



SAPIM[®] **SPOKES
AND NIPPLES**

Markus KLAUSMANN counts on Sapim spokes.



SAPIM®

**SPOKES
AND NIPPLES**

Founded in 1918, SAPIM has been producing spokes and nipples of the highest quality for over 90 years. From the beginning, maintaining a close relationship with customers has always been of the greatest importance. By listening to the needs and wishes of our customers, whether professional or amateur, our products are tailored to meet their requirements.

Flexibility in the production process means new innovations are quickly brought into the program. At SAPIM, your safety is our main concern. Only materials of the highest possible standard are used.

Thanks to our ISO 9001 certification standard and to our STTS (SAPIM Total Traceability System), SAPIM is able to guarantee that every spoke and nipple is meticulously monitored and checked throughout the entire production process, bringing only the best to our customers.

As a long established company, built on solid foundations, **SAPIM is dynamic and innovative and reliable**. We actively support professional and amateur bicycle racing in its many forms and are constantly evaluating how our products perform under the most extreme pressures.

SAPIM has been among the leaders in spoke and nipple production and our continued success is due to rigorous levels of quality control, innovative products, and solid pricing structure.

Never play with safety! The Sapim manufacture is based on the SCFT-system (Sapim advanced Cold Forging Technology). Our „Sapim Knowledge Base Lab for Research and Development“ was set up in 1981 for Sapim products to undergo very severe material fatigue tests. (See the test results on page 4.)

SAPIM offers race service to their customers at a lot of international events. Our target is to help the consumers, team riders and team mechanics with our knowledge of wheel building. Bringing together good wheel building with our superior spokes offers the customer best possible wheels. Annually many Protour teams and many World cup Mountain biker decide to ride with our spokes.

Also wheel building courses are held by SAPIM. Only good wheel building shows all positive aspects of our spokes and nipples in a wheel. A checklist is offered as well.

About us



Axel Moorkens; CEO Sapim



Testing



Race Service



Technical support



Florian BODENSCHATZ rides on Sapim spokes.

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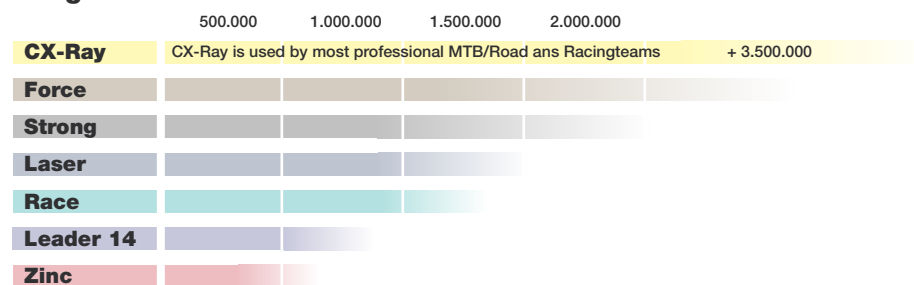
Aero Spokes

SAPIM aero spokes not only give an aerodynamic edge, they also make wheels lighter and stronger. As light as titanium spokes, CX-Ray still receive one of the best results in fatigue testing. No doubt why CX-Ray are used by top bike racers and triathletes around the world. Even downhillers use them, recognising their strength and flexibility. Special alloy treatment and sophisticated production make all this possible. Aero spokes are produced from the best suited stainless steel for spokes: high-tensile, fatigue-resistant 18/8 stainless steel conforming to SAPIM quality standard specifications. The CX-Ray fits easily into all standard hubs.

