



NexusTech Prime Composites

PRODUCT CATALOG

2026 version





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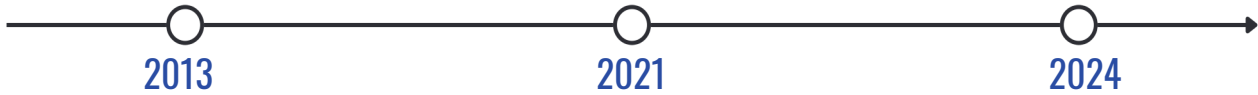
TRI/TT/TRACK BIKE

Aero tri-spoke wheels & disc wheels

ABOUT US

An experienced OEM and ODM headquartered in Xiamen, China—a city renowned as the hub of high-quality carbon wheel manufacturing. Over the past decade, we have proudly contributed to the industry's rapid advancements in manufacturing techniques that prioritize consistency and excellence.

Our History



A pure manufacturing factory, known for its high-quality products, has secured a steady customer base and is consistently improving to meet increasing demands.

By integrating supply chain management, we drive efficiency and reduce costs, offering an end-to-end service from raw material sourcing and product design to wheel building, packaging, warehousing, and shipping.

A rare capability in the industry: designing and developing products with your brand's sales and marketing goals in mind.

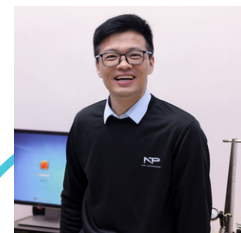
Plug-and-Play Partnerships

We understand what you need—because we've been in your shoes.

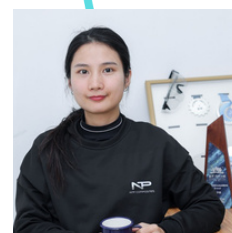
Hayson | Brand Perspective: With experience as Chief Marketing and Sales Manager at a growing carbon wheel brand, Hayson understands the delicate balance between the agility of branding and the challenges of supply chain inertia.

Koko | Process Perspective: As former OEM & ODM Sales Manager at a contract manufacturing factory, Koko has seen firsthand the inefficiencies and waste caused by misaligned priorities between brands and manufacturers.

Fang | Engineer Perspective: A Senior Engineer at one of China's largest cycling component factories, Fang has witnessed the engineering setbacks caused by a disconnect between original product vision and final execution, as well as a lack of collaboration in the development process.



HAYSON LIN
Co-Founder & General Counsel



KOKO YANG
Co-Founder & Project Manager



KUN FANG
Co-Founder & Chief Technology Officer

Carbon Fiber Reinforced Composites: Thermoset vs. Thermoplastic

Carbon Fiber Reinforced Composites consist of resin and carbon fiber, and there are two types of resins, thermoset and thermoplastic. Thermoset materials usually come in the form of prepregs (carbon fibers pre-impregnated with epoxy resin) which requires manual layup of the carbon cloths as the layup schedule requires. Thermoset carbon fiber is soft (forming state) at room temperature or lower, and solidify at heating. And the process is not reversible by re-melting the products. Thermoplastic carbon fiber composites are recyclable as it becomes soft at high temperature and cooling makes it become solid. The thermoplastic carbon products can be remelted to get carbon fibers for re-use.

Thermoset carbon fiber (Epoxy Resin)

Thermoset carbon fiber composites are typically made using prepregs, where carbon fibers are pre-impregnated with epoxy resin. This type of material remains soft at room temperature or below, solidifying once heated. The curing process is irreversible, meaning the material cannot be remelted.

◆ Pros of Thermoset carbon fiber

- **Superior Stiffness:** Offers excellent resistance to deformation, making it ideal for components requiring high structural integrity.
- **High Temperature Resistance:** Maintains its properties at elevated temperatures.
- **Lower Manufacturing Costs:** More cost-effective for large production runs.
- **Lightweight:** Generally results in a lighter final product, which enhances overall performance.

◆ Cons of thermoset carbon fiber

- **Labor-Intensive:** Requires more manual intervention, making the production process time-consuming.
- **Brittle:** Prone to cracking, especially under impact.
- **Non-Recyclable:** Cannot be reprocessed or reused, limiting its sustainability.
- **Storage Requirements:** Raw materials need to be refrigerated to maintain their properties.

Thermoplastic carbon fiber (PAEK resin)

Thermoplastic carbon fiber composites utilize a resin that softens at high temperatures and solidifies upon cooling. This reversible process allows for the recycling of thermoplastic composites, which is a significant advantage for sustainable manufacturing.

