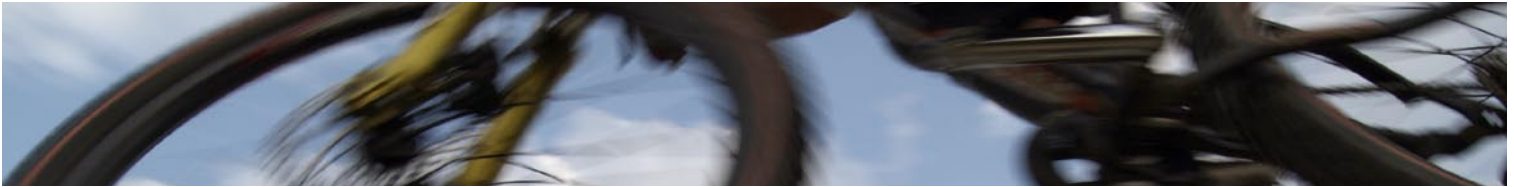


ELEMENT



Optimal, Functional, Classic



ELEMENT TECHNIC - SOUTH-EAST ASIA'S PREMIER HOME-GROWN BIKE

"Designed in Taiwan" is something that you don't hear too often. But that's the story of Element Technic.

Element Technic bikes are not only Made in Taiwan, but designed here in Formosa the old-fashioned way: by riding the bikes, by applying rider input, by understanding the user, by principles of common sense.

At Element Technic, our roots are grassroots...in riding. While the Element Technic brand moves into its 4th year, our parent company has over 20 years experience in the bicycle market in retail, as well as wholesale and distribution. During all that time on the front line, we have been interacting with the riders and wrenching all variety of high-end bike parts from all over the world. We have also consistently supported racing and competition in Taiwan for all fat-tire disciplines: BMX, XC, 4X, DH, and we continue to do so.

In Europe, America and Japan, this developmental way is the norm but it is really atypical for Taiwan. Many Taiwanese brands start off knowing only about industrial processes without regard to actually riding or interest in those people who buy the end product...strange, but true. When a brand is so far down the supply chain, away from the end-user, they struggle to comprehend and react to the needs of both the retailer and the customer. Conversely, we started as one of the only high-end retail stores in Taiwan before developing our brand.

Element Technic's founder's background was many years in industrial engineering before entering the bicycle retail market. Both careers then fused to form Element Technic. The Element brand started when the owners realized that the market was not being effectively serviced by other Taiwan brands. Either the other brands were too big, too industrial and too corporate to understand retail or too small, too unfocused and too inexperienced to service the distributor and the wholesaler.

However, the flip-side is that there are many excellent factories in Taiwan fabricating high-quality bike frames and components. By selecting the very best suppliers to work with, Element Technic can carefully control the quality of our products. Our ability to work directly the best fabricators in the world, means we can translate the needs of the rider into the highest-quality products with the best value.

Finally, Element Technic is not a faceless corporate entity, but a family-run business where employees are encouraged and treated with respect. The people behind Element Technic are among the most experienced bicycle servicers in South-East Asia. What that means for you is, you can trust the people at Element Technic to understand you and to meet your needs. Top-notch quality is not only in the product, but in the service to our customers.

In short, we can be described by this simple equation:

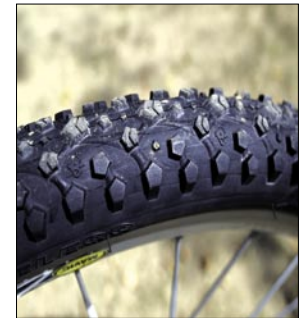
Element Technic=

Industrial Engineering x Bicycle Experience x Family Business x Taiwan Quality

ELEMENT TECHNIC - MISSION STATEMENTS

Each and every Element Technic product is made with one thing in mind: rider satisfaction. Element Technic is about:

- Specializing in framesets and frame kits.
- Designing our products by riding and listening to those who ride.
- Creating products that are enjoyable to ride.
- Offering the best quality of build and finish at the best value.





E.G.S. - EQUILIBRIUM GEOMETRY SYSTEM

Equilibrium Geometry System is Element Technic's integration of balanced frame and tubing geometries.