Weight (64 pcs x 260 mm lg)

CX-Ray	278 g
Laser	279 g
Race	360 g
Force	368 g
Zinc	424 g
Leader 14	424 g
Strong	430 g

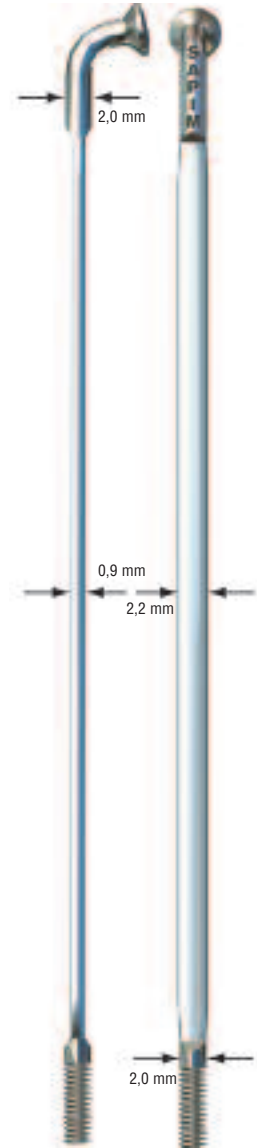
Fatigue Test



CX/CX-Ray Key



CX-Ray



INOX 18/8

Diameter	2,0 - 2,2 0,9 - 2,0 mm
Length	146 - 310 mm
Usage	Race, Triathlon, MTB, DH
Weight	278 g (64 x 260mm)
Fatigue Test	3.500.000
Strength on middle section	1600 N/mm ²
Packaging Quantities	20, 100, 500
Nipples	14 mm aluminium Poyax

Vlad SABĂU trusts in Sapim spokes.



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BUTTED Spokes

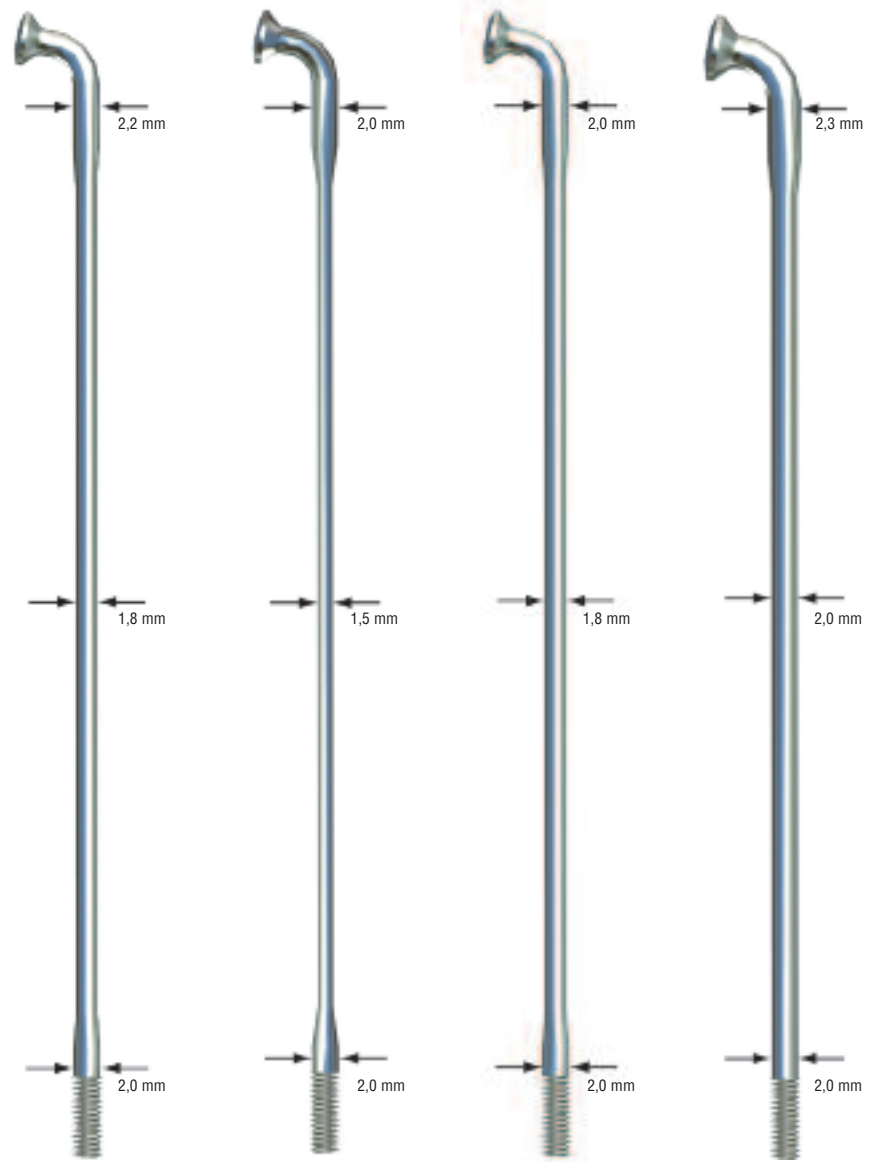
Butted Spokes

SAPIM butted spokes have two major benefits: less weight and more strength!

