

alping

S P O K E S  N I P P L E S



BICYCLE RANGE 



Based in Lomagna, in the heart of Lombardia, Alpina Raggi S.p.A. was founded in 1926 and focuses its activity on the production of spokes and nipples. The constant attention of Alpina guarantees the quality of its products through constant controls of raw material before and during its in house production, as well as a long standing collaboration with the Breda scientific Institute of Milan (www.isbreda.it) for specialized testing and consulting regarding to product quality.

Alpina is a company that shows the UNI EN ISO 9001:2000 certification.

The main production processes are planned to realize the best our customer requests . For this reason our in-house production control activities assure an adequate quality to the customer's specification. All product propositions are defined in our catalogues, price lists and customer specifications, in case the product is personalized. ALPINA, synonym for quality, continuous development of new and some patented products, quality and customer service supplies its high-grade spokes and nipples to the most important bicycle producers in the world.



FLAT SPOKES

alpina

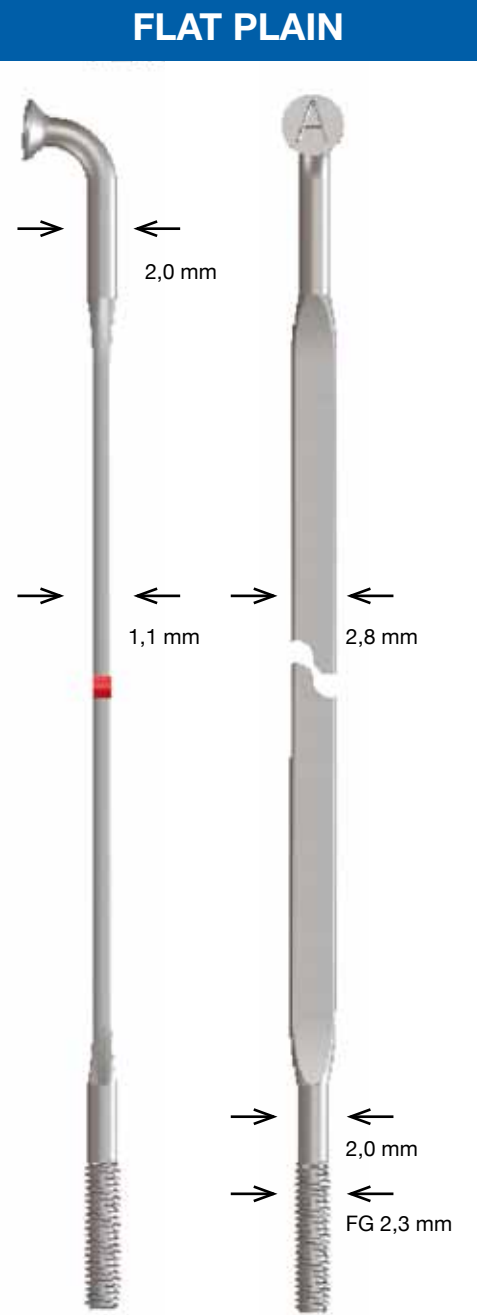
FLAT SPOKES

FINISHING
BLACK / SILVER

STRENGTH ON MIDDLE SECTION
From 1230 N/mm² to 1765 N/mm²



Aerodynamic benefit ,exceptionally light and fantastically strong at the same time, made from high-quality European 18/8 stainless steel.



INOX 18/8

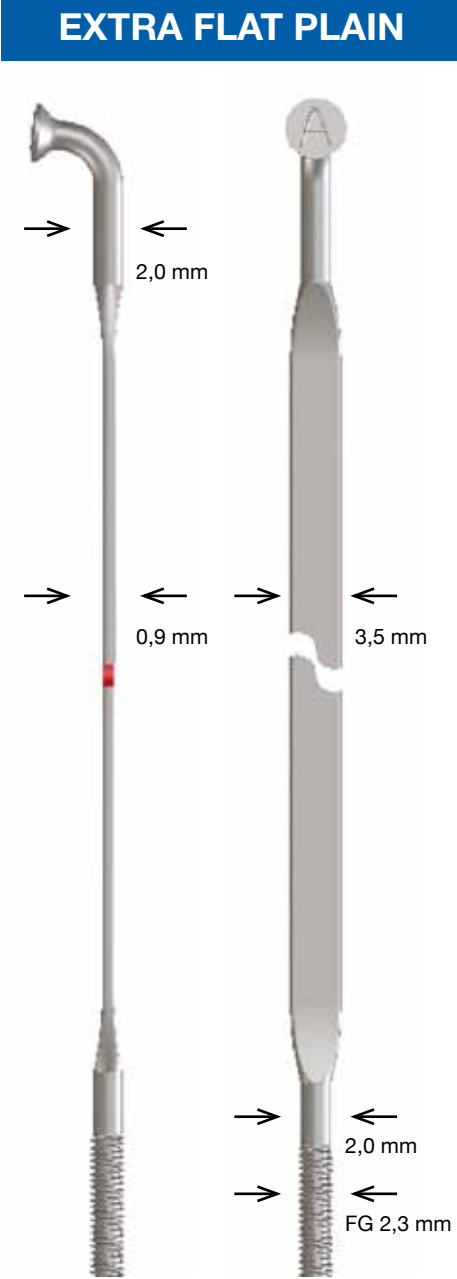
ø 2,0 mm	2,8 mm	1,05 - 1,15 mm
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Length: 130 - 310 mm

