

” A tower of strength, without a pillar you have nothing ”

Pillar

Pillar Can Help



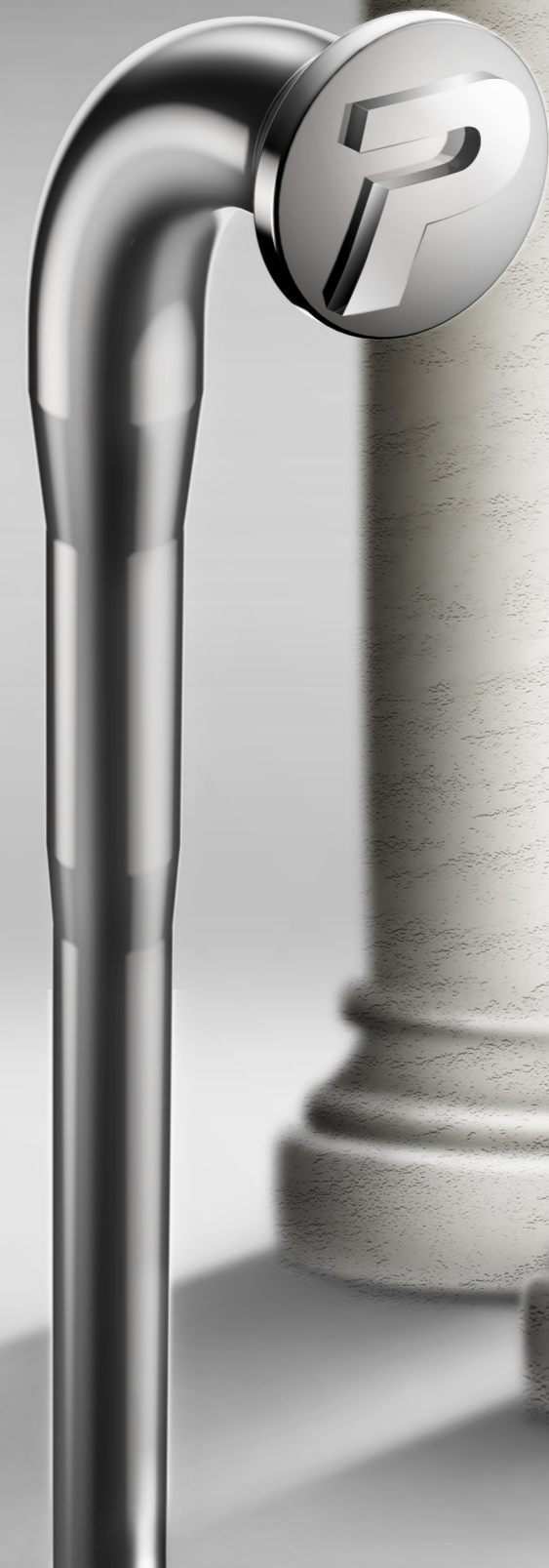
SHA DAR ACCESSORIES CO.,LTD

📍 No.4-2 Lane 20, Pae-Nae St., Shu Lin Dist., New Taipei City 23849, Taiwan

☎ +886 2 2686 8277 ✉ sales@pillarspoke.com

☎ +886 2 2681 5966 ✉ pillar@pillarspoke.com

🌐 www.pillarspoke.com 📖 Pillar Spoke (2024)



A Brief History of Pillar Spokes & Nipples



History

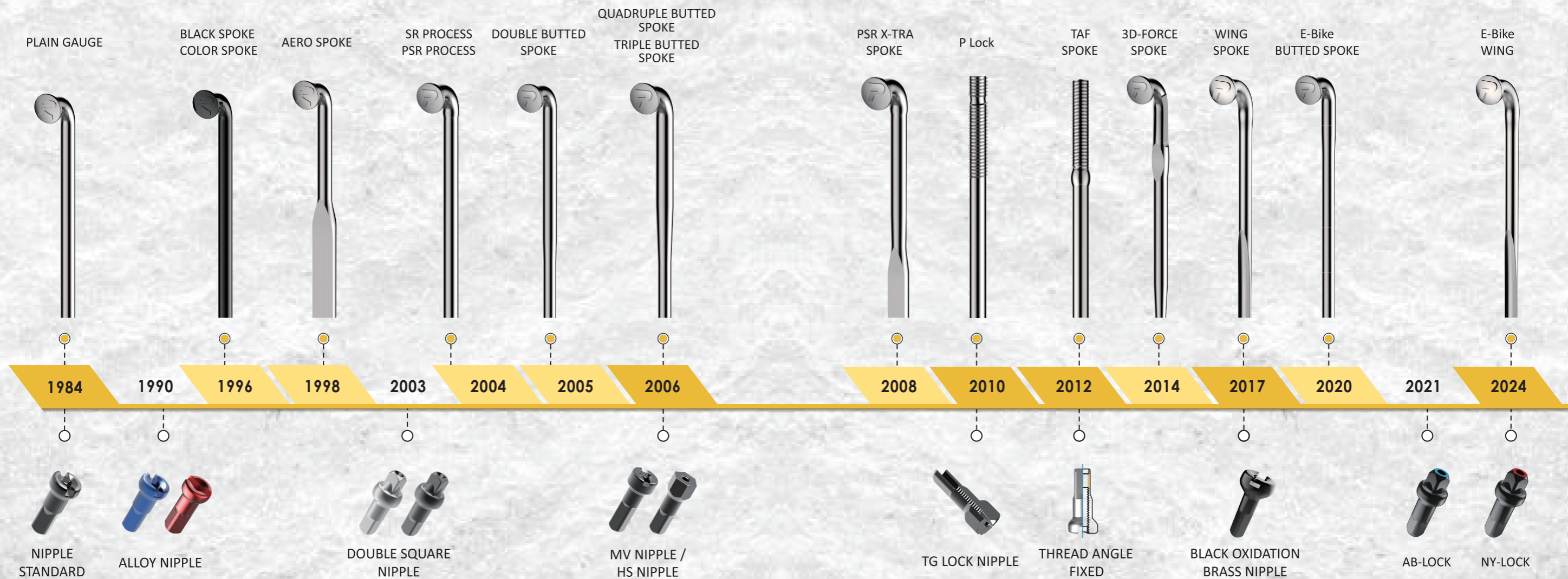
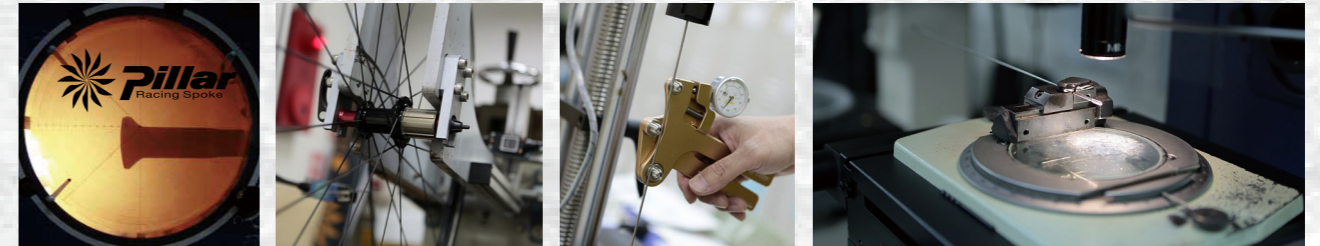
For over 40 years, Pillar has been pioneering spoke development throughout the world. With specialist manufacturing operations in Taiwan, coupled to the latest research and development facilities, Pillar has become the number one choice for spokes and nipples amongst the finest brands in the bicycle world today.

Production runs at well in excess of 1.5 million sets a month and our success is due to the clear lines of communication we maintain with each and everyone of our customers, linked to developing personal relationships by spending time at our customers locations in order to understand every, exact need they have.

Pillar holds countless patents on the technology and products it has developed over the years and will continue to lead the way to other manufacturers around the world.