First, frame geometry is the essential parameter of a good ride. We focus on positioning the rider in a way which is:

- ideal for the intended purpose of the bike
- efficient on the terrains for which the bike is intended to be used
- fits most body types.

Then, tube design translates the geometry and creates the feel of the ride. We develop tubing which is:

- shaped to resist the forces demands created by the rider and riding loads
- tuned to absorb and filter undesirable ground inputs
- created from the finest materials

Next, assembly of the tubeseet turns the frame into a reality. We carefully control:

- welding, bonding and heat-treatment
- precision alignment – 50% tighter than typical

Finally, without testing proof, our concept is nothing. We hold back the product until we can pass:

- hundreds of thousands of machine fatigue cycles
- thousands of kilometres of road-testing

E.G.S = (geometry) balance x (tubing + assembly)quality x (proof)(machine x man)



VIBE V.D.T – VERTICAL DAMPING TECHNOLOGY

VIBE Vertical Damping Technology is a common theme on Element Technic frames. It indicates the passive rear suspension (vertical flex) designed into the frame. The features of VIBE V.D.T. frames have rear stay designs which are Vertically Compliant for Comfort without sacrificing Laterally Rigid (Stiff) for Efficiency and Handling, for example:

Nitron-Q

Nitron-Q – Maximum VIBE in carbon flexes like a ski

- Horizontally elongated cross-sections allow up to 6mm (1/4") of travel
- Carbon-composite damps high-frequency vibrations
- Size-specific fiber-layup...smaller sizes have even greater flex for lighter riders



Electro-X Proton-D

Electro-X / Proton-D – Lo VIBE in alloy, subtle but effective

- Horizontally ovalized monostay
- Thin-wall one-piece curved and S-bend seatstays
- Non-oversize seatposts



XENON-X

Xenon-X – Hard-Core VIBE, allow the frame to absorb big hits, yet track straight for technical manoeuvres

- Curved, one-piece seat-stay-chain-stay for controlled vertical flex
- Box-section stays and CNC'd plate yokes
- CNC'd dropouts allow massive welding area





Spec/

- Sizes: 16.5" / 18" / 19.5"
- Frame weight (16.5"): 1.4kg
- Disk brake only
- Max tire width: 2.2"
- See detail at back of catalogue

Frame Kit includes/

- Element Krypton-36 large-ball integrated headset
- Seat-collar

Intended Use/

- XC ▪ Trail / Enduro ▪ Adventure
- All-Mountain

Recommended Forks/

- Manitou: Skareb, Black or Minute
- Fox: FLRT, FX or TALAS
- RockShox: SID or Reba
- Marzocchi: Marathon or MX

Recommended Components/

- SRAM: X.0
- Shimano: XTR

Color Options/

- Pearl White satin / carbon weave
- Indigo satin / carbon weave



Nitron-Q

[MD-09]

- Maximum VIBE V.D.T. carbon rear triangle
- E.G.S. Equilibrium Geometry System
- Triple-butted AL7005 main tubes
- Flared down and seat tubes
- KEG oversize hollow BB shell by CNC
- CNC headtube for integrated oversize 36°
- CNC dropouts w/replaceable hanger
- Smooth-welded for beauty and fatigue-strength





Spec/

- Sizes: 14.5" / 16.5" / 18" / 19.5"
- Frame weight (16.5"): 1.45kg
- Disk brake or V-brake
- Max tire width: 2.2" (with disk brake)
- See detail at back of catalogue

Frame Kit includes/

- Element Krypton-36 large-ball integrated headset
- Seat-collar
- Hydraulic line adapters for TT cable guides
- Cable-guide for BB
- Bottle screws

Intended Use/

- XC ▪ Trail / Enduro
- Adventure ▪ All-Mountain

Recommended Forks/

- Manitou: Skareb, Black or Minute
- Fox: FLRT, FX or TALAS
- RockShox: SID or Reba
- Marzocchi: Marathon or MX

Recommended Components/

- SRAM: X.9 ▪ Shimano: XT

Color Options/

- Ceramic White gloss
- Element Blue gloss
- Element Red gloss

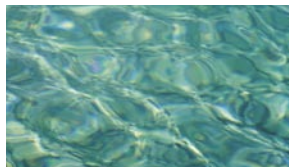
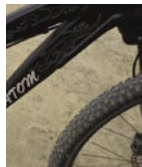