USE: Race, Triathlon, MTB

PACKAGING QUANTITIES
2.000

WEIGHT: 1 pcs x 6.6 gr.



INOX 18/8

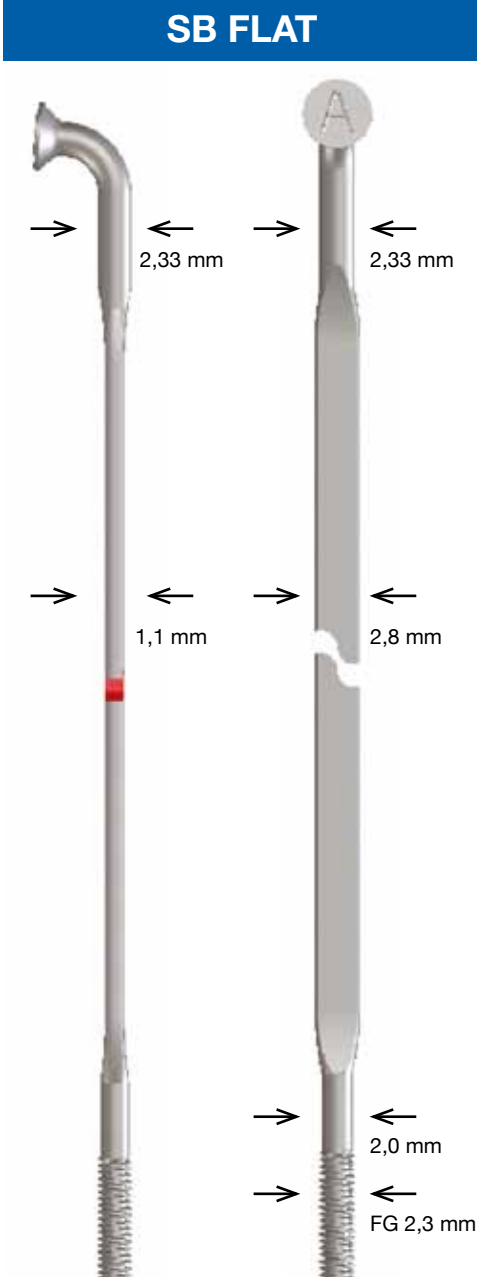
ø 2,0 mm	3,5 mm	0,85 - 0,95 mm
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Length: 130 - 310 mm

USE: Race, Triathlon, MTB

PACKAGING QUANTITIES
2.000

WEIGHT: 1 pcs x 6.6 gr.