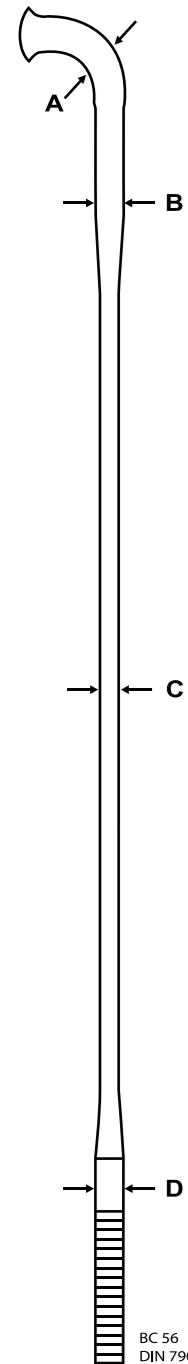
The continuous development of new and exciting materials will ensure that Pillar is the only choice of people in the know.

Contact us with the peace of mind there is no other spoke manufacturer in the world today that can cater for your needs, no matter how large or small.





		A (mm)	B (mm)	C (mm)	D (mm)	Weight (260mm)	Page	DISC		RIM		DISC		XC		AM	END	DH	E-BIKE	Cargo
								Tubular	Clincher	Tubular	Clincher	Tubular	Clincher	Light use	Heavy use					
PLAIN GAUGE SPOKE	P 12	2.6	2.6	2.6	2.6	10.9 g	10													
	P 13	2.3	2.3	2.3	2.3	8.5 g	10													
	P 14	2.0	2.0	2.0	2.0	6.5 g	10													
	P 15	1.8	1.8	1.8	1.8	5.5 g	10													
	PSR 13	2.5	2.3	2.3	2.3	8.5 g	11													
	PSR 14	2.2	2.0	2.0	2.0	6.5 g	11													
	PSR 15	2.0	1.8	1.8	1.8	5.5 g	11													
BUTTED SPOKE	PSB 23	2.6	2.6	2.3	2.3	9.0 g	13													
	PSB 34	2.3	2.3	2.0	2.0	6.8 g	13													
	PSB 45	2.0	2.0	1.8	1.8	5.6 g	13													
	PDB 1213	2.6	2.6	2.3	2.6	9.2 g	14													
	PDB 1314	2.3	2.3	2.0	2.3	7.0 g	14													
	PDB 1415	2.0	2.0	1.8	2.0	5.7 g	14													
	PDB 1416	2.0	2.0	1.6	2.0	4.7 g	14													
	PDB 1417	2.0	2.0	1.5	2.0	4.3 g	14													
	PTB 380	2.3	2.3	1.8	2.0	6.0 g	15													
	PTB 270	2.2	2.2	1.7	2.0	5.3 g	15													
	PSR TB 2018	2.2	2.0	1.8	2.0	5.7 g	16													
	PSR TB 2017	2.2	2.0	1.7	2.0	5.2 g	16													
	PSR TB 2016	2.2	2.0	1.6	2.0	4.7 g	16													
	PSR TB 2015	2.2	2.0	1.5	2.0	4.3 g	16													
	PSR QB 5380	2.5	2.3	1.8	2.0	6.3 g	17													
PSR QB 4270	2.4	2.2	1.7	2.0	5.8 g	17														
AERO SPOKE	PA 1423	2.0	2.0	2.3 x 1.5	2.0	6.5 g	19													
	PA 1432	2.0	2.0	3.2 x 1.0	2.0	6.5 g	19													
	PA 1528	1.8	1.8	2.8 x 1.0	1.8	5.5 g	19													
	PBA 1425	2.0	2.0	2.5 x 1.05	2.0	5.7 g	20													
	PBA 1422	2.0	2.0	2.2 x 0.95	2.0	4.7 g	20													
	PBA 1420	2.0	2.0	2.0 x 0.95	2.0	4.3 g	20													
	PSR Aero 1423	2.2	2.0	2.3 x 1.5	2.0	6.5 g	21													
	PSR Aero 1432	2.2	2.0	3.2 x 1.0	2.0	6.5 g	21													
	PSR Aero 1528	2.0	1.8	2.8 x 1.0	1.8	5.5 g	21													
	PSR X-TRA 1425	2.2	2.0	2.5 x 1.05	2.0	5.7 g	22													
	PSR X-TRA 1424	2.2	2.0	2.4 x 1.05	2.0	5.2 g	22													
PSR X-TRA 1422	2.2	2.0	2.2 x 0.95	2.0	4.7 g	22														
PSR X-TRA 1420	2.2	2.0	2.0 x 0.95	2.0	4.3 g	22														
WING SPOKE	13G WING 25	2.3	2.3	2.5 x 1.40	2.3	6.5 g	23													
	PSR WING 23	2.2	2.0	2.3 x 1.45	2.0	5.7 g	23													
	PSR WING 22	2.2	2.0	2.2 x 1.40	2.0	5.2 g	23													
	PSR WING 21	2.2	2.0	2.1 x 1.30	2.0	4.7 g	23													
	PSR WING 20	2.2	2.0	2.0 x 1.20	2.0	4.3 g	23													



BC 56
DIN 79012

*For reference only.



Wing

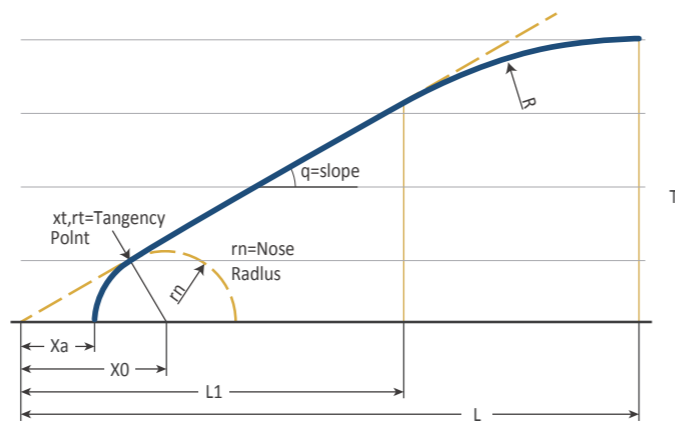


Nose cone has been proven to be the most effective aerodynamic design across the full spectrum of wind conditions encountered. Wing Spoke is milled to a computed aerodynamic curve derived from the same equation used for aircraft nose cones. This blunted leading edge decreases turbulence as the spoke enters the air stream.



SPOKE SECTION

The slope is calculated to reduce the turbulence towards the trailing edge minimizing drag. The cross-section area ensures that the spoke retains enough material for maximum strength-to-weight ratios.

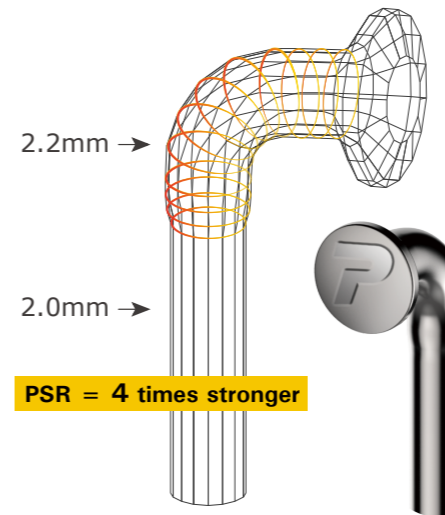


Pillar Spoke Reinforce

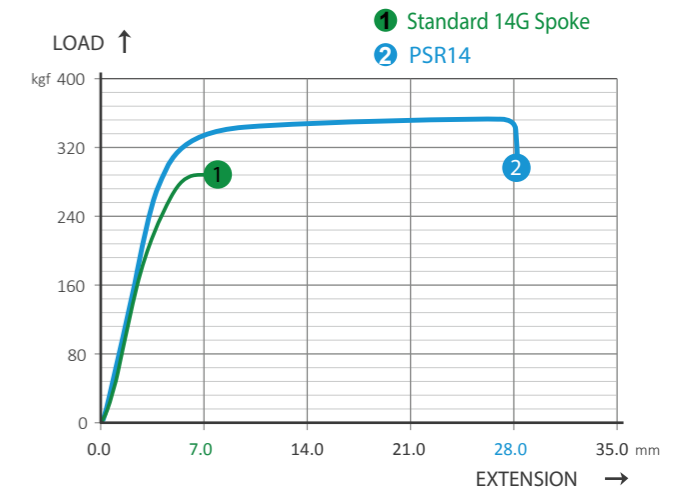


As clearly indicated in the chart, you will see the PSR spoke is four times stronger than standard spokes.

PSR has been developed by Pillar Spokes over years, making Pillar the industry leader for both aftermarket and OEM alike.