Technological advances using cold forging (SAPIM Forging Technology) 'stretch' the spoke, retaining the linear molecular structure of the material, thereby increasing the spoke strength at the middle by at least 48%.

As an added bonus, the thin middle section of the light Laser and Race spokes also provides better shock absorption. The Strong, with its extra material in the bend, fits more tightly into the hub hole making it ideally suited for tandems and other heavy duty applications.

Due to its high elasticity we do not advice to use Laser on disc-brake wheels.



Diameter	2,2 - 1,8 - 2,0 mm	2,0 - 1,5 - 2,0 mm	2,0 - 1,8 - 2,0 mm	2,3 - 2,0 mm
Length	252 - 268 mm	145 - 309 mm	146 - 310 mm	180 - 310 mm
Usage	Disc-Brake, Heavy Duty, Long distance travel	Race, Triathlon, XC	Race, Triathlon, MTB, Trekking	DH, Trekking, City, MTB
Weight	368 g (64 x 260mm)	279 g (64 x 260mm)	360 g (64 x 260mm)	430 g (64 x 260mm)
Fatigue Test	2.000.000	1.250.000	980.000	1.600.000
Strength on middle section	1350 N/mm ²	1500 N/mm ²	1350 N/mm ²	1400 N/mm ²
Packaging Quantities	100, 500	50, 500	100, 500	100, 500
Nipples	12 mm brass Poyax	12 mm brass Poyax	12 mm brass Poyax	12 mm brass Poyax

Michaela PIELSTICKER believes in Sapim quality.

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Basic Spokes

Intended for everyday use, these spokes are produced using top quality materials. Made from high-tensile, fatigue-resistant stainless steel conforming to SAPIM quality standard specifications, the Leader forms the basis for all other spokes.

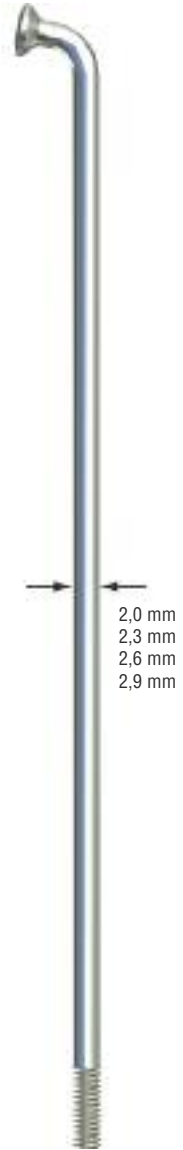
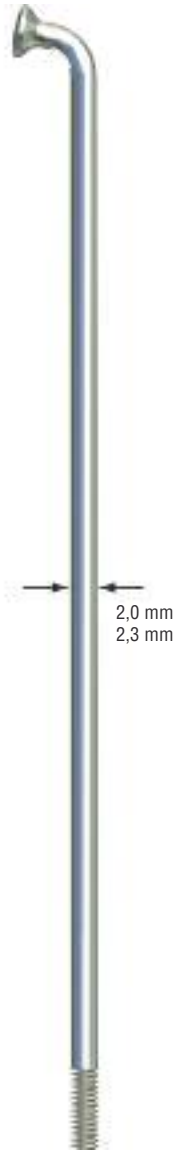
It is also available in black without losing any of the properties found in non-coloured versions.



For higher loads and bigger hub holes bigger diameters are available.