INOX 18/8

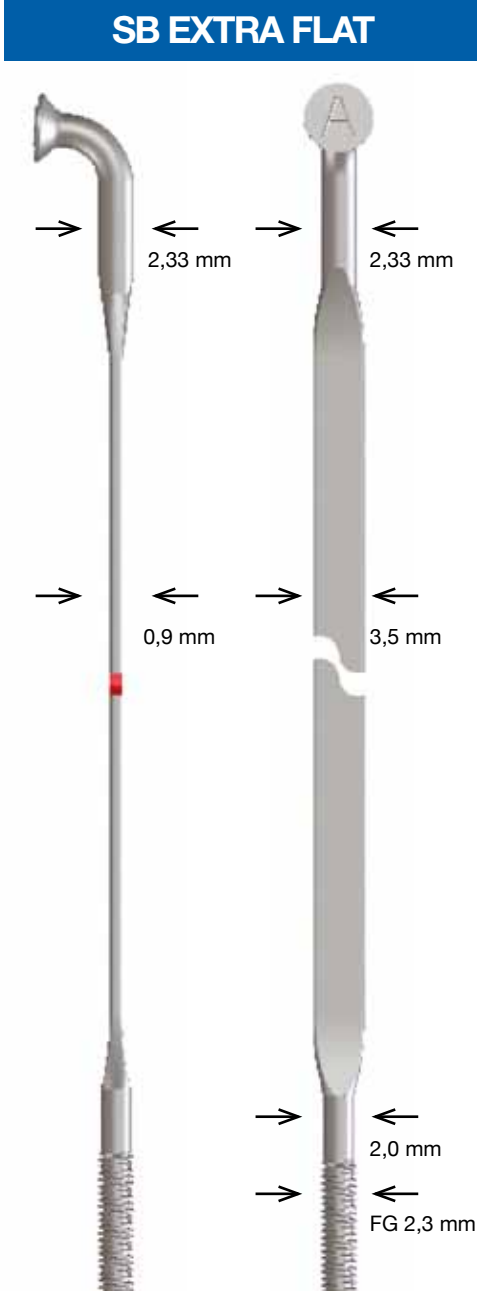
ø 2,33 mm	2,8 mm	1,05 - 1,15 mm
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Length: 130 - 310 mm

USE: Race, Triathlon, MTB

PACKAGING QUANTITIES
2.000

WEIGHT: 1 pcs x 6.7 gr.



INOX 18/8

ø 2,33 mm	3,5 mm	0,85 - 0,95 mm
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Length: 130 - 310 mm

USE: Race, Triathlon, MTB

PACKAGING QUANTITIES
2.000

WEIGHT: 1 pcs x 6.7 gr.

Alpina spokes & nipples are produced with the exact thread-tolerance for durability and the highest level of quality.

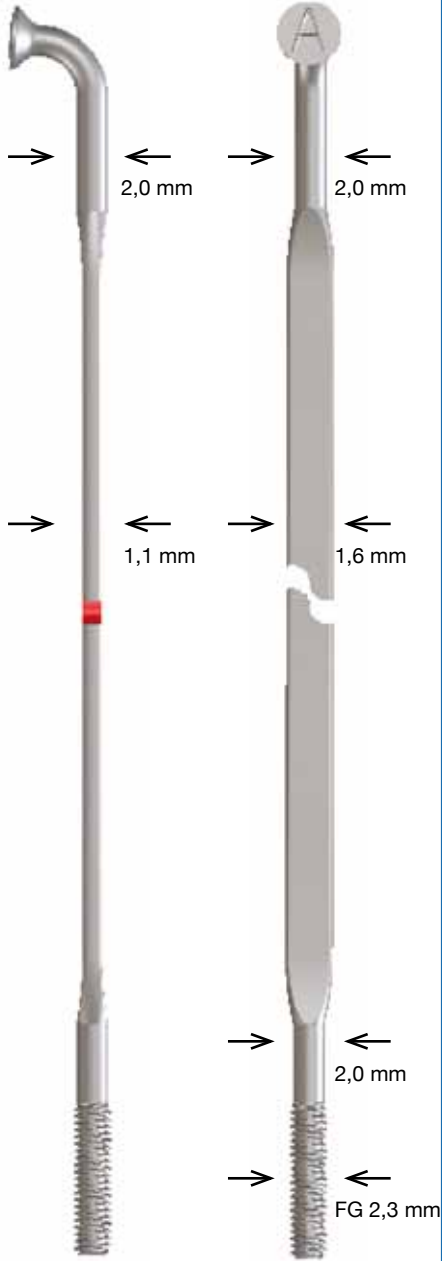
- Alpina surface treatment range: Surface-coating chromium plated, Multi-color powder coating
- All the Alpina spokes & nipples tolerance can be tailored on the different needs of the client