PSR = 4 times stronger

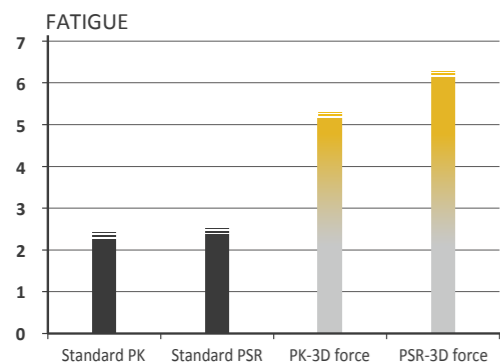
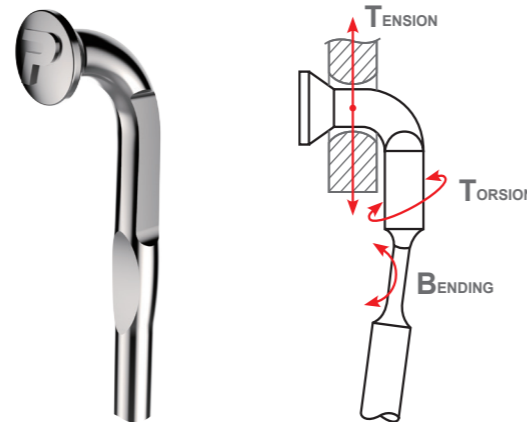


3 Dimension Force



3D-force spoke can set the spoke body at the correct position and direction for assembly and force handling. The first flattened section absorbs torsion and the second flattened section helps transfer tension thus allowing the change of angle of bending so that the spoke body, when put into use, may effectively absorb or transfer shock transmitted thereto.

This proprietary combination significantly enhances the fatigue resistance of the spoke body. If you want your wheels to significantly outlast the competition, 3D-Force will deliver.



Twist Prevent System

TPS (twist prevent system) allows the position of straight pull and double butted spokes to be fixed preventing the spokes from turning with the nipple during assembly.

TPS also prevents double butted spokes from twisting at the lighter-weight butted section as the spoke tension increases.



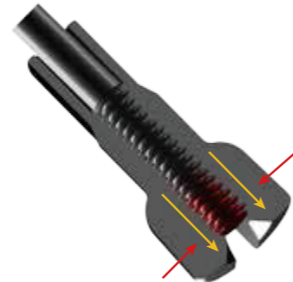
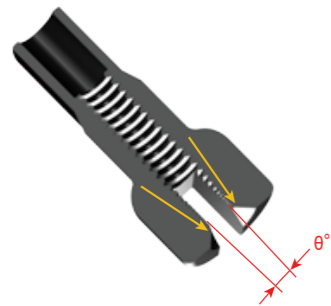


TG-Lock Nipple



TG-Lock Nipples are designed to attain maximum grip without the use of adhesives. This nipple will lock itself on to the spoke threads as the tension is increased and due to its unique design, will not come loose during its use.

Please use custom-designed PHT-TG TOOL to position TG nipple. TPS is recommended when TG nipple goes with butted or straight pull spoke.

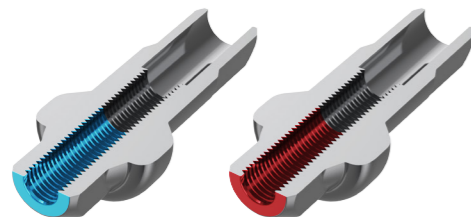


Lock Nipple NEW



AB-Lock nipples are coated with special designed epoxy micro-encapsulated curing adhesives, that enhance the anchorage of threaded fasteners. The pre-applied adhesives remain dormant until the shearing action of engaging the spoke into a nipple or threaded cavity breaks the capsules and allows the adhesive to cure.

NY-Lock nipples processing adjustment type anti-loose use. Appropriate lock-in torque, can be adjusted repeatedly. Good solvent resistance, such as lubricants, fuel oil, and most solvents. Comply with RoHS and halogen-free environmental protection requirements. No curing time required, can be used at any time.



AB-Lock

NY-Lock



Plain Gauge

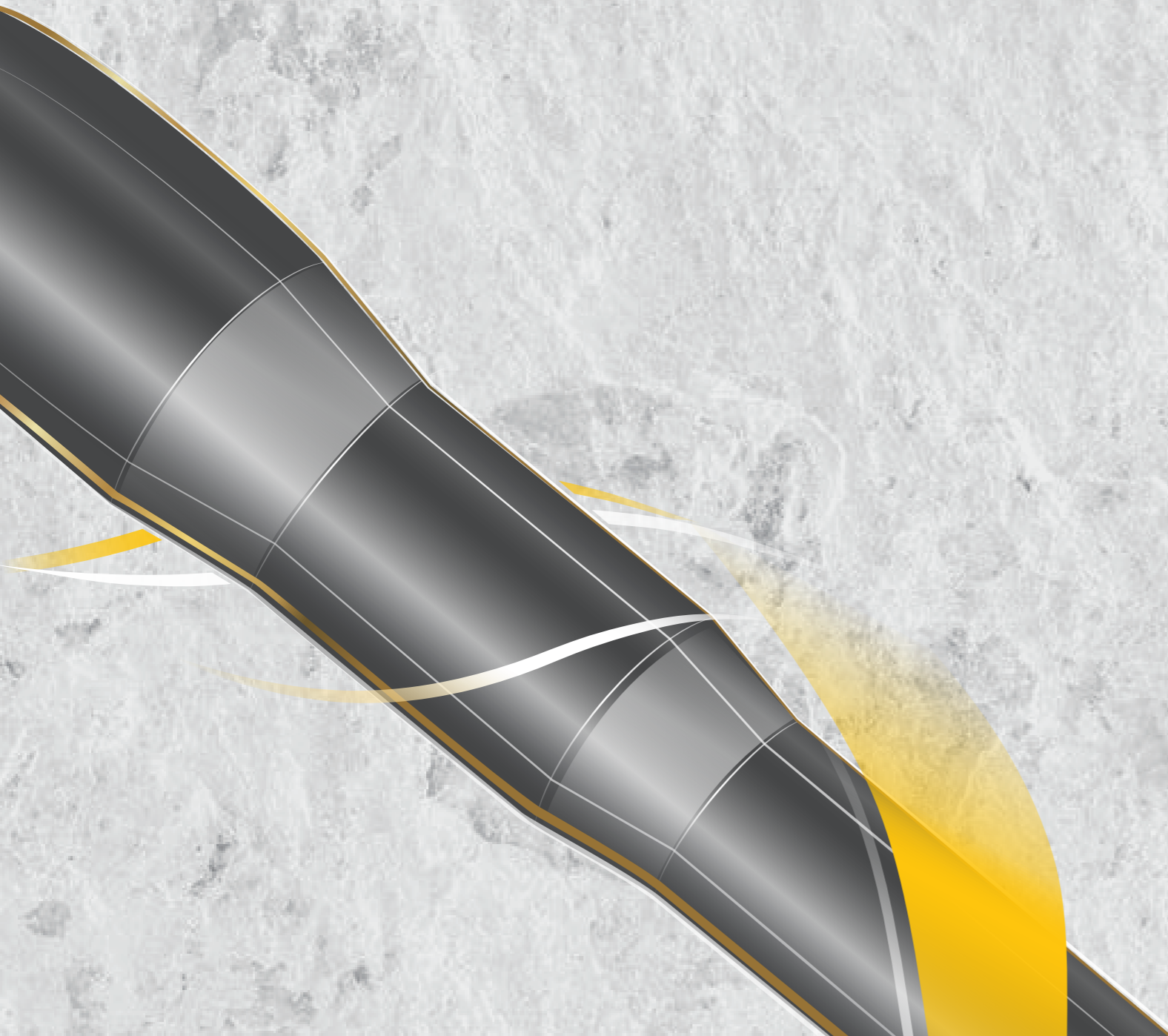
Spoke

- Plain Gauge
- PSR Standard

Butted

Spoke

- Single Butted
- Double Butted
- Triple Butted
- PSR Triple Butted
- PSR Quadruple Butted

