
UD CARBON RIM
BIRDY SPEC

Wheels Size	20"
Material	UD Carbon Rim
Rim Type	Clincher
Brake Interface	Disc Brake
Rim Depth	38mm
Inner Width	18mm
Outer Width	25mm
Fork Width	ø5*74mm-100mm
Frame Width	ø5*135mm
Spoke Count	20H
Max Tire Pressure	110psi
Freehub Body Compatible	Shimano 11SP (to 8.9.10SP with spacer), convertible to Sram XDR with optional driver body
Quick Release	Cinch Release (Titanium Axle)
Weight	(F) 559±20g / (R) 683±20g (excluding skewers and rim tape)





HS-CR007

CR-MO Axle (F)	29g
CR-MO Axle (R)	34g
Titanium Axle (F)	19g
Titanium Axle (R)	22g

Patented Hub Cinch or Cinch Release (anti-loosening devices) for Hubsmith Mini Wheels:

Hubsmith mini wheels are all fitted with this anti-loosening device, Hub Cinch or Cinch Release. Each cinch nut on Hub Cinch or Cinch Release has a small screw to double secure and fasten up the wheels on the bike forks. Hub Cinch and Cinch Release are lighter than the traditional quick release.



hubsmith.com