FLAT SPOKES



FLAT DB 1.5



INOX 18/8
ø 2,0 mm

1,6 mm	1,05 - 1,15 mm
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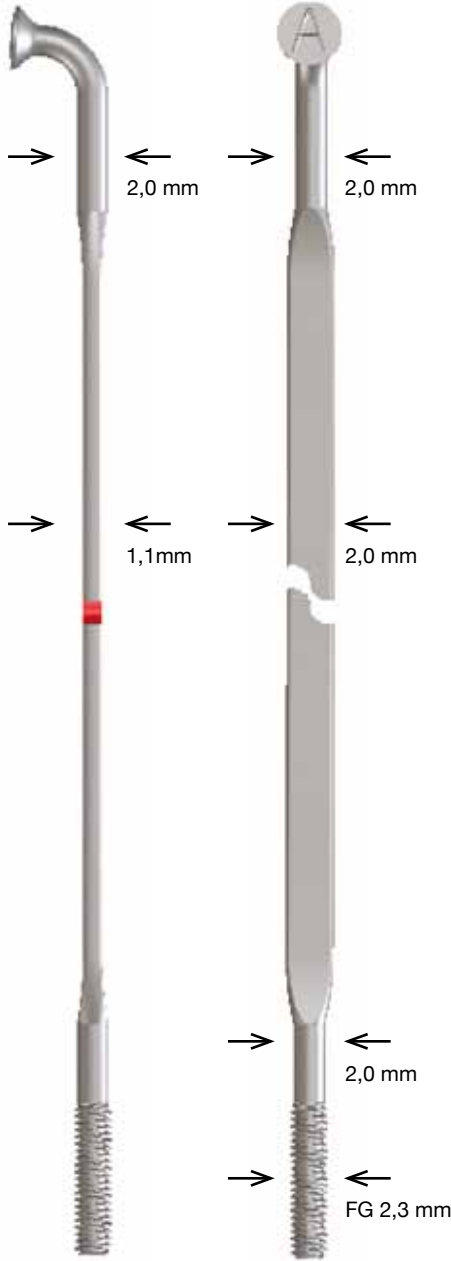
Length: 130 - 310 mm

USE: Race, Triathlon, MTB

**PACKAGING
QUANTITIES**
2.000

WEIGHT: 1 pcs x 4 gr.

FLAT DB 1.7



INOX 18/8
ø 2,0 mm

2,0 mm	1,05 - 1,15 mm
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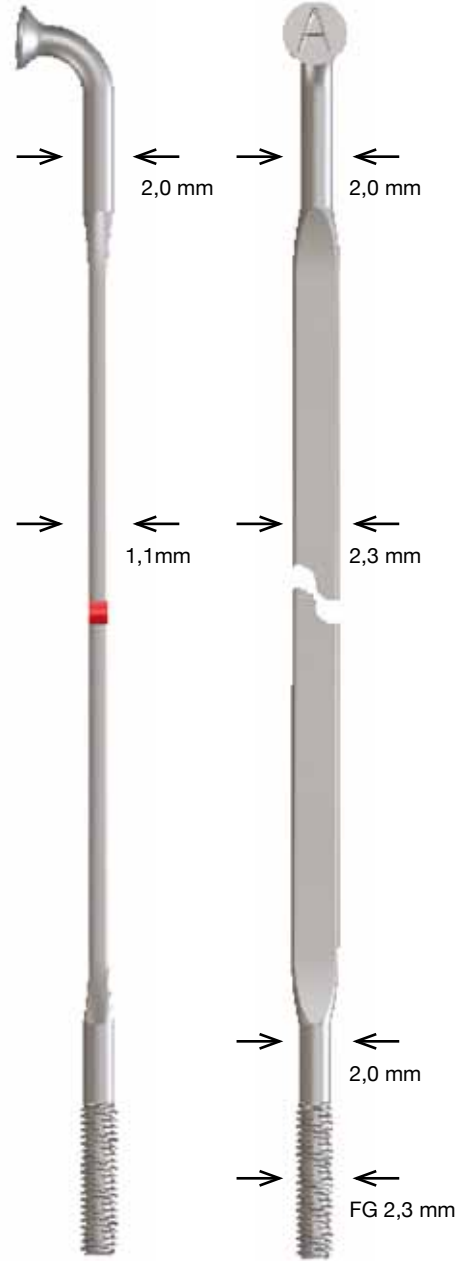
Length: 130 - 310 mm

USE: Race, Triathlon, MTB

**PACKAGING
QUANTITIES**
2.000

WEIGHT: 1 pcs x 5 gr.

FLAT DB 1.8



INOX 18/8
ø 2,0 mm

2,3 mm	1,05 - 1,15 mm
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Length: 130 - 310 mm

USE: Race, Triathlon, MTB

**PACKAGING
QUANTITIES**
2.000

WEIGHT: 1 pcs x 5.5 gr.