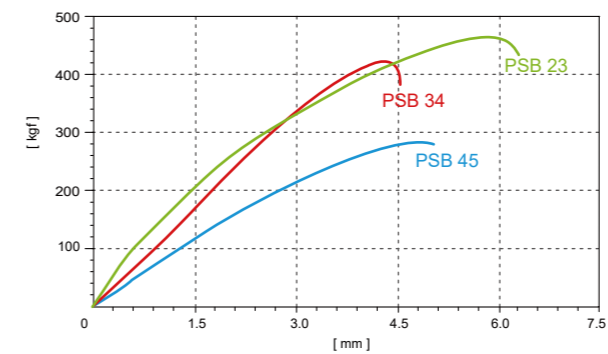


Single Butted

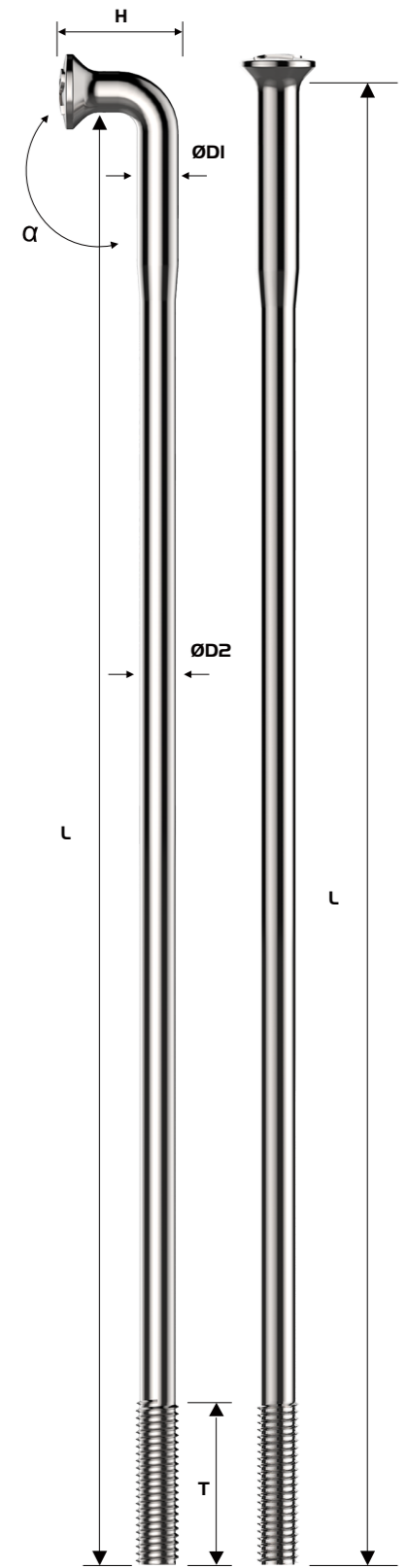
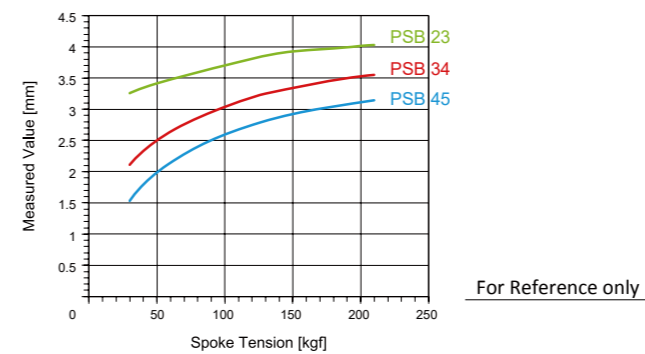
MATERIAL	T302+
ADVANTAGE	Pillar cold drawn technology, extra strength =20% +
THREAD	Rolled PSB 23: 13G PSB 34: 14G PSB 45: 15G
APPLICATION	City/ Trekking/ E-Bike/ Cargo
COLOUR	COLOURPC Black



Breaking Strength



Spoke Tension



Model	T	ØD1	ØD2	α	H	L	Weight (260 mm)
PSB 23	9.0 mm	2.6 mm	2.3 mm	100°	8.0 mm	160-310 mm	9.0 g
PSB 34	9.0 mm	2.3 mm	2.0 mm	95°	7.0 mm	160-310 mm	6.8 g
PSB 45	9.0 mm	2.0 mm	1.8 mm	95°	6.2 mm	160-310 mm	5.6 g

Aero

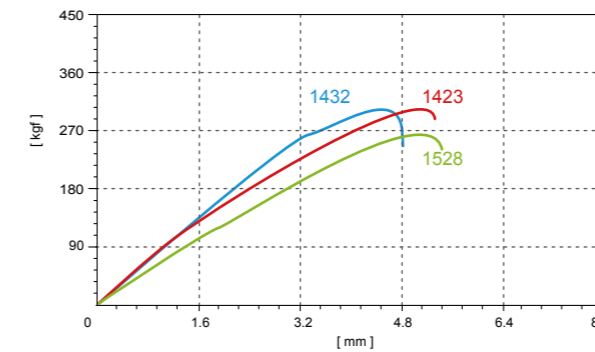
Spoke

- Aero
- Butted Aero
- PSR Aero
- PSR X-TRA
- Wing

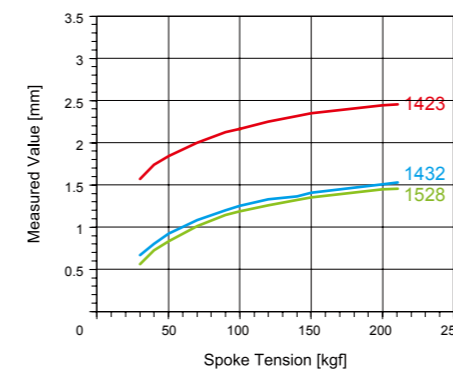
Aero

MATERIAL	T302+
ADVANTAGE	Pillar cold forge technology Aero shape, high elasticity and low drag coefficient.
THREAD	Rolled PA 1423: 14G PA 1432: 14G PA 1528: 15G
APPLICATION	Race/ MTB
COLOUR	COLOURPC Black

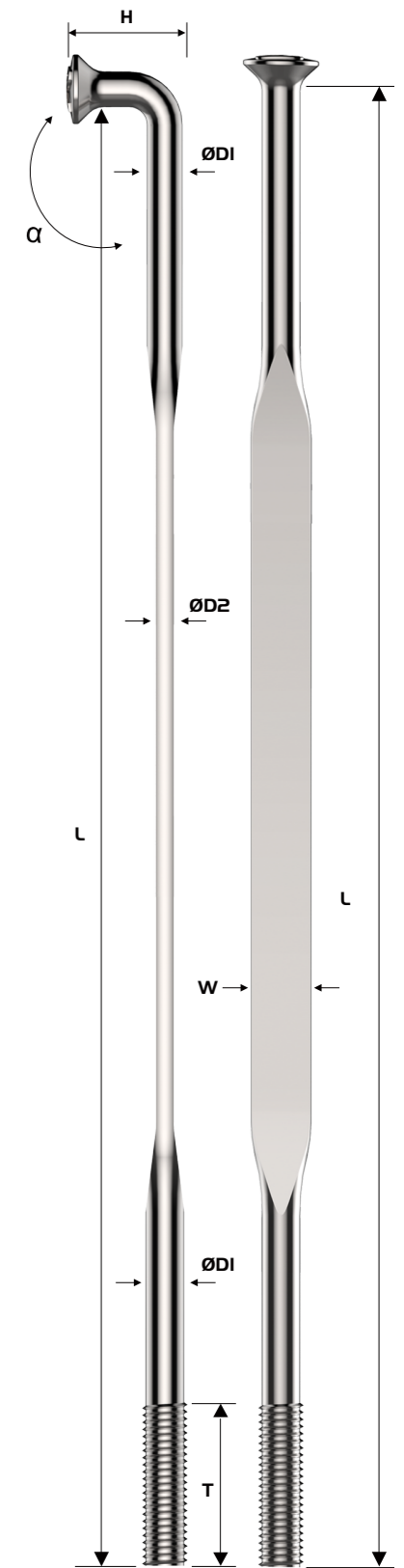
Breaking Strength



Spoke Tension



For Reference only



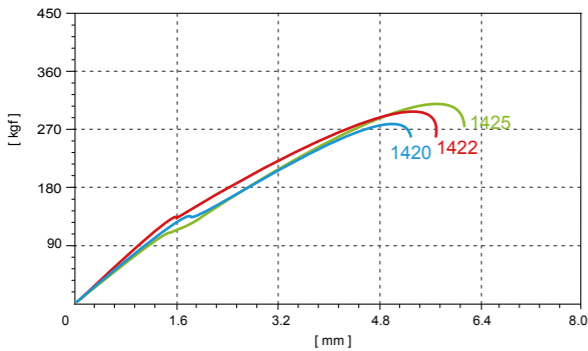
Model	T	ØD1	W	ØD2	α	H	L	Weight (260 mm)
PA 1423	9.0 mm	2.0 mm	2.3 mm	1.5 mm	95°	6.2 mm	170-310 mm	6.5 g
PA 1432	9.0 mm	2.0 mm	3.2 mm	1.0 mm	95°	6.2 mm	170-310 mm	6.5 g
PA 1528	9.0 mm	1.8 mm	2.8 mm	1.0 mm	95°	6.0 mm	170-310 mm	5.5 g