Electro-X

[MD-11]

- Low VIBE V.D.T. alloy seat stay
- E.G.S. Equilibrium Geometry System
- Triple-buttressed AL7005 main tubes
- Double-buttressed chainstays
- Flared down and seat tubes
- KEG oversize hollow BB shell by CNC
- CNC headtube for integrated oversize 36"
- Forged dropouts w/replaceable hanger
- Smooth-welded for beauty and fatigue life





Spec/

- Sizes: 14.5" / 16.5" / 18" / 19.5"
- Frame weight (16.5"): 1.45kg
- Disk brake or V-brake
- Max tire width: 2.2" with disk brake
- See detail at back of catalogue

Frame Kit includes/

- Element Krypton-36 large-ball integrated headset
- Seat-collar
- Hydraulic line adapters for TT cable guides
- Cable-guide for BB = Bottle screws

Intended Use/

- XC = Trail / Enduro
- Adventure = All-Mountain

Recommended Forks/

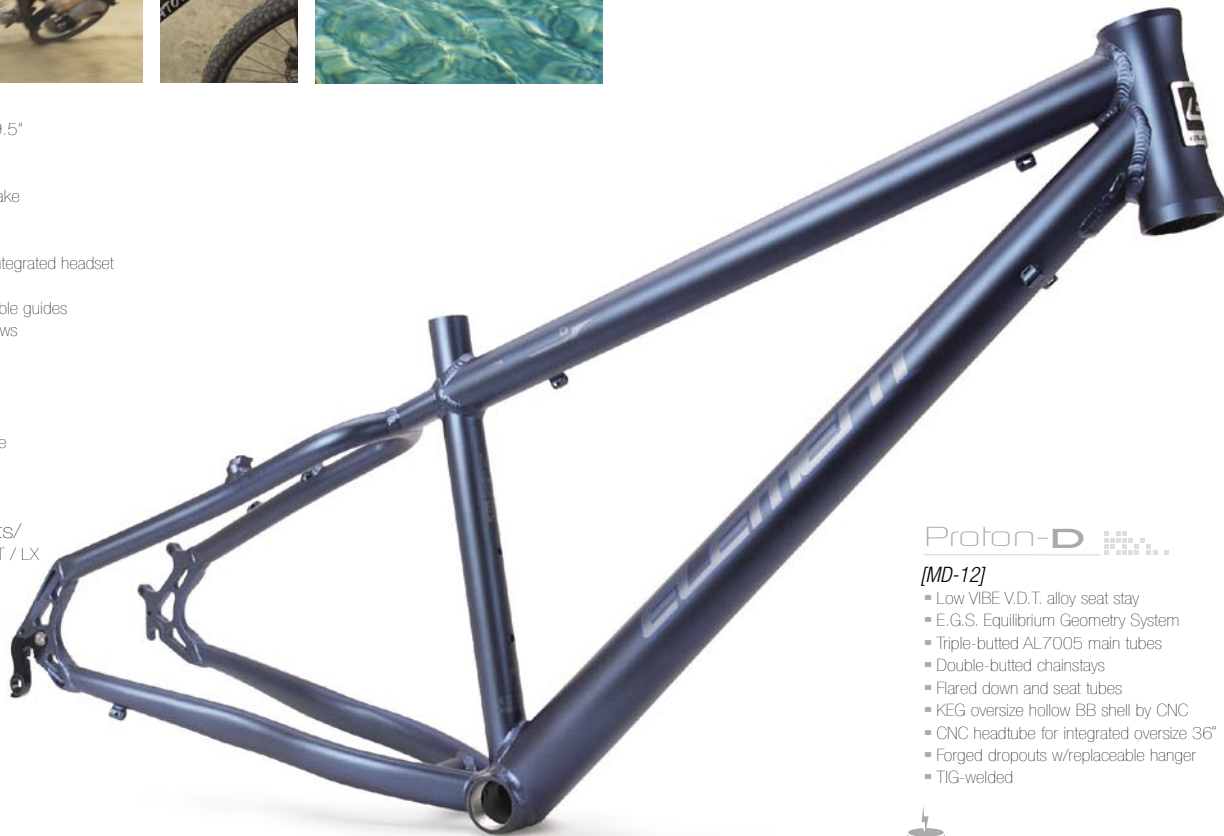
- Manitou: Skareb, Black or Minute
- Fox: FLRT, FX or TALAS
- RockShox: SID or Reba
- Marzocchi: Marathon or MX

