



ROTOR LACING SYSTEM



Area of use*



PUBLIC WORKS



HEAVY INDUSTRIE



LIGHT INDUSTRY



BUILDING



FINISHINGS

Technical features

High cut safety shoes.

Upper: water repellent nubuck leather.

Lining: textile.

Tongue: comfortable padding, with gusset.

Toe cap: composite shockproof 200J.

Insole: ESD, ergonomic in preformed PU.

Pierce resistant midsole: high tenacity textile.

Sole: polyurethane double-density.

Colour: black, grey and red.

Sizes: 39 to 47.

Packaging: carton of 10 pairs.

Subpackaging: individual box.

Weight: 660 g (Approximative weight of a shoe, size 42).

Advantages

Resistance to hydrocarbons thanks to the injected (polyurethane double-density) sole.

Flexibility and protection thanks to pierce resistant midsole made of high tenacity textile.

High resistance thanks to composite shockproof toe cap

Quick and easy adjustment with the rotor lacing system.



FOOT
Protection

Certification

This product complies with **European Regulation (EU) 2016/425** on Personal Protective Equipment (PPE). **Category II**. Issued by **TUV RHEINLAND**, notified body n°0197.

EN ISO 20345 : 2022 (S3S FO SR ESD)



Download the EU declaration of conformity on <http://docs.singer.fr>

STANDARDS (2022)

EN ISO 20344	Personal protective equipment: Test methods for footwear.
EN ISO 20345	Safety footwear: Toe protection against shocks (200 J) and the risks of flattening (15 kN).
EN ISO 20346	Protective shoes: Toe protection against shocks (100 J) and the risks of flattening (10 kN).
EN ISO 20347	Occupational footwear: No specification about toe protection.

SLIP RESISTANCE

SB	Basic properties	On ceramic surface, covered with SLS.
SR	Optional properties	On ceramic surface, covered with glycerol.

EN ISO 20345 - SHOES CLASS

SB	Class I ou II	Basic properties
S1	Class I	SB + Closed backpart + Antistatic shoes (A) + Energy absorption of the heel (E)
S2	Class I	S1 + Water penetration and absorption resistance of the upper (WPA)
S3	Class I	S2 + Metal pierce resistant midsole (P) + Studded sole
S3L	Class I	S2 + Metal free, pierce resistant midsole (PL) + Studded sole
S3S	Class I	S2 + Metal free, pierce resistant midsole (PS) + Studded sole
S6	Class I	S2 + Water resistance of the whole footwear (WR)
S7	Class I	S3 + Water resistance of the whole footwear (WR)
S7L	Class I	S3L + Water resistance of the whole footwear (WR)
S7S	Class I	S3S + Water resistance of the whole footwear (WR)
S4	Class II	SB + Closed backpart + Antistatic shoes (A) + Energy absorption of the heel (E)
S5	Class II	S4 + Metal pierce resistant midsole (P) + Studded sole
S5L	Class II	S4 + Metal free, pierce resistant midsole (PL) + Studded sole
S5S	Class II	S4 + Metal free, pierce resistant midsole (PS) + Studded sole

USED MATERIAL CLASS

Class I	All leather and other materials (except for all rubber or all polymer)
Class II	All rubber (fully vulcanised) or all polymer (fully moulded).

EN ISO 20345 - OPTIONAL REQUIREMENTS











E	Energy absorption of the heel
P	Metal pierce resistant midsole
PL	Metal free, pierce resistant midsole (tested with broad tip)
PS	Metal free, pierce resistant midsole (tested with fine tip)
CR	Cut resistant upper
M	Shockproof metatarsal protection
C	Conductive shoes
A	Antistatic shoes
HI	Insulation sole against contact heat
CI	Insulation sole against cold
HRO	Contact heat resistant outsole compound
WPA	Water penetration and absorption resistance of the upper
WR	Water resistance of the whole footwear
AN	Malleoli protection
SC	Stone guard resistance to abrasion
SR	Slip resistance (ceramic surface + glycerin)
FO	Resistance to fuel oil
LG	Grip system for ladder

EN 61340-4-3 - ELECTROSTATIC (ESD)

Shoes that cover this standard are «dissipative». This standard defines the shoes that protect electronic equipment against an electrostatic discharge.

Electrical resistance: < 1 Ω x 10⁸. Antistatic shoes are not necessarily ESD.

ADVANTAGES

	Slip resistance		Studded sole
	Antiperforation steel sole (1100N)		Antiperforation high tenacity textile sole (1100N)
	Shockproof steel toe cap (200J)		Shockproof composite toe cap (200J)
	Antistatic properties		Water penetration resistance
	Resistance to fuel oil		Energy absorption of the heel