



TECHNICAL GUIDE STANDARD

FUNCTIONS AND PROTECTIVE LEVELS

The norm EN ISO 20345:2022 defines the base and additional requisites (facoltative) of the safety footwear Includes, between the others, mechanical risks, slipping's resistance. Thermal risks and ergonomic's behaviour.

BASE REQUIREMENTS



footwear ergonomics and comfort



resistance, safety and performance of materials



toe cap impact 200J +15kN



slip resistance (ceramic floor +sodium laurylsulphate)

ADDITIONAL REQUIREMENTS



scuff cap



slip resistance (ceramic floor + glycerine)



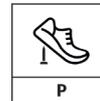
water resistant shoe



sole resistance o hydrocarbons



energy absorption of seat reagon



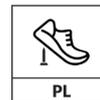
antiperforation midsole metallic nail (ø 4,5 mm)



toe cap impact (200J + 15kN)



antistatic footwear



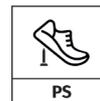
antiperforation midsole metallic nail (ø 4,5 mm)



slip resistance (ceramic floor +sodium laurylsulphate)



water resistant upper



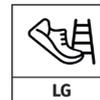
antiperforation midsole metallic nail (ø 3 mm)



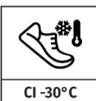
cold insulation of sole complex -17°C



heat insulation of sole complex



ladder grip



cold insulation of sole complex -30°C



outsole resistant to hot contact



EN ISO20345:2022	20345 calzature di sicurezza	classe
SB	basic requirements	I o II
S1	SB + closed heel area + A + E	I
S1P	SB + P	I
S1PL	S1 + PL + sole with reliefs	I
S1PS	S1 + PS + sole with reliefs	I
S2	S1 + WPA	I
S3	S2 + P + sole with reliefs	I
S3L	S2 + PL + sole with reliefs	I
S3S	S2 + PS + sole with reliefs	I
S6	S2 + WR	I
S7	S3 + WR	I
S7L	S3L + WR	I
S7S	S3S + WR	II
S4	SB + closed heel area + A + E	II
S5	S4 + P + sole with reliefs	II
S5S	S4 + PS + sole with reliefs	II
S5L	S4 + PL + sole with reliefs	II
SBH	/	calzatura ibrida

IDENTIFICATION CODES

E	Energy absorption of seat reagon	HI	Isolierung der Sohle vor Hitze
A	Antistatic footwear	CI	Outsole resistant to hot contact
C	Electrical resistance partially conductive footwear	M	Metatarsal protection
P	Antiperforation midsole non metallic nail (ø 4,5 mm)	AN	Ankle protection
PL	Resistenza Alla Perforazione Inserto Non Metallico Chiodo (ø 4,5 Mm)	CR	Cut resistance
PS	Antiperforation midsole non metallic nail (ø 3 mm)	LG	Ladder grip
WPA	Water resistant upper	SC	Scuff cap
WRU	Water resistant upper	SR	Slip resistance (ceramic floor + glycerine)
WR	Water resistant upper		
FO	Sole resistance to hydrocarbons		
HRO	Heat insulation of sole complex		