Recommend Components/

- SRAM: X.9 / X.7 = Shimano: XT / LX

Color Options/

- Indigo satin
- Silver gloss
- Black matte



Proton-D

[MD-12]

- Low VIBE V.D.T. alloy seat stay
- E.G.S. Equilibrium Geometry System
- Triple-butted AL7005 main tubes
- Double-butted chainstays
- Flared down and seat tubes
- KEG oversize hollow BB shell by CNC
- CNC headtube for integrated oversize 36"
- Forged dropouts w/replaceable hanger
- TIG-welded





Spec/

- Size: 13.5"
- Frame weight: 2.2kg
- Disk brake only
- Max tire width: 2.5"
- See detail at back of catalogue

Frame Kit includes/

- Fusion headset kit for $\varnothing 1-1/8"$, with
- AL7075 step-down adapters
- Element Krypton-36 large-ball integrated headset
- Seat-collar

Color Options/

- Black matte
- Military Green matte

Intended Use/

- Dirt Jump = Urban Assault
- 4X = Freeride

Recommended Forks/

- Manitou: Sherman or Stance
- Fox: Vanilla or 36
- RockShox: Pike
- Marzocchi: DJ or Z1



XENON-E

[MD-14]

- Hard-Core VIBE V.D.T. 1-pc rear stays
- E.G.S. Equilibrium Geometry System
- Double-buttet AL7005 main tubes
- Square to Round top and down tubes
- Oversize CNC headtube for 1point5 standard
- CNC BB shell with ISCG tabs
- CNC yokes for rear-triangle
- CNC dropouts w/replaceable hanger
- Adjustable stack with Krypton headset kit





Premium Bearing Products

Krypton-36 Oversize Integrated Headset [AD-9]

The Krypton-36 integrated headset is standard issue for Element Technic frames. It utilizes the 36° Oversize angular contact bearing (ACB). Although not as common as the 45° standard, there should be little need to replace it; in over a thousand frames over 4 years, we have seen neither bearing nor head tube failure. Of course, replacements are available from Element. The headset has these important features:

- Ø5/32" ball, 25% larger than standard balls
- 36° cartridge chamfer has a larger contact area to the headtube
- Ø50mm head tube, stiffer and stronger
- No cups, tool-free installation and better aligned bearings
- Weight: 85g



This table compares different systems:
Comparison of Headset Standards (Ø1-1/8")

Standard:	Integrated 36° Oversize	Integrated 45° Micro	Internal
Common Names	TH Standard	Cane Creek IS	Cane Creek ZS
Head Tube Diameter	Ø50mm	Ø45mm	Ø50mm
Cartridge Dimensions	Ø44mm 8mm x 36°	Ø41mm 6.5mm x 45°	Ø41mm 6.5mm x 45°
Ball Size Diameter	Ø4mm (Ø5/32")	Ø3.2mm (Ø1/8")	Ø3.2mm (Ø1/8")
Cups?	No	No	Yes
Need Tools for Install?	No	No	Yes

Fusion Headset Kit for 1point5 [HP-14A]

The Fusion headset kit adapts the Krypton-36 Ø1-1/8" headset for 1point5 (1.5") frames. The kit has step-down adapters that allow the use of durable 36° integrated headsets inside a 1point5 head tube. This system has many advantages:

- 1point5 head tube stiffens frame and eliminates ovalization
- Can use any Ø1-1/8" forks
- Lighter than other 1point5 headsets
- AL7075/T6 bearing seats
- Zero-stack upper means stem sits ~20mm lower
- Lower adapters in 2 sizes can be used to adjust head-tube angles, for example:

Fork Travel	Lower-Stack	
	0mm	12.5mm
120mm	68.5	68
100mm	69.5	69

- Adapter Weights
 - o Upper zero-stack 42g
 - o Lower zero-stack 42g / Lower 12.5mm stack 75g





Mercury Standard Headset [HP-66 / HP-66S]

The Mercury is a no-compromise conventional $\varnothing 1\text{-}1/8\text{'}$ headset. The Element Technic exclusive ACB features a special shoulder stop which controls pressure on the inner bearing ring to prevent overtightening.