- Alpina surface treatment range: Surface-coating chromium plated, Multi-color powder coating
- All the Alpina spokes & nipples tolerance can be tailored on the different needs of the client

BUTTED SPOKES

alpina

BUTTED SPOKES

FINISHING
BLACK / SILVER

STRENGTH ON MIDDLE SECTION
From 1230 N/mm² to 1765 N/mm²



Single-butted spokes are thicker than normal at the hub end, then taper to a thinner section all the way to the threads. Single-butted spokes are not common, but are seen more and more in heavy-duty applications (for example E-bikes)

spokes are thicker at the ends than in the middle.

Double-butted spokes do more than save weight. The thick ends make them as strong in the highly-stressed areas as straight-gauge spokes of the same thickness, but the thinner middle sections make the spokes effectively more elastic.

Alpina spokes & nipples are produced with the exact thread-tolerance for durability and the highest level of quality.

SB 2.0	SB 2.32	DB 1.5	DB 1.7	DB 1.8
INOX 18/8 ø 2,33 / 2,0 mm Length: 140 - 310 mm	INOX 18/8 ø 2,62/ 2,32 mm Length: 140 - 310 mm	INOX 18/8 ø 2,0 / 1,5 / 2,0 mm Length: 140 - 310 mm	INOX 18/8 ø 2,0 / 1,7 / 2,0 mm Length: 140 - 310 mm	INOX 18/8 ø 2,0 / 1,8 / 2,0 mm Length: 140 - 310 mm
USE: Downhill, Trekking, City, MTB	USE: Downhill, Trekking, City, MTB / electric bike	USE: Race, Triathlon, Cross Country	USE: Disc -Brake, Heavy Duty, Long distance travel	USE: Race, Triathlon, MTB, Trekking
PACKAGING QUANTITIES 100, 1.500	PACKAGING QUANTITIES 1.500	PACKAGING QUANTITIES 100, 2.000	PACKAGING QUANTITIES 100, 2.000	PACKAGING QUANTITIES 100, 2.000
WEIGHT: 1 pcs x 6.7 gr.	WEIGHT: 1 pcs x 9.0 gr.	WEIGHT: 1 pcs x 4 gr.	WEIGHT: 1 pcs x 5.0 gr.	WEIGHT: 1 pcs x 5.5 gr.

- Alpina surface treatment range: Surface-coating chromium plated, Multi-color powder coating
- All the Alpina spokes & nipples tolerance can be tailored on the different needs of the client



PLAIN SPOKES



PLAIN SPOKES

FINISHING
BLACK / SILVER

STRENGTH ON MIDDLE SECTION
From 1230 N/mm² to 1765 N/mm²

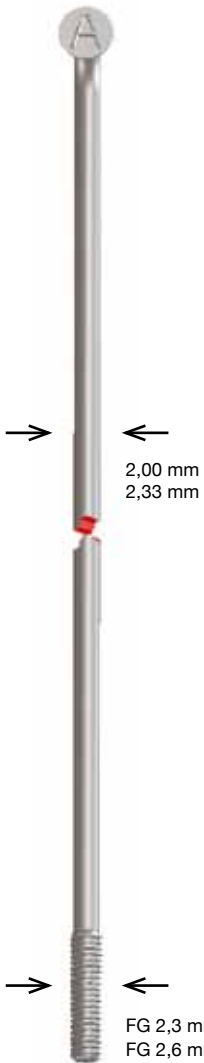


AVAILABLE
Straight Head

Made for basic use with high quality materials, such as European 18/8 stainless steel.

Alpina spokes & nipples are produced with the exact thread-tolerance for durability and the highest level of quality.

PLAIN



INOX 18/8

Standard ø 2,0/2,33 mm
Length: 75 - 310 mm

USE:
City, Trekking, MTB, Tandem

PACKAGING QUANTITIES

2.000	(2,0 mm)
1.500	(2,3 mm)
100	(2,0 mm)
100	(2,3 mm)

WEIGHT: 1 pcs x
6,6 gr. (2.0) 8,85 gr. (2.32)

- Alpina surface treatment range: Black plasticized spokes, Surface-coating chromium plated Multi-color powder coating, Multi-color surface painting, Zinc plated
- All the Alpina spokes & nipples tolerance can be tailored on the different needs of the client

NIPPLES

BRASS & ALLOY 20/24

ALLOY CURRENT FINISHING

BLACK, BLUE, RED, SILVER ANODIZATION



BRASS CURRENT FINISHING

NICKEL

LENGTH

12-14-16 mm - ø fg 2,3 - fg 2,6

PACKAGING

5.000/10.000

Nipples ABS

EUROPEAN PATENT n° 97201859.2 - U.S.A. PATENT n° 6205664

- **Less Maintenance**
- **Longer Life**
- **Better Safety**

One of the reasons why the wheels bend is because the nipples get loose. Up to now in order to avoid this problem locknut glues have been used. Now the patented self-locking ABS nipples prevents the loosening of the nipples and of the spokes. The nipple has a perforated nylon ball inserted in the head. The assembly is identical to the traditional way. The locking is created by the friction between the thread of the spoke and the nylon ball while tightening. All the adjusting and tensioning of the wheel can be carried out as usual.