◆ Pros of thermoplastic carbon fiber

- **Fast Production Cycle:** Allows for rapid manufacturing, reducing lead times and improving production efficiency.
- **High Tensile Strength:** Offers exceptional mechanical properties.
- **Recyclability:** Can be remelted and reformed, making it a more sustainable option.
- **Vibration Damping:** Known for its ability to absorb vibrations, enhancing ride comfort in bicycle components.

◆ Cons of thermoset carbon fiber

- **Higher Cost:** The manufacturing process and raw materials are generally more expensive.
- **Limited High-Temperature Durability:** Not as resistant to high temperatures as thermoset composites.

Application at NTP

Thermoset carbon fiber

- Carbon rims
- Carbon framesets
- Components such as handlebars and spokes

Thermoplastic carbon fiber*

- Carbon thru-axles
- Carbon spokes
- Carbon bottle cages

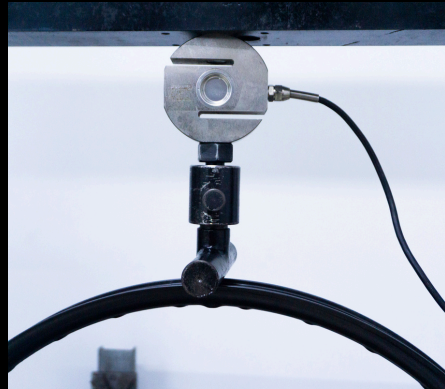
*The thermoplastic carbon fiber partnership is still in its early stages, and we are eager to explore innovative ideas with our partners. If you have product concepts in mind, we'd love to hear from you. Reach out via email at koko@ntpcposites.com or WhatsApp at +86 156 5978 9571 to discuss potential collaborations and sign NDAs.

IN-HOUSE RIM/WHEEL TEST

We provide original test reports, images and videos. We also assist our clients in conducting competitor product tests.



Wheel Dishing & Trueness



Rim Stiffness



Spoke Hole Strength



Impact (Double-Sided)



Rim Flatness & Roundness



4-Hour Greenhouse Test



Wheel Fatigue



Brake Track Performance



High Pressure Tire Retention

QUALITY CONSISTENCY

Our in-house quality control team collaborates closely with production to uphold the highest standards throughout the manufacturing process.

In-Process Self Check

- ◆ Material Preparation: First-in, first-out (FIFO) system & raw material weight inspection
- ◆ Layup: Weight measurement to prevent layup errors that could affect product quality and performance. Layup quality inspection in key areas (rim beads and sidewall transitions) to ensure layers are firmly laminated without bubbles or delamination.
- ◆ Molding: Mold cleaning and inspection; molding stove inspection; raw rim weight measurement.
- ◆ Holing: Drill bit inspection and replacement every 40 rims for consistent precision. Drilled rim weight measurement.
- ◆ Trimming & finishing: Weighing roughly treated rims and inspecting trueness to avoid over-treatment. Inspection of rim paint and vinyl decals.
- ◆ Wheel Building: Lacing inspection. Tension inspection for all spokes. Wheel trueness inspection. Any misalignment of spokes and nipples and other poor compatibility of the components.



QUALITY ASSURANCE

Our quality inspectors conduct inspections at key production stages and perform a final check before shipment.

QC Inspections

- ◆ Pre-Production: Examination of raw material quality and quantity. Short-beam shear strength testing of raw carbon prepregs according to ASTM-D2344 standards.
- ◆ Curing: Out-of-mold raw rims are weighed and inspected for flatness. Check for abnormal noise and air-bladder leaks.
- ◆ Trimming: Weight measurement after trimming. Check for burrs, residue, and hole accuracy.
- ◆ Final Inspection (Rim):
Inflation Test (all road rims are tested at a max tire pressure of 150 psi).
Final net weight, appearance, hole diameter, hole counts, noise, decals, and labels.
Waterslide decal placement.
- ◆ Final Inspection (Wheels): Spoke tension and dishing. Roundness and flatness inspection.



01 | ROAD & CX

All road, paved, climb, cyclocross

Key Technologies

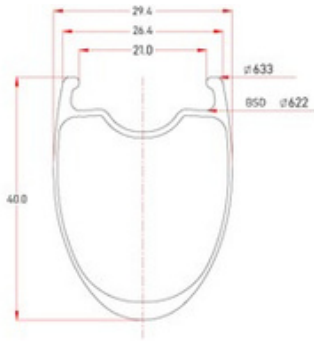
- ◆ Enhanced impact strength.
- ◆ Lightweight carbon layup.
- ◆ Varied width and depth options.

