What are Conductive Safety Shoes?

Conductive safety shoes (CSS) are a type of footwear that is designed to immediately conduct static electricity via the shoes onto the ground. They suppress the occurrence of static sparks & accumulation of static electricity. CSS are designed to offer protection from Explosion & Fire where Volatile gases/vapours are present such as in paint booth.

Do not confuse CSS, anti-static & ESD safety shoes. CSS have a lower electrostatic resistance <100KΩ, according to the EN20345 /IS 15298 (Part 2):2024 standard than Antistatic/ESD >100 KΩ.

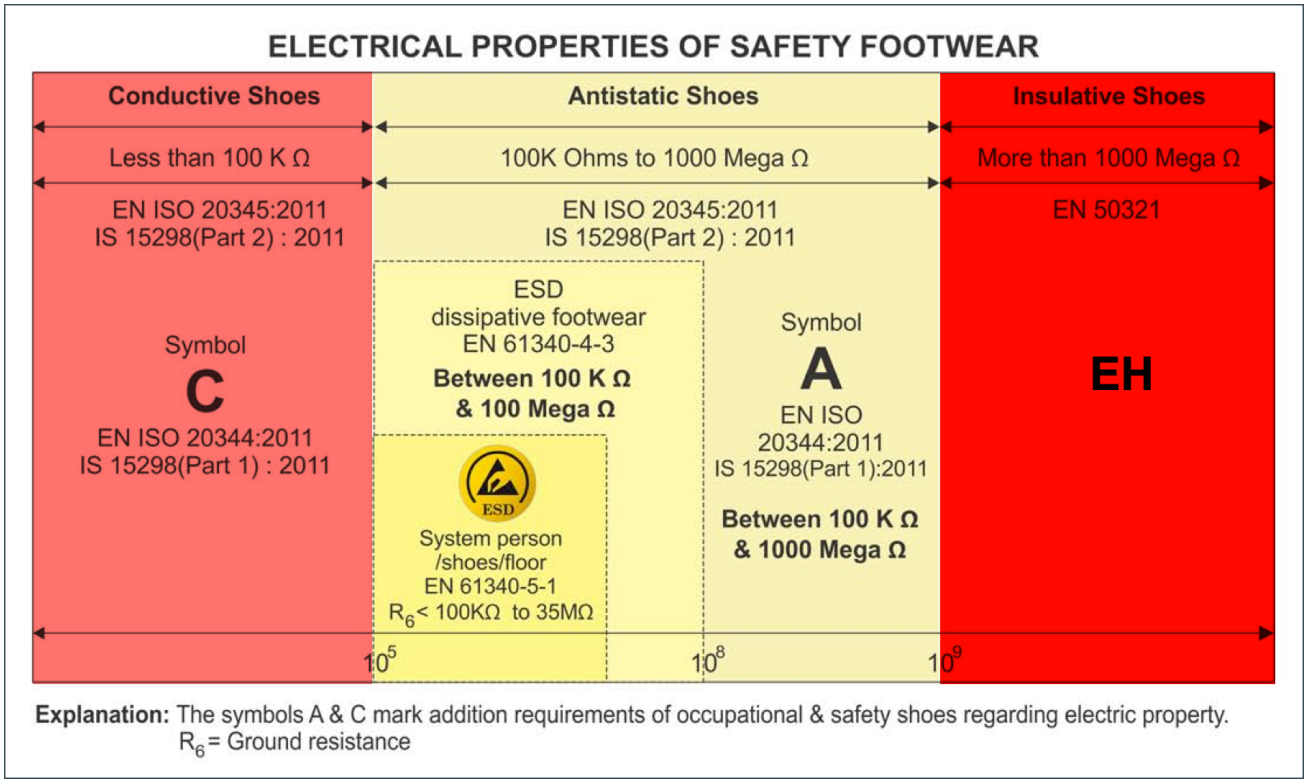
Applications of Conductive Safety Shoes?

CSS are worn by people working in the following sectors:

- Explosives industry
- Highly flammable environments
- Fireworks manufacturers

What are the Features of Conductive Safety Shoes?

