INDRA





Area of use*



Technical features

ESD shoes. Upper: split suede leather and ventilated polyester mesh. Lining: textile. Tongue: comfortable padding, with gusset. Toe cap: composite shockproof 200J. Insole: ESD, in preformed PU. Pierce resistant midsole: high tenacity textile. Sole: polyurethane double-density. Weight: 640 g (Approximative weight of a shoe, size 42). Sizes: 36 to 47. Colour: black, grey and red. Packaging: carton of 10 pairs. Subpackaging: individual box.

Advantages

- > Metal free shoes.
- > Optimal flexibility of the sole thanks to the triple flex zone.
- > Reduces shocks with PU and energy absorbing heel.
- > Quality and reliability of ISO 9001 / ISO 14001 certified production.





Certification

This product complies with European Regulation (EU) 2016/425 on Personal Protective Equipment (PPE). Category II. Issued by CIMAC, notified body n°0465.



EN IEC 61340-4-3 : 2018 (ESD) / EN ISO 20345 : 2011 (S1-P SRC)

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



STANDARDS			
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
SRA	On ceramic tile floor with SLS.
SRB	On steel floor with glycerol.
SRC	SRA + SRB

	EN ISO 20345 - OPTIONAL REQUIREMENTS
E	Heel energy absorption
Р	Anti-puncture sole
CR	Cut resistance of the upper
М	Metatarsal protection
С	Conductive sole
А	Antistatic footwear
HI	Insulation against heat
CI	Insulation against cold
HRO	Heat resistant outsole compound
WRU	Water penetration and water absorption resistance of the upper
WR	Water resistance of the whole footwear
I	Insulating shoes
AN	Malleoli protection

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 IEC 61340-4-3 - ELECTROSTATIC

Shoes that cover this standard are «dissipative». This standard defines the shoes that protect electronic equipment against an electrostatic discharge. Electrical resistance: <1 $\Omega \times 10^{\circ}$. Antistatic shoes are not necessarily ESD.

		EN ISO 20345 - SHOES CLASS
SB	Classe I ou II	Basic properties
S1	Classe I	Basic properties + Closed backpart + Antistatic properties + Energy absorption of the heel + Resistance to fuel oil
S2	Classe I	Basic properties + Closed backpart + Antistatic properties + Energy absorption of the heel + Resistance to fuel oil + Water penetration resistance + Water absorption resistance
S3	Classe I	Basic properties + Closed backpart + Antistatic properties + Energy absorption of the heel + Resistance to fuel oil + Water penetration resistance + Water absorption resistance + Anti-puncture sole + Studded sole
S4	Classe II	Basic properties + Closed backpart + Antistatic properties + Energy absorption of the heel + Resistance to fuel oil
S5	Classe II	Basic properties + Closed backpart + Antistatic properties + Energy absorption of the heel + Resistance to fuel oil + Anti-puncture sole + Studded sole

	ADVANTAGES
	Slip resistance
	Studded sole
other	Resistance to fuel oil
/	Antistatic properties
2003	Shockproof composite toe cap (200J)
2003	Shockproof steel toe cap (200J)
	Antiperforation high tenacity textile sole (1100N)
TIDEN	Antiperforation steel sole (1100N)
	Water penetration resistance
$\mathcal{N}_{\mathbf{z}}$	Energy absorption of the heel