Private Labeling Service

- ◆ 3-year rim warranty
- ◆ Order Terms: CBS, EXW
- ◆ NO MOQ. Higher volume for a lower per-unit price.



R21-40



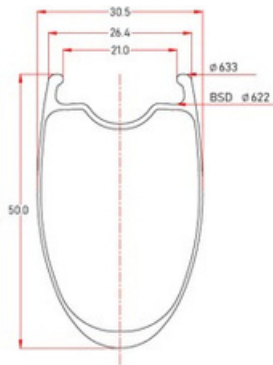
Highlights: Lightweight Everyday Adventure Rim

- ◆ Optimized Tire Fit: R21-40 feature 21mm int width for road tires of 25C, 28C and wider.
- ◆ Control & Efficiency: the 40mm versatile depth allows for more control on windy conditions. For flat roads and hill climbs.
- ◆ Lightweight layup: the rim features our revolutionary light layup design, achieving a good balance of strength and light. 100J impact passed.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	21mm	Outer Width	26.4mm
Profile Depth	40mm	Weight	390g, 360g
Diameter	700C	ETRTO	622×21
Tire Fit	25C-40C	ERD*	560mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

R21-50



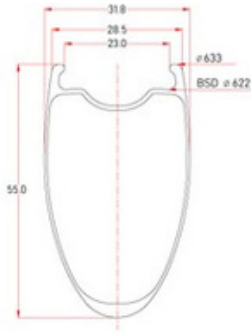
Highlights: All-Terrain Speed

- ◆ Optimized Tire Fit: R21-50 feature 21mm int width for mainstream tires of 25C, 28C and wider.
- ◆ Aero with control: the 50mm depth allows for marginal aero gains on flat roads while offers good control under gusts of winds.
- ◆ Lightweight layup: the rim features our revolutionary light layup design, achieving a good balance of strength and light. 100J impact passed.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	21mm	Outer Width	26.4mm
Profile Depth	50mm	Weight	410g, 375g
Diameter	700C	ETRTO	622×21
Tire Fit	25C-40C	ERD*	540mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

R23-55



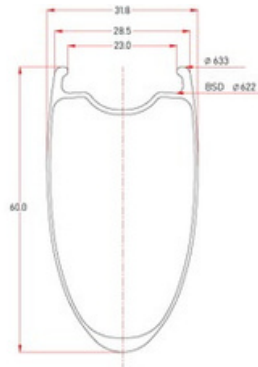
Highlights: All-Round Performance

- ◆ Optimized Tire Fit: its 23mm width suits perfectly 28C road tires, offer premium grip and puncture resistance on more complicated terrain.
- ◆ Reliable Performance: the 55mm depth is the sweet spot of many riders looking for a speed advantage as well as steering stability.
- ◆ Balanced Strength & Weight: Weighing just 415g per rim, the 55mm rim passes our in-house 110-joule impact test.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	23mm	Outer Width	28.5mm
Profile Depth	55mm	Weight	415g
Diameter	700C	ETRTO	622×23
Tire Fit	28C-45C	ERD*	530mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

R23-60



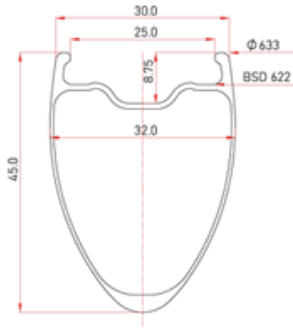
Highlights: Limitless Aero Gains

- ◆ Optimized Tire Fit: its 23mm width suits perfectly 28C road tires, offer premium grip and puncture resistance on more complicated terrain.
- ◆ Responsive and fast: the 60mm deep rim featuring premium stiffness reacts instantly to the pedaling.
- ◆ Minimized aero drag: the deep section design reduces aero drag, allowing riders to carry higher speeds throughout the races.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	23mm	Outer Width	28.5mm
Profile Depth	60mm	Weight	420g
Diameter	700C	ETRTO	622×23
Tire Fit	28C-45C	ERD*	520mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