Butted Aero

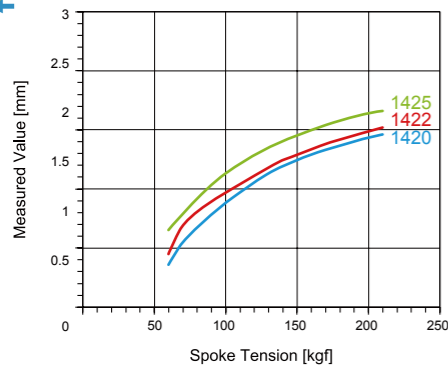
- MATERIAL** T302+
- ADVANTAGE** Pillar cold drawn technology. Double butted with three Blade options. Up to 30% weight saving without compromising strength.
- THREAD** Rolled
PBA 1425: 14G
PBA 1422: 14G
PBA 1420: 14G
- APPLICATION** Race/ MTB/ Down Hill
- COLOUR**



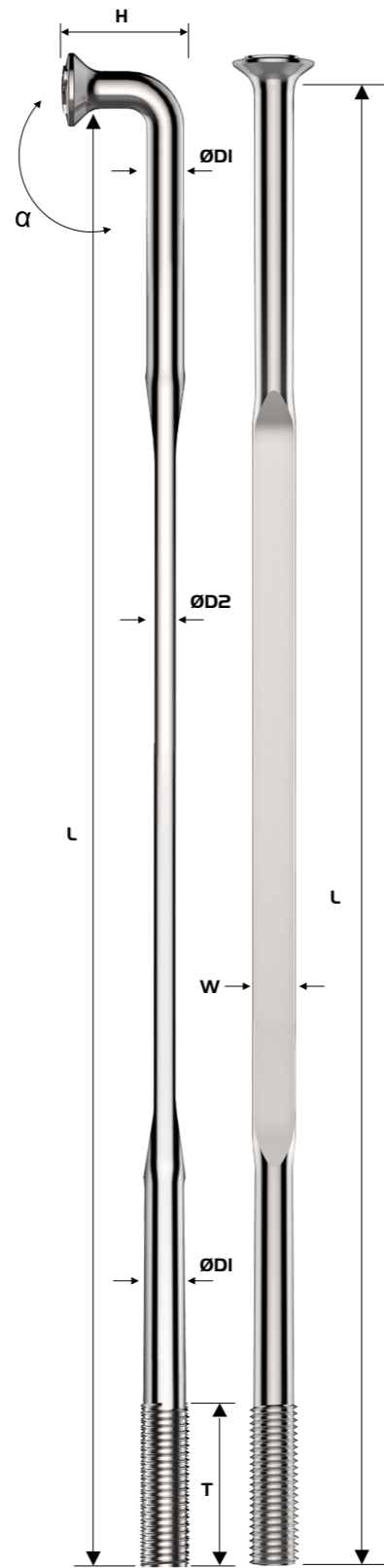
Breaking Strength



Spoke Tension



For Reference only

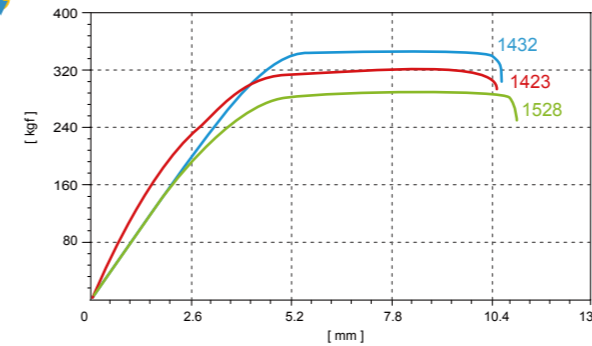


PSR Aero

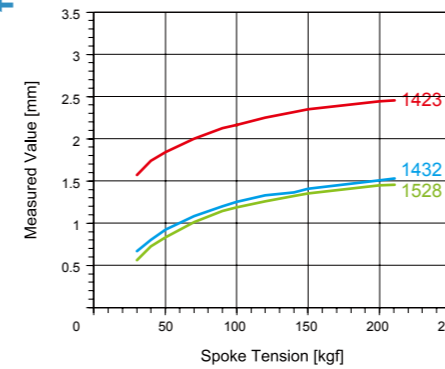
- MATERIAL** T302+
- ADVANTAGE** Pillar unique cold forge technology, Up to 20% more Strength Perfect Aero shape, high elasticity and low drag coefficient.
- THREAD** Rolled
PSR AERO 1423: 14G
PSR AERO 1432: 14G
PSR AERO 1528: 15G
- APPLICATION** Race/ MTB/ Down Hill/ Free Ride
- COLOUR**



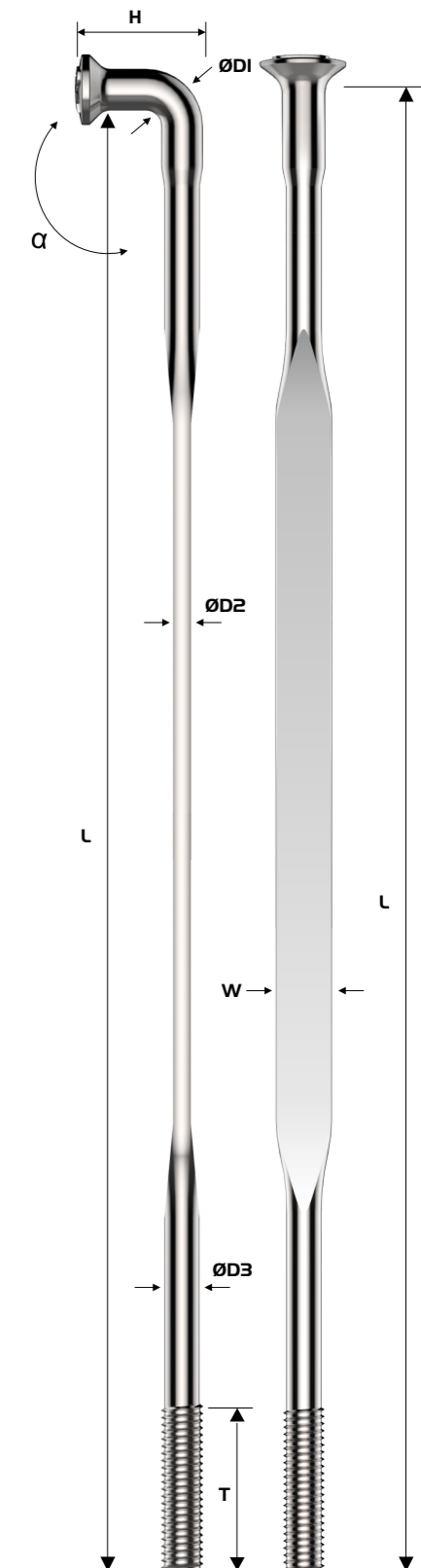
Breaking Strength



Spoke Tension



For Reference only



Model	T	ØD1	W	ØD2	α	H	L	Weight (260 mm)	Model	T	ØD1	W	ØD2	ØD3	α	H	L	Weight (260 mm)
PBA 1425	9.0 mm	2.0 mm	2.5 mm	1.05 mm	95°	6.2 mm	170-310 mm	5.7 g	PSR AERO 1423	9.0 mm	2.2 mm	2.3 mm	1.5 mm	2.0 mm	95°	6.6 mm	180-310 mm	6.5 g
PBA 1422	9.0 mm	2.0 mm	2.2 mm	0.95 mm	95°	6.2 mm	170-310 mm	4.7 g	PSR AERO 1432	9.0 mm	2.2 mm	3.2 mm	1.0 mm	2.0 mm	95°	6.6 mm	180-310 mm	6.5 g
PBA 1420	9.0 mm	2.0 mm	2.0 mm	0.95 mm	95°	6.2 mm	170-310 mm	4.3 g	PSR AERO 1528	9.0 mm	2.0 mm	2.8 mm	1.0 mm	1.8 mm	95°	6.5 mm	180-310 mm	5.5 g