- Intended usage: Road / XC / All-Mountain / Freeride
- Special stainless steel 45°/36° angular contact bearings
- CNC'd AL6061/T6 cups
- Polished anodized finish with laser logo
 - o Colors: black, silver, red, blue, gun-metal
- 12mm "semi-deep" cup insertion, for headtube strength
 - o 25% more insertion vs. standard 9mm cups
 - o Fits most frames, unlike 22mm deep-cups
- Lower crown race available in either
 - o CNC AL6061 for road / XC/ all-mountain, or
 - o stainless-steel for freeride
- Weights: 92g / 104g



Headset Spacers Kit [WS-118CF / WS-100CF]

The perfect match for your Element headset.

- Full carbon-fiber
- $\varnothing 1\text{-}1/8\text{'}$ or $\varnothing 1\text{'}$
- One kit includes: 3, 5, 10, 15, 20mm



Technium Hubsets

The Technium disk hubsets are durable, smooth-running units. A special feature is that the disk rotor mounts are precisely perpendicular to the hubshell; this means that disk rotors run very straight and true.

- Precision CNC'd
- Cartridge Bearings
- Polished black-anodized finish with laser logo
- International 6-bolt disk bolt pattern
- Includes QR's (except thru-axles)



[HB-XC101]

Technium XC

- Front hub: OLD100mm x $\varnothing 9\text{mm}$ x 32H
- Rear hub: OLD135mm x $\varnothing 10\text{mm}$ x 32H
 - o Alloy cassette body
- Weights: 230 / 360g

[HB-FR202]

Technium FR

- Front hub: OLD110mm x $\varnothing 20\text{mm}$ x 32H
- Rear hub: OLD135mm x $\varnothing 10\text{mm}$ x 32H
 - o Steel cassette body
- Weight: 235 / 460g



Carbon Fiber Handlebars

Element Technic carbon-fiber handlebars are the strongest and most reliable available. Since we developed these handlebars 3 years ago, they have been adopted and re-labelled by 2 of the most-respected brands in freeride. Developed with a systems-engineering approach to consider the interaction with stem, shifters and bar-ends, they pass the most demanding mechanical testing.

- Intended usage: XC / Enduro / All-Mountain
- Superior impact and fatigue strength
- Multi-buttet and tapered full carbon-fiber
- Reinforced under stem and brake lever clamping areas
- Alloy reinforcements at ends for bar-end and crash resistance
- Gloss finish with color logos
- For Ø25.4mm stems



Radium-F

[HD-22CF]

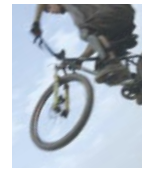
- Riser Bar
- 660mm width, 9° sweep, 25mm rise
- Weight: 165g



Indium-X

[HD-11CF]

- Flat Bar
- 580mm width, 7° back-sweep
 - 610mm also available
- Weight: 135g



Alloy Handlebars

Element Technic alloy bars are designed with special sweep and rise to improve rider comfort and control. Since handlebar position is a critical element to bike fit, we took special interest in handlebar positioning. Testing position with an experimental adjustable bar and stem, we evaluated over 30 bar sweeps of which we narrowed down to 10 and then 4 positions. Mainly, we found the need to have an increased up-sweep. These 4 positions fit the widest range of riding styles and body positions.

- Special sweep and rise for control and comfort
- Precision tolerances on bar diameter and wall-thickness
- Heat-treated triple-butted AL7075 alloys
- Dual surface treatments:
 - Shot-peened center and bends for strength
 - Polished ends for better adhesion of grips
- Marked ends for cutting-down.
- Color graphics
- For Ø25.4mm stems

Baron-V

[HD-539]

- Hi Rise
- Intended usage: All-Mountain / Freeride
- 660mm width, 10° back-sweep, 9° up-sweep, 38mm rise
- Weight: 268g



Piuton-O

[HD-537]

- Mid Rise
- Intended usage: Enduro / All-Mountain / Freeride
- 650mm width, 9° back-sweep, 10° up-sweep, 30mm rise
- Weight: 230g



Barium-Q

[HD-520B]

- Lo Rise
- Intended usage: XC / Enduro / All-Mountain
- 630mm width, 8° back-sweep, 8° up-sweep, 15mm rise
- Weight: 198g



Lithium-E

[HD-538]

- Super Low Rise
- Intended usage: XC / Enduro / All-Mountain
- 630mm width, 9° back-sweep, 3° up-sweep, virtual rise
- Weight: 185g



Why Ø25.4mm?