Leader

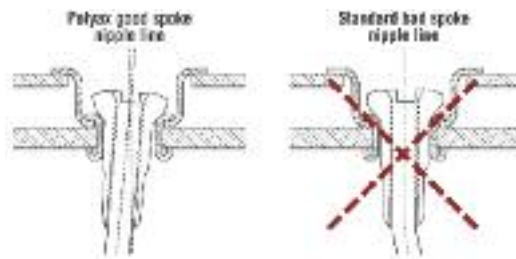
Zinc



	Standard Diameter Other Diameters	2,0 / 2,3 mm 2,60 / 2,9 mm	2,0 mm 2,3 / 2,6 / 2,9 mm
Length		130 - 310 mm	130 - 310 mm
Usage		City, Trekking, MTB, Tandem	City, Trekking
Weight		421 g (64 x 260mm)	424 g (64 x 260mm)
Fatigue Test		870.000	700.000
Strength on middle section		1080 - 1180 N/mm ²	950 - 1050 N/mm ²
Packaging Quantities		100, 500	144, 500
Nipples		12 mm Poyax brass	12 mm Standard brass

NIPPLES

Original Sapim Polyax Nipple



Silver colour nickel-plated brass: 12, 14, 16 mm

Option: black

Packaging quantities: 100, 144, 500

S.I.L.S. Polyax

Sapim Integrated Locking System



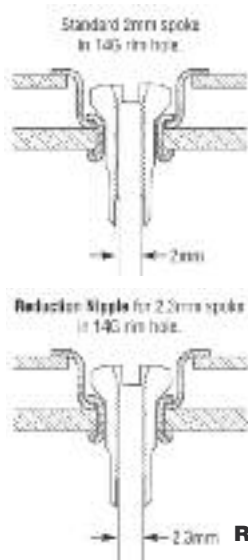
Sapim's revolutionary nipple

The Self-Securing Nipple

- no more early loosening
- no time wasted gluing screw threads
- environmentally friendly
- sticking qualities not affected by re-centring wheel
- increases spoke life and overall wheel safety
- also suitable for machine wheel-building



Reduction Nipple



Reduction nipple for 2,3 mm 13G spoke and 14G 4,5 mm rim hole.

Hexagonal Head Nipple



Brass: 12, 14, 16 mm

Hexagonal head nipples for "V" section rims and special rim profiles.

Inverted Nipple



- Available in brass 8,5, 10 and 12 mm for 14G and 12mm for 13G thread.
- Available in aluminium 10 mm length for 14G thread.

Aluminium Nipple

with COATING



Silver colour alloy: 12, 14, 16 mm

Option: black, red, blue, gold, green, purple, orange

Aluminium nipples in EN 7075 are as strong as brass nipples.

Coating is the new way to reduce friction on alloy nipples. The coating is in the thread and on the nipple. Friction between both spoke and nipple and rim and nipple is significantly reduced. Coating also seals the surface reducing corrosion.

Now standard Sapim production.

- Silent, effective truing with no more squeaks
- Virtually torsion free spokes
- High tension wheels without problems
- No overtight nipples on spoke threads
- No more oily and dirty wheels
- Just efficient dry working and clean hands
- No unnecessary cleaning
- Wheels that are easier to true

The coating treatment of nipples is not as easy as simple oiling. Different production methods have to be employed.

OPTIONS / TOOLS

Straight Spokes



Straight pull spokes are available for special hubs.

Black Spokes



All spokes are available in black except Zinc.

Colored Spokes



All spokes are available in red or white; minimum amount 1.000 pcs.

Sapim Race Tools for proper wheel assembly



Nipple Clamping Screwdriver



Nipple Driver, long and short version available.



Up-side-down Nipple Key



Nipple Wrench: yellow 14G, red 13G



Hexagonal Nipple Key

Nipple Washers



Spoke Washers



Disclaimer: Sapim products are meant only for use by professional wheel builders. The terms of any contractual agreement and related guarantees are valid only if Sapim spokes and nipples are used together exclusively.

Other wheel components must first be approved by Sapim and assembled according to the latest assembly instructions issued by Sapim. Copies of these instructions are available from Sapim upon request.



KENNY BELAEY

8 x World Champion Biketrial and 2 x World Cup Winner Trial
trusts in Sapim quality !

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For our list of distributors see

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