PSR X-TRA

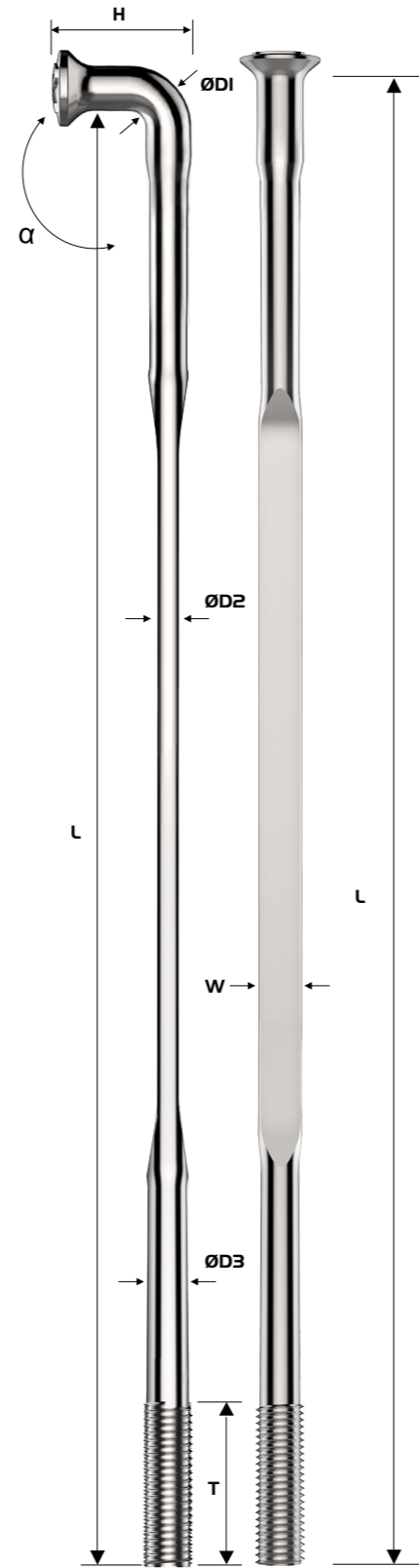
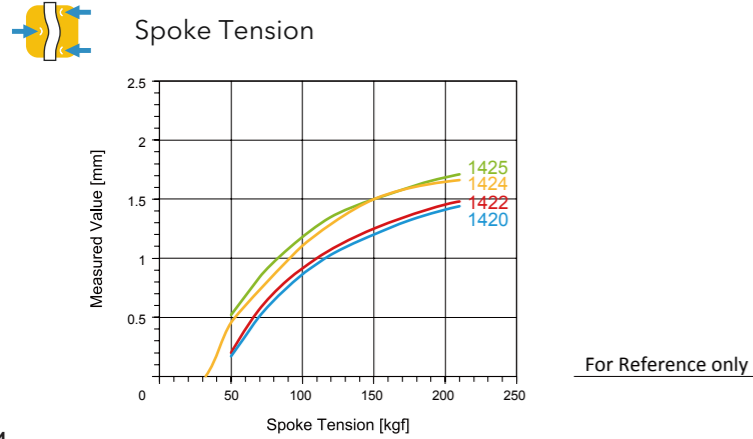
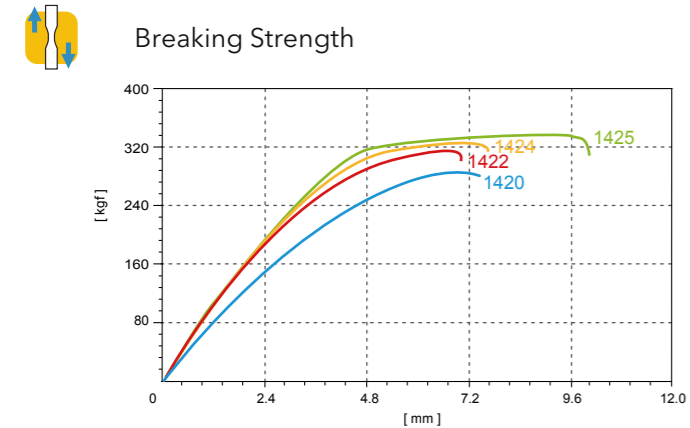
MATERIAL T302+

ADVANTAGE Pillar unique cold forge with our cold drawn technology. Up to 30% weight saving without compromising strength.

THREAD Rolled
 PSR X-TRA 1425: 14G
 PSR X-TRA 1424: 14G
 PSR X-TRA 1422: 14G
 PSR X-TRA 1420: 14G

APPLICATION Race/ MTB/ Down Hill/ Free Ride

COLOUR Black



Wing

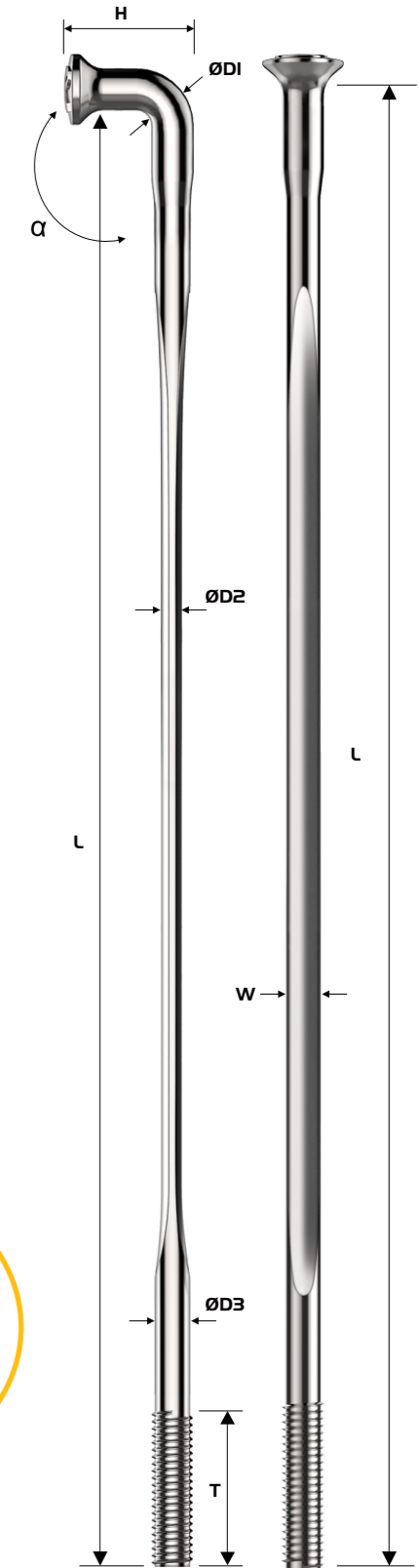
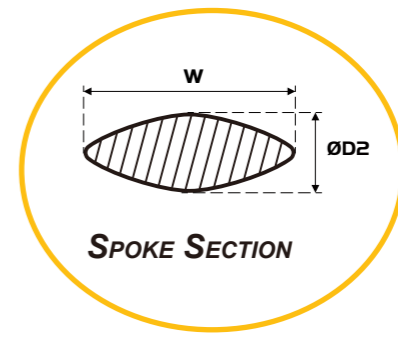
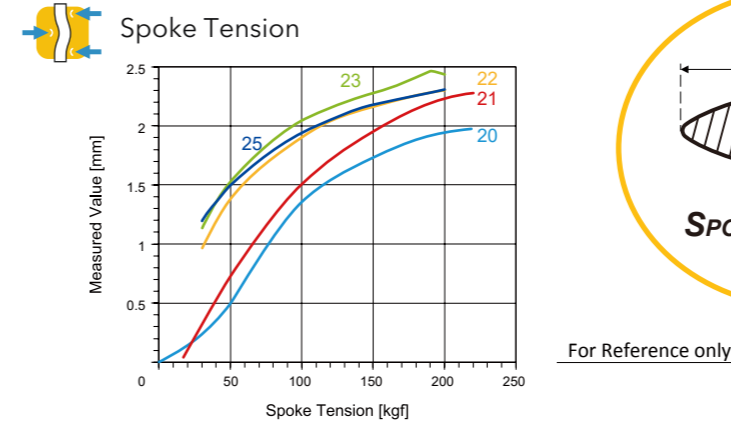
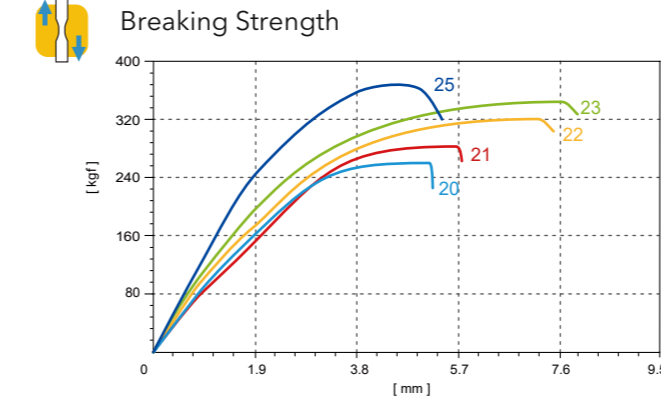
MATERIAL T302+

