



RESPIREX™



## Dielectric Footwear

From WORKMASTER™





## High-Voltage Risks

Electrical power plays an important role in modern society. We take it for granted and rarely think that it is dangerous, but contact with electric current can cause serious injury and or death. Protection from accidental contact with live equipment and conductors is important for those exposed to electrocution risk.

## What are Dielectric Boots?

Dielectric boots are used where there is a risk of electric shock from high voltages. They provide protection because their insulating properties stop electric current from being grounded. High voltage electric current can stop the heart or produce fatal burns.

Dielectric boots are used for working on live power or in the area of live power, as current can jump large distances, especially in wet or damp conditions. There have also been fatalities caused by digging in locations where power cables are buried underground and the cable has been inadvertently cut by a drill, shovel, or with a mole.

## Why use Workmaster™ dielectric boots?

- They are waterproof and their performance is not affected if they get wet
- Unlike leather boots, the performance of Workmaster™ dielectric boots is not compromised by perspiration
- The wearer is always protected, unlike dielectric matting, which the user can step off unintentionally
- At 5kV, AC current can jump 40mm, which is greater than the depth of a typical safety shoe sole
- Every single boot is electrically tested before it leaves the factory, ensuring the highest quality & safety
- Boots are available tested against AC or DC voltages, depending on the customer requirement

## Applications

- Power generation and distribution
- Electrified transport systems such as the Railways
- Utility companies who run the risk of cutting electric cables whilst digging or moling
- Power sub-stations where the current can jump distances (e.g. Hospitals and Shipping)
- Wind Farms
- Electric and hybrid vehicle construction, maintenance and recovery

*N.B. Dielectric boots (as with any other item of high voltage PPE) should be used with a second barrier in case one barrier fails, typically this would be a dielectric glove.*

## How are they made?

The Workmaster™ range of boots and overboots from Respirex™ are made in the United Kingdom at our state of the art automated boot factory. The injection moulding manufacturing process guarantees seamless, leak-free construction and a consistent, high-quality product.

Our multi-station computer controlled injection moulding machine is capable of high volume production and the robotic controlled machinery enables the manufacture of different types and styles of boots within the same operating run, giving the flexibility to meet rapidly changing market demands.

Our automated dielectric testing machine is capable of testing up to 180 pairs of boots per hour at up to 50kV AC or 100kV DC.

All our boots are REACH compliant and both boots and insoles are machine washable at up to 40°C with a shelf life in excess of 10 years.

For further information and videos on our dielectric footwear visit [www.dielectricboots.com](http://www.dielectricboots.com).



# WORKMASTER™ DIELECTRIC SAFETY BOOTS



Our class leading electrically insulating (dielectric) boots provide protection of up to **20kV** over the complete boot, and **35kV** over the sole.

The energy absorbing heel and comfort insole ensure that these boots are comfortable to wear all day long, and the hard wearing vulcanised rubber sole provides superior slip resistance, reducing the risk of accidents on wet or slippery surfaces.

- 200 Joule Epoxy coated steel toe cap
- Injection moulded construction guarantees there are no seams to leak
- Kick off lug for hands free removal
- Blue cleated vulcanized rubber sole for maximum grip - 30% better than conventional safety boot soles
- Hard wearing cut-resistant sole provides twice the wear resistance of conventional soles
- Fuel and oil resistant sole

## Electrical Protection

Complete boot: **20 kV**.....8 hours no damage  
**5 kV**.....<5mA Leakage current

Sole: **35 kV**.....3 minutes no damage

## Certification

Safety Footwear	EN ISO 20345:2011 - <b>SB E CI HRO SRA FO</b>
Electrically Insulating Footwear	EN 50321:1999 <b>Class 0</b> prEN 50321:2014 <b>Class 2</b>
Dielectric Footwear	ASTM F1117-03(2013)
Personal Protective Equipment	PPE DIR 89/686/EEC
<b>Conforms to:</b>	
Protective Footwear	ANSI-STD Z41-1991, Section 4
Protective Footwear	CSA STD Z195-14

## Available Sizes:

UK	3	4	5	6	7	8	9	10	11	12	13	14	15
EU	35	36	37	39	41	42	43	44	45	46	47	49	50
US	4	5	6	7	8	9	10	11	12	13	14	15	16

# WORKMASTER™

## COMPACT DIELECTRIC OVERBOOTS



The compact dielectric overboot features a front opening and fastening design for ease of fitting and provides protection of up to **20kV** over the complete boot for over three minutes.

- Ideal for personnel who have to regularly enter and exit high voltages areas
- Single piece injection moulded construction with integral moulded fastener ensures there are no seams or mounting/fastener holes to leak
- No metal fasteners or components used in the construction
- Two button fasteners allow adjustment for different calf sizes
- Slip resistant sole in blue dielectric compound
- Fuel and oil resistant sole

### Electrical Protection

Complete boot: **20 kV**.....3 Minutes, no damage  
**5 kV**.....<5mA Leakage current



### Certification

Safety Footwear	EN ISO 20347:2012 - <b>I SRA FO</b>
Electrically Insulating Footwear	EN 50321:1999 <b>Class 0</b> pr EN 50321:2013 <b>Class 1</b>
Dielectric Footwear Personal Protective Equipment	ASTM F1117-03(2013) PPE DIR 89/686/EEC

### Available Sizes:

	Medium	Large	Extra-Large
UK	6 - 8	9 - 11	12 - 15
EU	39 - 42	43 - 45	46 - 50
US	7 - 9	10 - 12	13 - 16

# WORKMASTER™ MAXI DIELECTRIC OVERBOOTS



Maxi dielectric overboots incorporate a unique rear opening design that makes it easier for wearers of large or bulky safety boots to fit. With a hard wearing and slip resistant vulcanised rubber sole the maxi overboot provides protection of up to 20kV over the complete boot for over three minutes.

- Injection moulded construction ensures there are no seams or mounting/fastener holes to leak
- Fixing strap is quick and easy to fasten, even when wearing gloves
- Kick off lug
- Slip resistant vulcanised rubber sole
- Fuel and oil resistant sole

## Electrical Protection

Complete boot: **20 kV**.....3 Minutes, no damage  
**5 kV**.....<5mA Leakage current

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## Certification

Safety Footwear	EN ISO 20347:2012 - <b>I SRA FO</b>
Electrically Insulating Footwear	EN 50321:1999 <b>Class 0</b> pr EN 50321:2013 <b>Class 1</b>
Dielectric Footwear Personal Protective Equipment	ASTM F1117-03(2013) PPE DIR 89/686/EEC

## Available Sizes:

	Medium	Large	Extra-Large
UK	6 - 8	9 - 11	12 - 15
EU	39 - 42	43 - 45	46 - 50
US	7 - 9	10 - 12	13 - 16





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