



V1710 CHALLENGER IGS

BLACK METAL-FREE WOMEN'S SHOE



Built using our specially-shaped women's last to provide optimum fit, the Challenger features a soft padded collar designed to protect the Achilles tendon. A water repellent whole piece upper with reinforced stitching helps reduce the ingress of liquids. Metal-free, this shoe benefits from the Energys shock absorbing footbed; and the new innovative IGS rubber sole unit ensures superb grip on all surfaces and increased cushioning underfoot.

CE Specification

EN ISO 20345:2011 S3 HRO SRC

Size

2 - 8 (35 - 41)



Upper

Water resistant and breathable whole piece full grain leather upper. Reinforced stitching and a quick and easy lacing system. Padded scoop collar and bound bellows tongue edge for extra strength.

Lining

Padded, moisture wicking and highly breathable. Cool in summer, warm in winter.

Footbed

Heel pump shock absorbing Energys footbed. Contoured to support the foot, with air channels to wick moisture and reduce heat build up and odour.

Toecap

Wide fitting composite non sparking and thermal insulating. Tested to impact of 200 Joules.

Protective midsole

A woven fibre midsole designed to protect from sharp objects entering underfoot.

Sole

Inspired by tyre technology and made from highly durable rubber, the IGS sole unit features a unique hexagonal tread ensuring superior traction, ladder grips offering firefighter levels of safety and a re-designed heel strike pad delivering exceptional water dispersal. The IGS is heat resistant to approximately 300°C. Non-marking and resistant to diesel, fat, acid and alkali.



Safety Standards

Classification	Test to achieve classification	Safety Standards				
		S1	S2	S3	SBP	S1P
SB	Toe protection tested with 200J impact and 15kN compression force	●	●	●	●	●
P	Penetration resistant outsole tested at 1100 newtons			●	●	●
A	Electrical resistance between foot and ground of between 0.1 and 1000 mega ohms	●	●	●		●
E	Energy absorption of the seat region tested at 20 joules	●	●	●		●
WRU	Water resistant upper leather		●	●		

The below are further tests that can be added to the above classifications (e.g. S3 HRO)

HRO	Heat resistant outsole compound tested at 300°C
CI	Insulation against the cold - temperature drops less than 10°C when tested at -17°C
M	Metatarsal protection - tested to 100J impact

The below are further tests that can be added to the above classifications (e.g. S3 HRO SRC)

SRA	Slip resistant on ceramic tile floor with sodium lauryl sulphate solution
SRB	Slip resistant on steel floor with glycerol
SRC	Slip resistant for both SRA and SRB

Anti-fatigue footwear solutions

Poor fitting footwear can cause all sorts of problems for your feet. Below we've listed a few common complaints, possible causes and simple ways of solving footwear problems.

Complaint	Possible cause	Suggested action
Ingrowing toenails	Nails cut too short. Very painful if knocked.	Cut nails square and wear wide fitting footwear with padded interior to protect toes.
Aching feet	Stiff footwear or footwear that flexes in the middle of the arch instead of at the ball of the foot.	Wear footwear with a shank. This is essential to make the footwear bend with the foot and not against it.
Athlete's foot A fungal infection which thrives in dark damp places.	Sweaty footwear, or damp footwear which has not been allowed to dry out. Fungal infections can spread very quickly from one foot to the other.	Wear breathable footwear and make sure shoes dry out well overnight. Full grain leather is essential if leather footwear is required. Buy a new pair of insoles and use a recommended powder, available from chemists.
Hammer toe Toe(s) curl over and stiffen in deformed position.	Footwear that is too small or too narrow, causing toes to bunch up.	Wear footwear that is wider fitting and correct size. All the V12 Footwear is wide fitting.
Bunions /corns Hard patches of skin on toes.	Narrow toed ill fitting footwear.	Wear wider fitting footwear to ensure foot freedom.
Plantar fasciitis Inflammation of tissue on the bottom of the heel.	Poor quality footwear with little or no shock absorption.	Wear the V Shok II footwear to cushion the heel and consult your doctor.

Shoe care

"At the end of a day's work, the removable footbeds should be pulled half out of the boots to help make sure that they dry out and air properly overnight. If you don't do this you risk the boots becoming smelly and create ideal conditions for bacteria to thrive in."

"If you get your boots really muddy, brush the worst off then wipe them down with warm water and let them dry naturally. Don't put them on top of the boiler or in the airing cupboard as this will increase the tendency to crack the leather."

"Once a month, take out the replaceable insoles and stick them through the washing machine for a freshen up."

"When leather gets wet repeatedly, the natural oils eventually get washed out and if they are not replaced the leather will crack. You should periodically treat your boots to a dose of Chelsea Leather Food. This will feed and rejuvenate the leather and maintain its water resistant qualities."

"It's worth investing in good quality socks made of cotton or other natural material. Besides being another layer of cushioning and insulation, socks play the vital role of wicking moisture away from the foot."