ADVANTAGE Pillar unique highest level of aerodynamic performance spoke with one-piece & butted design, reduces potential weak spots, helps prevent twisting or breakage when tensioning.

THREAD Rolled
 13G WING 25: 13G
 PSR WING 23: 14G
 PSR WING 22: 14G
 PSR WING 21: 14G
 PSR WING 20: 14G

APPLICATION Race

COLOUR Black



Model	T	ØD1	W	ØD2	ØD3	α	H	L	Weight (260 mm)	Model	T	ØD1	W	ØD2	ØD3	α	H	L	Weight (260 mm)
PSR X-TRA 1425	9.0 mm	2.2 mm	2.5 mm	1.05 mm	2.0 mm	95°	6.6 mm	180-310 mm	5.7 g	13G WING 25	9.0 mm	2.3 mm	2.5 mm	1.40 mm	2.3 mm	95°	7.5 mm	180-310 mm	6.5 g
PSR X-TRA 1424	9.0 mm	2.2 mm	2.4 mm	1.05 mm	2.0 mm	95°	6.6 mm	180-310 mm	5.2 g	PSR WING 23	9.0 mm	2.2 mm	2.3 mm	1.45 mm	2.0 mm	95°	6.6 mm	180-310 mm	5.7 g
PSR X-TRA 1422	9.0 mm	2.2 mm	2.2 mm	0.95 mm	2.0 mm	95°	6.6 mm	180-310 mm	4.7 g	PSR WING 22	9.0 mm	2.2 mm	2.2 mm	1.40 mm	2.0 mm	95°	6.6 mm	180-310 mm	5.2 g
PSR X-TRA 1420	9.0 mm	2.2 mm	2.0 mm	0.95 mm	2.0 mm	95°	6.6 mm	180-310 mm	4.3 g	PSR WING 21	9.0 mm	2.2 mm	2.1 mm	1.30 mm	2.0 mm	95°	6.6 mm	180-310 mm	4.7 g
										PSR WING 20	9.0 mm	2.2 mm	2.0 mm	1.20 mm	2.0 mm	95°	6.6 mm	180-310 mm	4.3 g



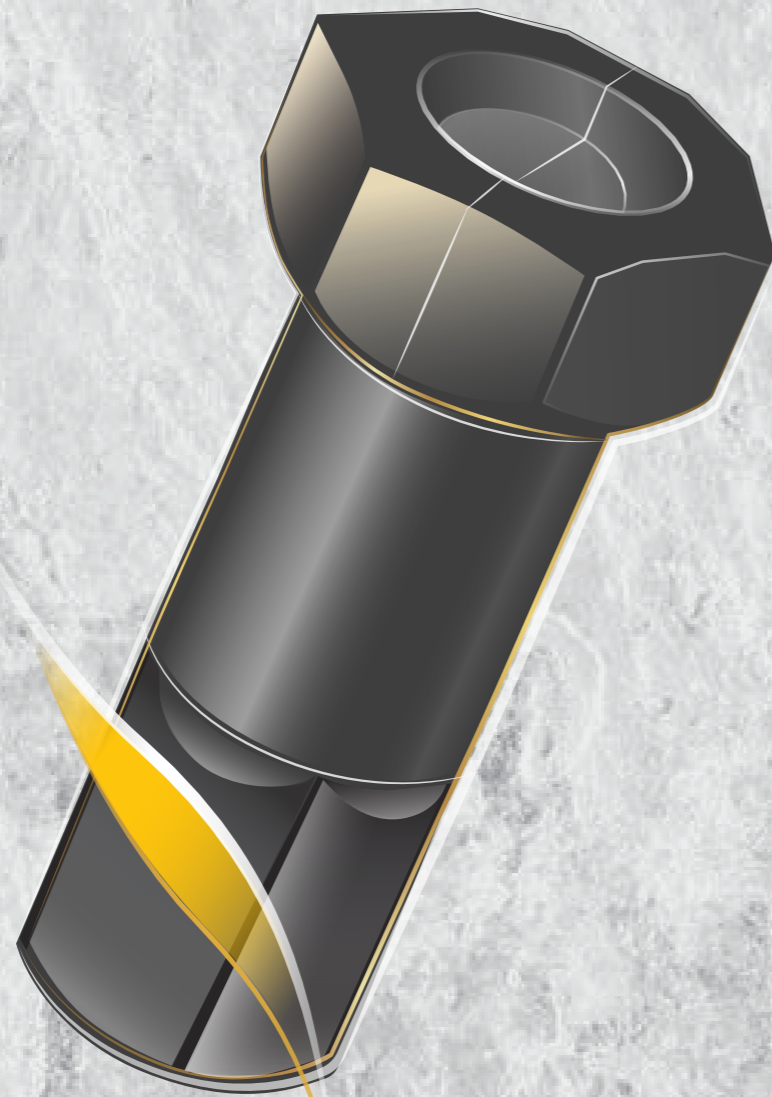
Size	Model	Material	CHILDREN'S	TRICYCLE	BMX	FOLDING	3T	TRACK	ROAD	ADVERTISING	RECUMBENT	TANDEN	TOURING	CROSS COUNTRY	GRAVE	XC	FR	AM	DOWN HILL	E-BIKE	CARGO
15G NIPPLE	LF 15	Low Lead	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PB 15				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PB 15 H				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PT 735	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PT 735 H	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	MV 15	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	NEW VH 15	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	HS 15							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	DSN 15							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	4R 15							█	█	█	█	█	█	█	█	█	█	█	█	█	█
14G NIPPLE	LF 14	Low Lead	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PB 14				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PB 14 H				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PT 734	Alloy			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	PT 734 H	Alloy			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	MV 14	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	NEW VH 14	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	HS 14	Alloy						█	█	█	█	█	█	█	█	█	█	█	█	█	█
	DSN 14							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	TG 14							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	TG 14 H							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	Hex 10							█	█	█	█	█	█	█	█	█	█	█	█	█	█
	4R 14							█	█	█	█	█	█	█	█	█	█	█	█	█	█
13G NIPPLE	LF 13	Low Lead																			
	PB 13																				
	PB 13 H																				
	PT 733 H	Alloy																			
	DSN 13																				
	TG 13 H																				
12G NIPPLE	PB 12																				
	PB 12 H																				
	DSN 12																				



Nipple

Series

- External Nipple
- TG Nipple
- Internal Nipple



*For reference only.
Please refer to product drawing.