R25-45



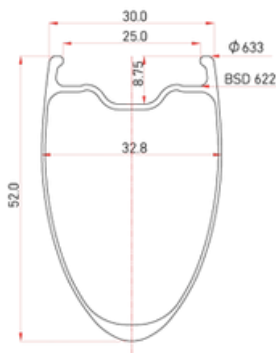
Highlights: All-Terrain Adventures

- ◆ Optimized Tire Fit: the modern 25mm int width offers a generous platform for road tires of 30C and 32C. Maximizing the control & comfort.
- ◆ Fun and confidence: the 45mm depth strikes a good balance of speed and compliance.
- ◆ Lightweight yet durable: Weighing just 360g per rim, it passes the 95-joule impact test (2x UCI standard-40J).
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	25mm	Outer Width	30mm
Profile Depth	45mm	Weight	360g, 320g
Diameter	700C	ETRTO	622×25
Tire Fit	28C-50C	ERD*	550mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

R25-52



Highlights: High Speed Under Control

- ◆ Optimized Tire Fit: the modern 25mm int width offers a generous platform for road tires of 30C and 32C. Maximizing the control & comfort.
- ◆ More aero gains: the 52mm depth offers enough aero gains while keeping the bike under good control in crosswinds.
- ◆ Lightweight and durable: the 380g version passes the 100-joule impact test (conforming to UCI testing requirements).
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	25mm	Outer Width	30mm
Profile Depth	52mm	Weight	380g, 340g
Diameter	700C	ETRTO	622×25
Tire Fit	28C-50C	ERD*	536mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

02 | GRAVEL & ADVENTURE

All condition control & comfort

Key Technologies

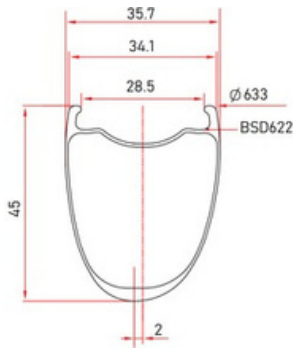
- ◆ Enhanced impact strength.
- ◆ Gravel-focused tire platform.
- ◆ Hookless / hooked bead shapes .

Private Labeling Service

- ◆ 3-year rim warranty
- ◆ Order Terms: CBS, EXW
- ◆ NO MOQ. Higher volume for a lower per-unit price.



G28-45



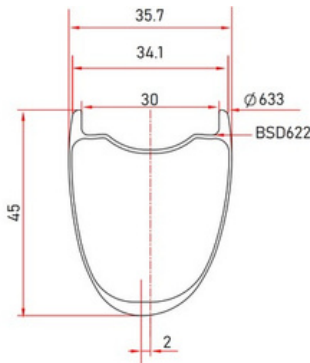
Highlights: A Do-it-all Gravel Solution

- ◆ Optimized Tire Fit: 28mm inner width suits mainstream gravel tires (35C–50C), ensuring a secure, performance-driven fit.
- ◆ Control & Efficiency: Lower pressure options on rugged trails and singletracks improve grip and rolling efficiency.
- ◆ All-Round Height: 45mm depth offers aerodynamic benefits and keeps the bike stable even in gusty winds.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	28.5mm	Outer Width	34.1mm
Profile Depth	45mm	Weight	400g
Diameter	700C	ETRTO	622×28
Tire Fit	35C-50C	ERD*	550mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

G30-45



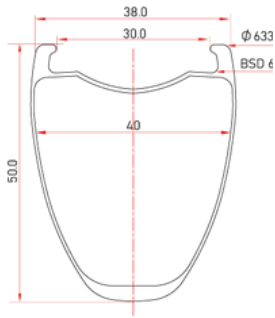
Highlights: Mega-Wide Gravel Rim

- ◆ Optimized Tire Fit: 30mm inner width suits wider gravel tires (45C–60C), ensuring a secure, performance-driven fit.
- ◆ Control & Efficiency: Lower pressure options on rugged trails and singletracks improve grip and rolling efficiency.
- ◆ All-Round Height: 45mm depth offers aerodynamic benefits and keeps the bike stable even in gusty winds.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	30mm	Outer Width	34.1mm
Profile Depth	45mm	Weight	410g
Diameter	700C	ETRTO	622×30
Tire Fit	45-60C	ERD*	550mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

G30-50



Highlights: Confident Control Across Diverse Terrain

- ◆ Optimized Tire Fit: 30mm inner width suits wide gravel tires (50mm+), offering premium grip and control.
- ◆ Offset drilling: the flat inner circumference make it possible for offset hole drilling, achieving balanced spoke tensions on two sides.
- ◆ Aero gains: the 50mm depth reduces air drag on hard surfaces.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	30mm	Outer Width	38mm
Profile Depth	50mm	Weight	460g
Diameter	700C	ETRTO	622×30
Tire Fit	50C-60C	ERD*	539mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

03 | MOUNTAIN BIKE

XC, Enduro, DH, E-bike

Key Technologies

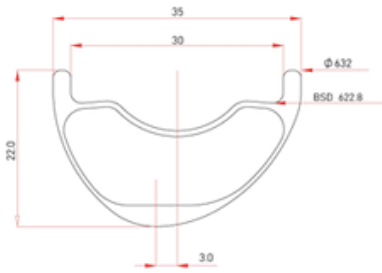
- ◆ Enhanced impact strength.
- ◆ Compliance for more comfort.
- ◆ Wide rim beads to reduce pinch flats.

