McLAREN
Manufacturer of Tracks and Tires

Continuous Wound vs. Overlapping Connections on Rubber Tracks



Inside of a rubber track, a steel cable is what gives the track its tensile strength. Without this wire, you could pull on the track, and it would stretch—similar to how a rubber band would. However, these steel wires inside the rubber track prevent it from stretching out. Ultimately, there are two ways to implement steel cables inside a track. Below, we'll address some of the key differences between continuous wound vs. overlapping connections on rubber tracks.

Overlapping Connection

In a track with an overlapping connection, numerous different wire strands are extruded into a belt. The steel belts are cut to lengths and then overlapped and vulcanized together with rubber.

The strength of a track with an overlapping connection will depend on the strength of the rubber adhesion—also known as the overlap point—rather than the cable's durability and strength. As such, most failures on a track that has an overlapping connection are due to a failure in the adhesion between the overlapped wire belts.

Continuous Wound

A continuous wound cable system resembles a piece of string wrapped around a pencil. As its name suggests, the wire winds continuously around the track, and each wire is directly next to its neighbor with very little space between them.

The most important difference between continuous wound and overlapping connections on rubber tracks is that a continuous wound track is generally stronger because the track's strength depends on the tensile strength of

steel cables rather than the strength of a rubber adhesion. However, sometimes the circumference of the cable on a continuous wound track is not perfectly straight, which means that some cables will carry more of a load than others.

The McLaren's Next Generation of Continuous Wound Technology: SpoolRite Belting

At McLaren, we use a continuous wound technique for all our tracks. However, our belting system has a more specialized version of the design known as SpoolRite belting, the next generation of continuous wound technology.

Essentially, SpoolRite belting takes the concept of continuous wound connections and builds it into next-level technology. Unlike standard continuous wound systems, SpoolRite belting consistently keeps the wire straight so that it doesn't have any crooks or curves, meaning the gaps between each cable all have an equal distance. Ultimately, the goal of SpoolRite belting is to keep the amount of rubber between each wire consistent to put the same exact amount of tension on each cable distributing the load evenly over the whole belt. Precision circumference of this technology also creates a perfect fit further improving longevity of the rubber tracks.

For more information on McLaren's high-quality rubber tracks, call 800-836-0040 or contact us today.