Obviously, many companies are pushing to go to Ø31.8mm bar diameter. This size has the claimed advantage of being "stiffer and stronger". But, let's examine these "benefits" in more detail.

Strength: Large diameter tubes with thin walls are great in the main tubes of a frame (such as Element uses). However, in clamped areas, it does not work so well so wall thickness needs to be the similar to Ø25.4mm bars. This is why Ø31.8mm bars and stems are not lighter and often heavier. Oversize bars are challenging to manufacture, as they taper 43% from stem to grip, then stretched into a riser shape. Thin walls are difficult to control in such a complex system. Ø25.4mm bars only taper 14%, so tolerances can be tighter and bars can be

rounder with consistent strength.

Weight: A set of oversize stem plus bar together tends to be 25~30g heavier vs. a similar set in Ø25.4mm.

Stiffness: For a rigid road bike, this has some merit. However, on a bike with flattish bars, fat tires and suspension, handlebar stiffness is less of an issue. Note also that since heavier parts are inherently stiffer, some of the extra stiffness of Ø31.8mm is simply due to weight increase.

Reliability: Element Technic bars in Ø25.4mm have been carefully developed and are manufactured with precision. They have a proven service life. Why change for the sake of fashion? Only when we can find a way to do an oversize bar properly will we go to Ø31.8mm.

Stems

Element Technic stems are a perfect link between our frames and handlebars.

- Precision CNC machined
- Anodized finish
- Color graphics



SM-01 L90mm



SM-01 L90mm



Neon-S

[SM-20]

Superlight

- Intended usage: XC / Enduro / Adventure
- AL7075/T6 w/ titanium screws (w/anti-seize thread compound)
- Size: Ø25.4mm x L90, 100, 110, 120mm x +5°
- Weight (L100): 125g

Neon-L

[SM-20R]

- Intended usage: Road
- Size: Ø26.0mm x L105mm x -5°

Helium-N

[SM-01]

Lightweight

- Intended usage: XC / Enduro / Adventure / All-Mountain
- AL6061/T6 w/stainless-steel screws
- Size: Ø25.4mm x L90, 100, 110, 120mm x +8°
- Weight (L100mm): 145g

Seatposts

Element Technic seatposts are a perfect complement to our frames.

- Easy and secure 2-bolt adjustment
- Color graphics



Argon-T

[SP-500]

Performance zero-offset post

- Intended usage: Enduro / Adventure / All-Mountain / Freeride
- 3-D forged one-piece AL7075/T6 shaft
- Black anodized finish
- Size: Ø27.2mm x L350mm
- Weight: 230g

Oxy-Z

[SP-700]

Superlight zero-offset post

- Intended usage: XC / Enduro / Adventure
- Full carbon construction
- Carbon clamps
- Carbon weave finish
- Size: Ø27.2mm x L320mm
- Weight: 170g

Hydro-S

[SP-900]

Offset carbon post

- Intended usage: XC / Enduro / Adventure
- Carbon shaft
- Alloy head and clamps
- Carbon weave finish
- Size: Ø27.2mm x L320mm
- Weight: 200g



Chainstay Protectors

- Cordura nylon w/ velcro
- Black w/Element logo
- Size: M (fits most seatstays) or L (fits over size seatstays)



Mini Pumps

- Alloy construction
- Thumblock dual-head
- Folding T-handle

[MP-ELM002]

- Easy-read bar-type gauge
- Length:285mm



MP-ELM002

[MP-ELM102]

- Hi-pressure / Hi-volume switchable
- Telescopic
- Length:220mm



MP-ELM102

[MP-ELM101]

- Basic design
- Length:273mm



MP-ELM101

Saddle Bag

[BG-SH-701MR]