The Sole Resistance is less than 100 Kilo Ohms when tested as per EN 20344



Explanation: The symbols A & C mark addition requirements of occupational & safety shoes regarding electric property.
R_6 = Ground resistance

What are the Benefits of Conductive Safety Shoes?

Some of the benefits of CSS include:

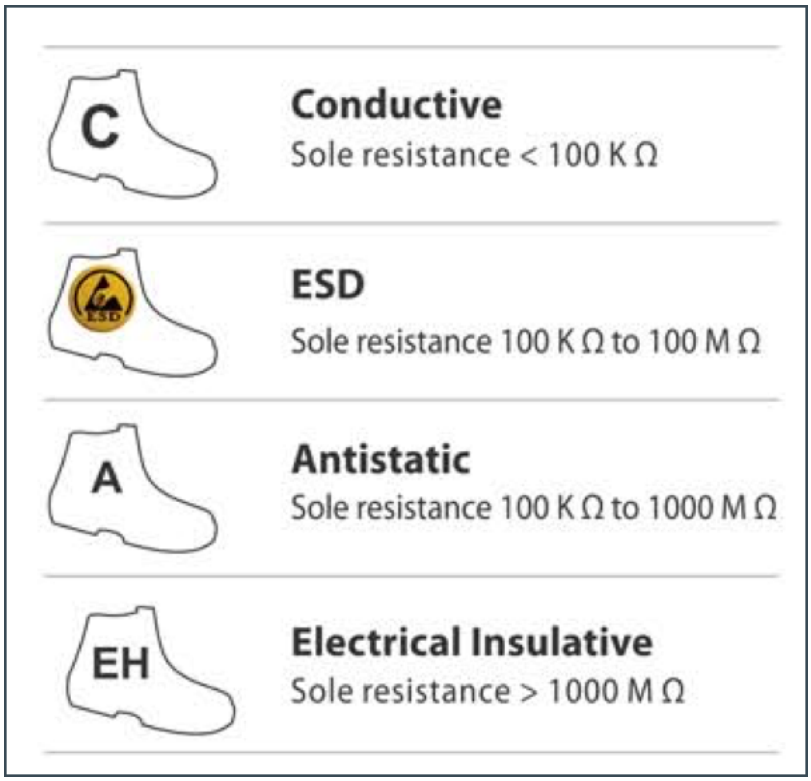
- They help protect the user in an environment where static electricity which has accumulated poses a hazard. They are used to reduce accumulation of electrostatic charges in the shortest possible charge for example when handling explosives. They ensure you have the least possible electrostatic charges on your body to avoid any spark that would cause an explosion.
- CSS reduce the chance of ignition from static electric spark by dissipation of static electricity from the body onto the ground.

How do Conductive Safety Shoes Work?

CSS are designed to discharge electricity that is static from the body via the shoes into floors that are grounded. For the charge to be dissipated, the floors need to be grounded.

What is the Marking of Conductive Safety Shoes?

The marking of CSS is C.



What is the difference between Conductive Safety Shoes & Electrical Safety Shoes?

CSS are designed to conduct static electricity via the sole into the ground. They dissipate electricity that is static faster and completely thus making them suitable for such hazardous environments. They are worn in environments that are highly flammable & where there are explosives. Moreover, conductive safety shoes have a “C” mark visible on the taffeta label which is sewn on their inside.

Electrical safety shoes are designed in a way that reduces/hinder significantly electricity flow through the shoe to the ground. In this way, it tends to reduce the possibility of electrocution. This is opposite to CSS. They have an “EH” mark which is visible and sewn on the label inside the electric safety shoes& also on outside.

Is CSS the same as ESD Safety Shoes?

No. They are not similar as sole resistance of ESD footwear is **more than** 100 KΩ but less than 100 MΩ. All ESD footwear are Antistatic (100 KΩ to 1000 MΩ).

CSS should not be used where wearer is exposed to live electricity. CSS facilitate completion of electrical circuit while electrical hazard (EH) footwear prevents the completion of electrical circuit.

JCB
SAFETY FOOTWEAR
Marketing Office
310, Krishna Tower, 15/63, Civil Lines,
Kanpur - 208001
Tel + 9336811103, 9336110112
Fax + 91 512 2330601
info@jcbfootwear.in, www.jcbfootwear.in