THE SELF-LOCKING NIPPLES

- no more early loosening
- assure long lasting centering of the wheel
- no need for maintenance
- immediately useable on any kind of automatic wheel building machinery
- no need for any regulation or modification of the standard applications
- increase spoke life and overall wheel safety



ALPINA 100% QUALITY
= VISUAL CONTROL 1 BY 1



Nipples ABS BLU POWER - Round head

IDEAL FOR SPECIAL RIM PROFILES

ABS
Alpina Block System



SELF-LOCKING, PATENTED SYSTEM,
assuring highest functionality and reliability

BLUE NYLON SHOCK-ABSORBER INSERT
absorption of micro-vibrations to increase the durability of the spoke

STAR SPLINE
improving the connection of the self locking insert

TRADITIONAL SCREW-DRIVER CUT
for universal and standard use of the product

GAUGED HOLE
to obtain a perfect elastic interference with the thread part of the spoke

SPHERICAL
self-locking under-head

INCREASED BODY DIAMETER
up to 4 mm for higher resistance and strength

THE RAW NIPPLE IS COLD-PRESSED
with a control system for applied forces

SQUARE
with higher resistance



Nipples ABS - Hexagonal head

IDEAL FOR HIGH AND ACCURATE TENSIONING

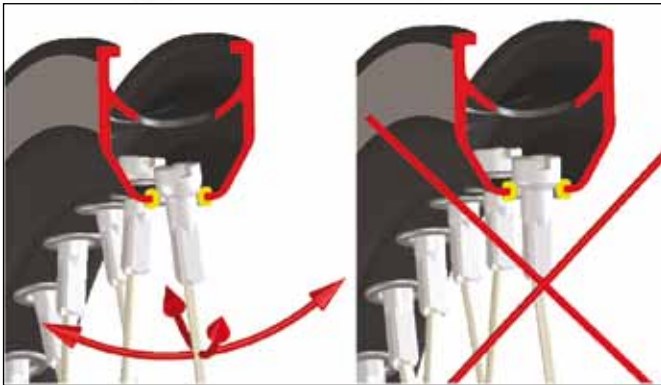


Basic Nipples



Nipples POWER - Round head Spherical under-head

IDEAL FOR ALL APPLICATIONS



SPHERICAL UNDER-HEAD that permits the oscillation



Nipples - Hexagonal head IDEAL FOR ALL APPLICATIONS



INOXPLUS
THERMIC TREATMENT

TT

TM

INOX PLUS TT – TRATTAMENTO TERMICO

Dopo anni di studio e ricerca tecnica Alpina raggi ha realizzato l'innovativo e unico TRATTAMENTO TERMICO "TT" che rinforza e rende indistruttibile ogni raggio sottoposto a questo processo speciale. Nasce così il nostro nuovo prodotto : ALPINA INOX PLUS TT Il robustissimo raggio del futuro, realizzato con il migliore ACCIAIO INOX in commercio, che accetta il nostro TRATTAMENTO TERMICO "TT", per rendere immortali tutte le ruote esistenti ANCHE QUELLE CON POCHI RAGGI!!

- DISPONIBILE PER TUTTI I TIPI DI RAGGIO E PER TUTTE LE TESTE – ANCHE TESTA DRITTA
- RENDE IL RAGGIO INDISTRUTTIBILE



t h e r m i c t r e a t m e n t

INOX PLUS TT – THERMIC TREATMENT

After years of technical research Alpina Raggi has realized an innovative and unique THERMIC TREATMENT "TT", that reinforces and makes indestructible any spoke treated with this special process. A new product was born: ALPINA INOX PLUS TT The extremely robust spoke, made of the best stainless steel in trade that accepts our "TT" THERMIC TREATMENT, and makes forever lasting all existing wheels – even those with only a few spokes.

- AVAILABLE FOR ALL KIND OF SPOKES, STRAIGHT HEAD AND WITH BENDING
- MAKES SPOKES INDESTRUCTIBLE

THERMIC TREATMENT

alpina[®]
S P O K E S A N I P P L E S

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