- 1680D polyester
- Black
- Reflective tape
- Reflective logo with loop for attaching flasher
- Convertible volume
- Velcro straps



Handlebar Bags

- 1680D polyester
- Reflective logo
- Black
- Map pockets



Large

[BG-SH-3404R]

- Bottle pocket
- 13" x 7" x 8" (330mm x 178mm x 203mm)

Small

[BG-CS-103R]

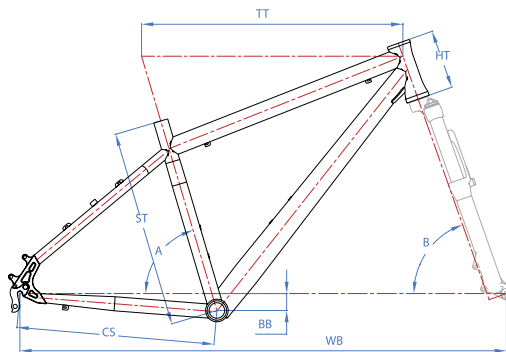
- 8" x 4" x 7_" (203mm x 102mm x 191mm)



Geometry and Spec

Nitron-Q
Electro-X
Proton-D

Item	Spec
Fork Travel	80mm~100mm
Seatpost	Ø27.2mm
Seat collar	Ø30.9mm
F. Deraillieur	Ø31.8mm
B.B.	68mm
Headset	OS integrated 36x Ø44mm

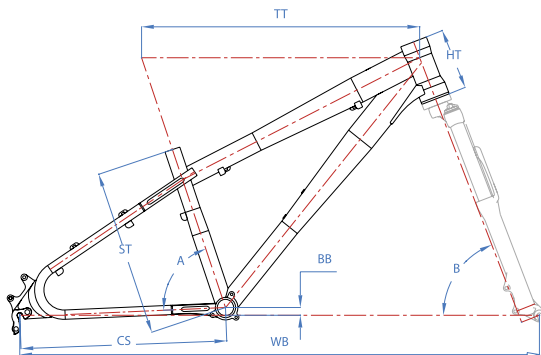


Sizing		ST (c-t)		A	TT (c-c)		B	HT		BB (drop)		CS		WB	
Asia	West	[in.]	[mm]	Ø	[in.]	[mm]	Ø	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]
S	XS	14.0	355	73.5	21.3	540	70.0	4.9	125	1.4	36	16.5	420	40.3	1024
M	S	16.5	420	73.5	21.9	555	70.5	4.9	125	1.4	36	16.5	420	40.8	1036
L	M	18.0	460	73.5	22.2	565	71.0	4.9	125	1.4	36	16.5	420	41.3	1049
XL	L	19.5	495	73.5	23.2	590	71.0	5.3	135	1.4	36	16.5	420	41.9	1064

Note:Frame Measurement with 80mm

XENON-E

Item	Spec
Fork Travel	100~130mm
Seatpost	Ø27.2mm
Seat collar	Ø31.8mm
F. Deraillieur	Ø34.9mm
B.B.	73mm
R. Hub	standard 135mm
Headset	1point5 (1.5")



Sizing		ST (c-t)		A	TT (c-c)		B	HT		BB (drop)		CS		WB	
Asia	West	[in.]	[mm]	Ø	[in.]	[mm]	Ø	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]
M	S	13.5	340	74	22.1	560	69	4.9	125	+0.6	+16	16.5	420	41.7	1060

Note:Frame Measurement with 100mm fork(no sag)

Model name 2006 v.s. 2550

2006	2005
Frames	
Nitron-Q	Elegant
Electro-X	Electrox
Proton-D	Proton
Xenon-X	-
Handlebars	
Indium-X	Taper Lite
Radium-F	Taper Rise
Lithium-E	Silver
Barium-Q	Gold
Pluton-O	Copper
Boron-V	Iron
Stems	
Neon-S	Neon (Ø25.4)
Neon-L	Neon (Ø26.0)
Helium-N	Helium
Seatposts	
Oxy-Z	Oxy
Hydro-S	Hydro
Argon-T	Nitro

Note:Products and specifications in this catalogue are subject to change without notice.

ELEMENT PERFORMANCE PRODUCTS



亞曼特

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