SAFETY SHOE CONSTRUCTION

Why it matters how safety shoe is constructed?

Safety shoes are critical to providing secondary protection for a safer day on the worksite. Slips, trips & falls constitute the vast majority of accidents, causing approximately 15% of all unintentional death. Selecting safety footwear based on the needs, requirements & work site environment is key to finding the right shoe to help get through without incident.

The ***three main footwear construction*** methods are cement, direct attach & welted. Each delivers a series of benefits built for specific end uses. Looking at how a safety shoe is constructed is an excellent way to start the selection process.

Cement/ Pasted Construction offers the lightest weight of all three constructions, and is also the most flexible. Once a shoe's upper is shaped (lasted) & completed, the sole is attached with an adhesive.

- **Ideal environments:** Environments with flat surfaces, such as assembly lines, manufacturing jobs, warehouses, and roofing & service applications, as well as jobs where the majority of time is spent standing or kneeling.
- **Pros:** Extremely flexible, lightweight & typically a lower price point for the wearer. This construction also offers the ability to feel the ground or work surface area beneath the foot to be confident footed with every step.
- **Cons:** Not for extreme environments. ***The cement may come apart or delaminate***. The wearer may experience extreme foot fatigue if worn on uneven, rocky surfaces.

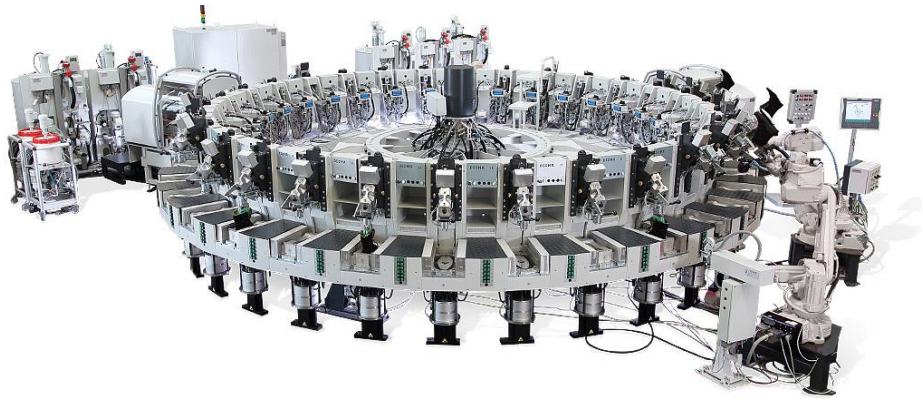
Direct Attach Construction offers flexible comfort, as the ***sole is fused directly to the fibres of the uppers to produce a tough, seamless watertight bond – without the help of adhesive.***

- **Ideal Environments:** Uneven or flat work surfaces such as construction sites, manufacturing, transportation & shipping. Environments (indoor & outdoor) where standing, walking & moving are seen frequently.
- **Pros:** Offers ***more torsion control*** than a cemented construction, helping minimize fatigue, but is not as heavy or stiff as a welted boot. ***Offer extreme cushion & comfort for all-day work.***
- **Cons:** Typically less flexible than cemented footwear & tends to be a higher price point due to the injection construction method.

Goodyear Welt (Stitched) Construction is the oldest, most labour-oriented construction & the most durable of the three options. It involves multiple steps to stitch the insole, upper & outsole together.

- **Ideal Environments:** Working on rocky or uneven terrain such as railroads, building construction, land clearing, etc.; and in industries in which repeated ladder work is required. Uneven work surfaces or environments with mineral or caustic elements, such as oil & gas, agriculture, and chemical, as well as highly abrasive environments.
- **Pros:** This time-tested construction is the most durable, delivering better torsion control & stability on uneven surfaces, drastically reducing fatigue. Also capable of handling more acidic, caustic or severe working conditions where chemicals could potentially erode & delaminate cemented outsoles. These can be re-soled.
- **Cons:** They are stiffer, very heavy & offer less cushion & support. They tend to be a highly expensive option on the market.

By selecting the shoe construction that best suits the work environment, you'll find the right footwear for the right job.



JCB manufacture only by Direct Attach Construction with soling done on highly sophisticated robot assisted DESMA Rotary Machines.

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