External Nipple

Type	PB 12	PB 13	PB 14	PB 15
Thread	12G	13G	14G	15G
Material	Brass	Brass	Brass	Brass
Length	13, 16	12.5, 14, 16	12, 14, 16	12, 14, 16

Type	PT 734	PT 735	MV 14	MV 15
Thread	14G	15G	14G	15G
Material	Alloy Pro 7	Alloy Pro 7	Alloy Pro 7	Alloy Pro 7
Length	12, 14, 16	12, 14, 16	12, 14, 16	12, 14, 16

Type	PB 12 H	PB 13 H	PB 14 H	PB 15 H
Thread	12G	13G	14G	15G
Material	Brass	Brass	Brass	Brass
Length	13, 16	12.5, 14, 16	12, 14, 16	12, 14, 16

Type	PT 733 H	PT 734 H	PT 735 H
Thread	13G	14G	15G
Material	Alloy Pro 7	Alloy Pro 7	Alloy pro 7
Length	12.5, 16	12, 14, 16	12, 14, 16

Type	VH 14	VH 15	HS 14	HS 15
Thread	14G	15G	14G	15G
Material	Brass Alloy Pro 7	Brass Alloy Pro 7	Brass Alloy Pro 7	Brass Alloy Pro 7
Length	13, 15	13, 15	14, 16	14, 16

Type	DSN 12	DSN 13	DSN 14	DSN 15
Thread	12G	13G	14G	15G
Material	Brass Alloy Pro 7	Brass Alloy Pro 7	Brass Alloy Pro 7	Brass Alloy Pro 7
Length	17	16	14.4, 16, 18	14.4, 16, 18



MV Nipple



VH Nipple

HS Nipple



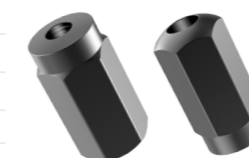
TG Nipple / Thread Lock System

Type	TG 13 H	TG 14	TG 14 H
Thread	13G	14G	14G
Material	Brass Alloy Pro 7	Brass Alloy Pro 7	Brass Alloy Pro 7
Length	14	14, 16	14, 16



Internal Nipple / Hidden

Type	Hex 10
Thread	14G
Material	Alloy Pro 7
Length	10



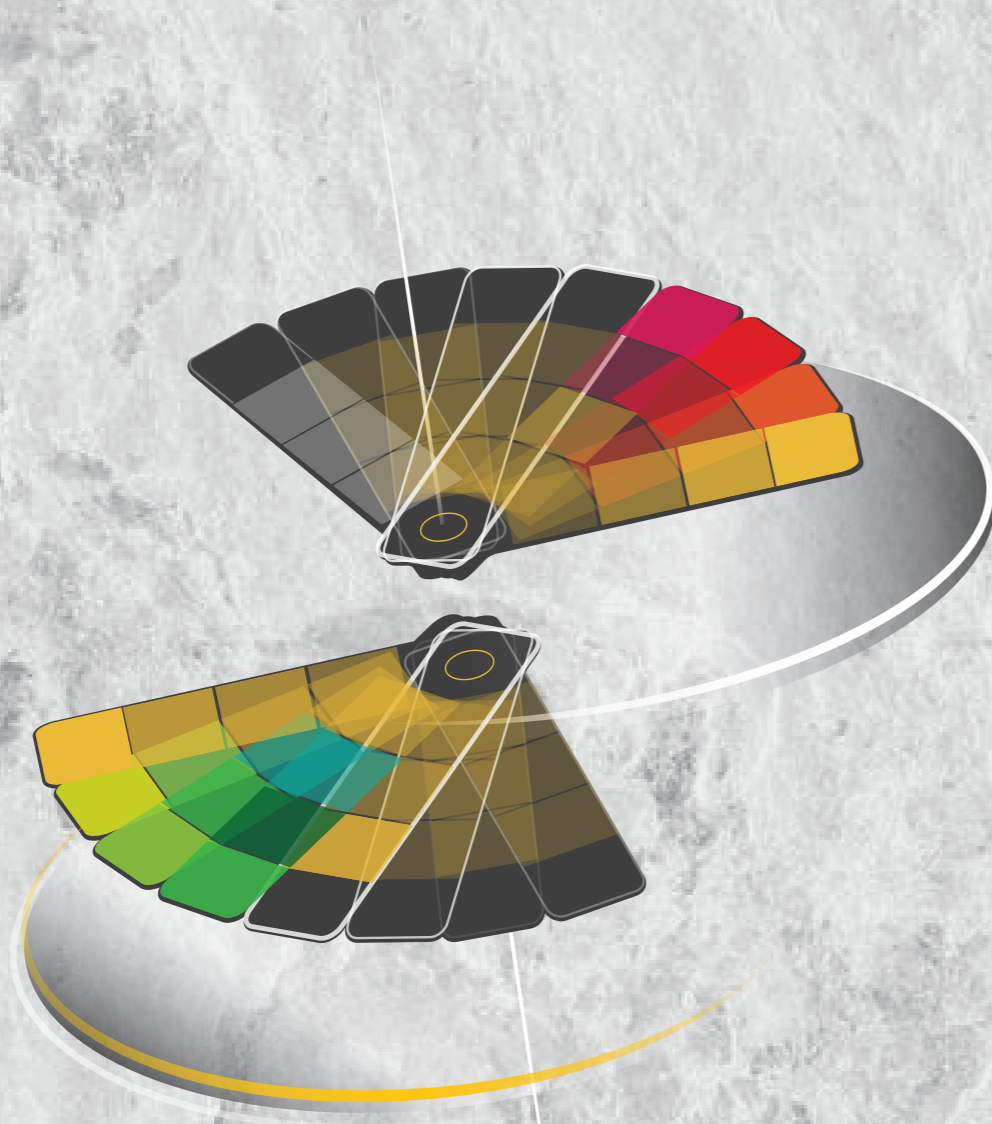
Type	4R 14	4R 15
Thread	14G	15G
Material	Brass Alloy Pro 7	Brass Alloy Pro 7
Length	10.5	10.5



Colour Series

Tool Accessories

- Nipple
- Spoke



*For reference only.
Please refer to actual product for coloring.

Nipple

Standard Colour / For Brass Nipple



-  Silver
-  Black Oxidation

Anodize Colour / For Alloy Nipple



JY

-  001
-  002
-  003
-  004
-  007
-  010
-  017
-  023
-  024
-  025
-  029
-  037

Spoke

Standard Colour / For Stainless Steel











































-  Silver
-  Black Oxidation

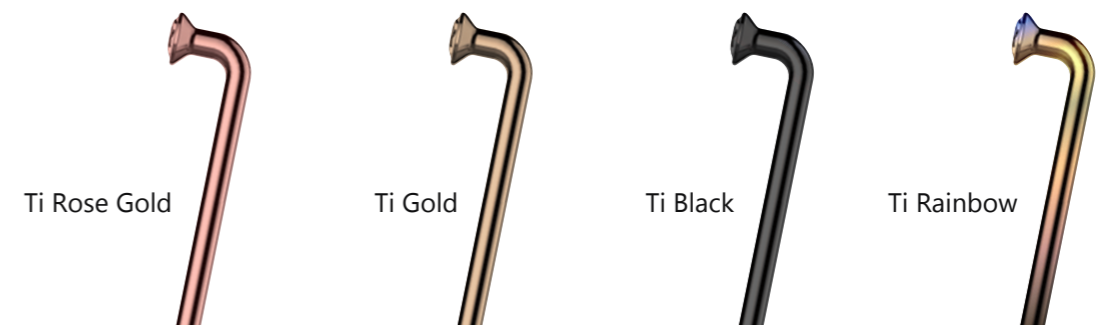
Powder Coating / For Any Material



SD-PC

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Ceramic Nanometer Ti Plating / For Stainless Steel



Ti Rose Gold

Ti Gold

Ti Black

Ti Rainbow

SPOKE TENSION METER



● Type: PHT4080

NEW



● Type: PHT5580

NEW



● Type: PHT5550

SPOKE TENSION GAUGE



RULER



BOX



AERO SPOKE HOLDER



TPS TOOL



● Type: PHT185

SPOKE WRENCH



● Type: 15G (3.2x3.2)
14G (3.2x3.2)
13G (3.6x3.6)
12G (3.9x3.9)

HAND TOOL

NEW



● Type: PHT7555 ◻ 5.5mm



● Type: PHT1532 ◻ 3.2mm

NEW



● Type: PHT7536 ◻ 3.6mm

NEW



● Type: PHT6032 ◻ 3.2mm

WASHER



For External Nipple
Type: PW 7542

For External Nipple
Type: PW 7048

For Internal Nipple
Type: PW 6035

For Internal Nipple
Type: PW 8630