

RACE TOP BOA



DESCRIPTION

- Safety shoes for professional use.
- According to normative EN 20345 :2011
- Standards: S3+SRC+CI
- Upper: 2 layers fabric, hydrofugated PES + PA fibers layer
- Sole: Bidensity polyurethane
- Lining: Breathable Coolmax
- Removable preformed insole
- Composite toe cap with external rubber protection+ Perforation resistant insole (non-metallic)
- Closing: Boa Closing System
- Sizes: 40-46 (extreme sizes available on demand)



RACE TOP BOA

TECHNICAL CHARACTERISTICS

HYDROFUGATED BREATHABLE UPPER FABRIC

TEST	RESULTS	REQUIREMENTS
Water vapour permeability	12.6 mg/cm ² h	≥ 0,8 mg/cm ² hour
Water vapour coefficient	102,6 mg/cm ²	≥ 15 mg/cm ²
Abrasion resistance Dry: Wet:	80.000 cycles no damage 40.000 cycles no damage	>25.600 cycles no damage >12.800 cycles no damage

INNER LINING COOLMAX®

Technical fabric that speeds up the process of moisture absorption, ensuring the skin is always dry. Moisture is continually drawn to the exterior and never returns to the skin, creating a pleasant and comfortable sensation.

Main characteristics:

- Moisture control and quick drying
- Lowers skin temperature
- Soft, light and breathable
- 100% absorbent and abrasion resistant

TEST	RESULTS	REQUIREMENTS EN ISO 20345
Composition	65% PES + 35% COOLMAX	-
Tear Strength	>32 N	> 15 N
Water vapour permeability	>70 mg/cm ² h	≥ 2 mg/cm ² h
Water vapour coefficient	> 500 mgr/cm ²	≥ 20 mgr/cm ²
Abrasion resistance Dry Wet	>50.000 cycles no damage >25.000 cycles no damage	>25.600 cycles no damage >12.800 cycles no damage

SAFETY ELEMENTS

Safety plastic toecap, resistant to impacts of an energy of up 200 J (dropping 20 kg mass from 1 meter high) and with a compression strength of 15 kN.

The toecap's weight is 40% lighter than a steel toecap, non-magnetic, not affected by heat and cold (and it doesn't keep it inside the footwear like metal toe caps) and recover its position after an impact (according to normative, no more than 200 J)



RACE TOP BOA

NON METAL, PUNCTURE-RESISTANT INSOLE

Non-metal, puncture-resistant insole meets EN 12568 & ISO EN 20344 standards, for more than 1.100 N puncture protection. It makes the footwear lighter, more flexible, more comfortable, providing higher thermal insulation.

It is made of High Tenacity Polyester(HTP) plus ceramic layer which has better results than Kevlar® being more flexible, not affected by light, able to be marked and it has better bond strength to textiles (like the upper).

TEST	REQUIREMENTS	RESULTS
Penetration Resistant	≥1100 N	1318 N
Flex Resistant of penetration-resistant inserts	1.000.000 cycles with signs of cracking	No Cracking
Water absorption Water Desorption	70 mg/cm ² > 80%	103 mg/cm ² 96%
Behaviour of non-metal penetration resistant inserts Effect of above ambient temperature Effect of below ambient temperature Effects of acid Effects of alkali Effects of fuel oil	> 1.100 N	1.356 N 1.383 N 1.379 N 1.294 N 1.334 N

REMOVABLE INSOLE

Removable insole anatomically preformed to provide total comfort to the feet.

Anatomical and breathable insoles that provide excellent shock absorbing, eliminate moisture caused by perspiration, offer maximum comfort and guarantee total hygiene, thanks to their antibacterial treatment and active carbon, and antistatic composition.

The first layer is made of very breathable 100% polyester, very soft but with a high abrasion resistance. The second layer is made of recycled rubber, an open-cell foam that keeps feet dry (the special moisture absorption system keeps feet dry), well-ventilated, and providing excellent comfort properties to the whole feet, and especially in the heel area.

The cushioning system prevents foot fatigue and the foam last longer thanks to its inbuilt recovery system.

TESTS 20345	RESULTS	REQUIREMENTS
Thickness	>2 mm (on request)	>2 mm
Water absorption	>200 mg/cm ²	≥ 70mg/cm ²
Water desorption	100%	> 80 %
Abrasion resistance Dry Wet	>50.000 cycles >25.000 cycles	(Cycles without break) >25600 >12800

RACE TOP BOA

ANTISTATIC BIDENSITY SOLE

Bi-density sole of polyurethane. Made of two layers: The external one with relieves to increase the grip of the footwear and draining/ The internal one made of foamed polyurethane that provides comfortability to the user's feet.

Qualified for any kind of surface (SRC: steel and ceramic according to Normative)

TEST	REQUEST	RESULT
Abrasion resistance	<150 mm ³	60 mm ³
Tear resistance	>8 kN/m	10 kN/m
Flexion resistance	<4 mm increase of cut at 30.000 cycles	3 mm
Hydrolysis resistance	<6 mm d increase of cut at 150.000 cycles	4 mm
Electrical Resistance	>0,1 MΩ y 1000 MΩ	90MΩ
Energy absorption heel	>20 J	28 J
Cold Isolation	<10 °C	8º C
Slip Resistance	>0,13 heel steel >0,18 front steel >0,28 heel ceramic >0,32 front ceramic	>0,18 heel steel >0,36 front steel >0,30 heel ceramic >0,35 front ceramic

CLOSING SYSTEM: BOA Technology

The BOA® system has a reel where an aircraft-grade stainless steel wire is winded (it has a nylon external cover to protect hands from injuries), bringing the following advantages:

PRECISION FIT: The BOA® system allows you to fully adjust the boot so it fits as close as a glove.

PERMANENT FIT: The BOA® System never loses its grip and never come undone.

COMFORTABLE FIT: The BOA® System adjusts constantly to your foot's movement and eliminates any pressure points.

QUICK FIT: The BOA® System fit is quick and easy: pull out the reel, put the boot on, push the reel in and turn to adjust.

Steel Lace with Nylon cover has a Tear Strength of more than 750 N.