Private Labeling Service

- ◆ 3-year rim warranty
- ◆ Order Terms: CBS, EXW
- ◆ NO MOQ. Higher volume for a lower per-unit price.



XC30-22



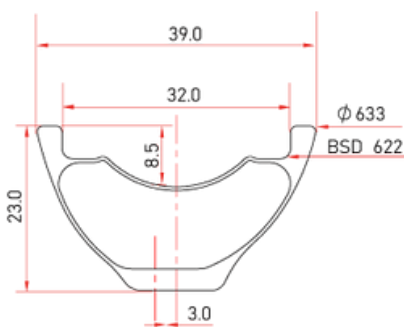
Highlights: Climb Fast, Descend With Confidence

- ◆ **Lightweight Design:** Streamlined layup reduces excess material, cutting weight for faster acceleration and climbs.
- ◆ **Durable & Strong:** Reinforced in critical areas—spoke holes, valve hole, and tire interface—for confidence on fast descents.
- ◆ **Asymmetric Profile:** Evenly balances spoke tensions on both sides, enhancing wheel stability and reducing maintenance needs.
- ◆ **Customizable features** include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	30mm	Outer Width	35mm
Profile Depth	22mm	Weight	270g, 250g
Diameter	29"	ETRTO	622×30
Tire Fit	2.2"-2.4"	ERD*	594mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

EN32-23



Highlights: Enhanced Strength and Compliance

- ◆ **Wide Profile:** Enhances grip and stability on high-speed, technical trails.
- ◆ **Vertical Compliance:** Reduces wrist fatigue, increasing comfort.
- ◆ **Responsive Handling:** Delivers precise steering and cornering on tight turns.
- ◆ **Asymmetric Offset:** Optimizes spoke tension for more balanced wheel performance.
- ◆ **Customizable features** include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	32mm	Outer Width	39mm
Profile Depth	22/23mm	Weight	480g
Diameter	29"	ETRTO	622×32
Tire Fit	2.3"-2.8"	ERD*	592mm

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

04 | TRIATHLON/TT/TRACK

Aero and fast

Key Technologies

- ◆ Lightweight layup and materials.
- ◆ Modern wide tire platform.
- ◆ Aero construction.

Private Labeling Service

- ◆ 3-year rim warranty
- ◆ Order Terms: CBS, EXW
- ◆ NO MOQ. Higher volume for a lower per-unit price.



Trispoke-23-75



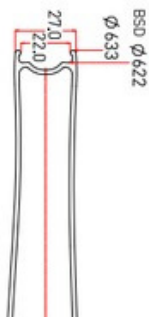
Highlights: Tri-Spoke Max Speed

- ◆ Modern wide construction offers more stability and better terrain passability. Suits 28C tires perfectly.
- ◆ Lightweight Design: Streamlined layup reduces excess material, cutting weight for faster acceleration and climbs.
- ◆ Aero margin: the 75mm deep profile plus the neat 3-spoke design reduce air drag for the riders.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	23mm	Outer Width	28mm
Profile Depth	75mm	Hole Count	n/a
Diameter	700C	ETRTO	622×23
Tire Fit	28C-32C	ERD*	n/a

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

Disc Wheel-22



Highlights: Full Disc Aero Gains

- ◆ Modern wide construction offers more stability and better terrain passability. Suits 28C tires perfectly.
- ◆ Lightweight Design: Streamlined layup reduces excess material, cutting weight for faster acceleration and climbs.
- ◆ Aero margin: the full-disc design maximize the aero gains you can get from a wheel.
- ◆ Customizable features include rim weave, finish, weight, strength, stiffness, decals, hole count, valve hole type (Presta by default).

Inner Width	22mm	Outer Width	27mm
Profile Depth	n/a	Hole Count	n/a
Diameter	700C	ETRTO	622×22
Tire Fit	25C-30C	ERD*	n/a

* NTP ERD = Rim diameter (mm) + 2×spoke hole thickness (mm)

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