

Performance Belts by Timken

A History of Innovation... A Tradition of Excellence

From Dayton Rubber to Dayco to Carlisle to Timken, the names have changed but Ultimax[®] performance belts remain the same. The unique history behind Ultimax belts is filled with technical achievements, dedicated associates and a commitment to satisfying customers. Behind every Ultimax belt is a team that takes pride in all that we do. Today, Ultimax belts are proudly manufactured by Timken Belts.

The Dayco and Ultimax brands have not been related since 2001. Today Timken Belts continues the tradition of producing a comprehensive line of Ultimax performance products in the same ISO-registered manufacturing facilities, supported by the same kind of innovative product development that started it all.

Ultimax Belts History

- **1899** Timken Roller Bearing Axle Company incorporates
- **1905** Dayton Rubber Manufacturing Company (DRMC) founded in Dayton, Ohio
- **1921** DRMC invents first raw edge v-belt
- **1926** DRMC patents cog-type raw edge v-belt
- **1959** New DRMC belt manufacturing plant opens in Springfield, Missouri
- **1960** DRMC changes name to Dayco
- **1967** New technical center opens in Springfield, Missouri
- **1976** "The Incredible MAX" snowmobile drive belt is introduced
- **1988** "Ultimax," the revolutionary snowmobile belt with aramid cord, is introduced
- **2001** Carlisle Companies acquires the industrial belt division of Dayco including:
 - The Springfield manufacturing plant where powersports belts are made and the technical center where powersports belts are designed and developed
 - The OEM belt business for snowmobile and ATV manufacturers
 - The premium Ultimax brand name products and trademark
- 2005 Ultimax ATV and Ultimax XS drive belts are introduced
- **2015** Timken acquires the Carlisle[®] belts business
- 2015 One billionth belt sold
- 2016 Ultimax HQ original equipment replacement belt introduced
- **2017** Timken recognized as one of the world's most ethical companies
- **2018** Ultimax XP extreme performance belt is introduced

Timken Belts is a major supplier of original equipment ATV and snowmobile belts. Premium quality Ultimax MAX, Ultimax PRO, and Ultimax XS snowmobile belts and Ultimax HQ, Ultimax UA and Ultimax XP belts for ATVs are manufactured in the USA by Timken Belts and sold through powersports dealers around the world.







Are the Ultimax and Dayco brands the same?

• No. Dayco sold the Ultimax brand to Carlisle in 2001 and Timken Belts acquired the brand in 2015. Timken Belts continues to manufacture Ultimax belts in the same location where the premium performance Ultimax brand originated. Dayco does not make Ultimax belts.

Who makes Ultimax belts?

• Ultimax belts are made by Timken Belts, an affiliate of The Timken Company.

Where are Ultimax belts made?

• All Ultimax belts are proudly made in the USA at our ISO-registered facility in Springfield, Missouri.

What sets Ultimax belts apart from others?

- Behind every Ultimax belt is a team of Timken Belts engineers focused on delivering the best belts in the industry. Premium components, state-of the art equipment, and a quest for perfection are key elements in every Ultimax belt. Super strong aramid cord and special rubber compounds are used to ensure long life and superior performance.
- Our extensive OEM experience makes us unique. That history, connection and knowledge are built into every Ultimax belt. Our production lines meet stringent OEM quality standards, which sets Ultimax belts apart from the competition in aftermarket drive belts.

How are Ultimax belts tested to ensure their superior performance?

- Timken Belts engineers collect over a million miles of field test data every year.
- Extensive lab testing is performed on state-of-theart equipment dedicated to powersports product development. The data gathered is used in the development and design of new and existing belts to produce premium, reliable, high performance belts.

What is the warranty on Ultimax belts?

• Ultimax MAX, Ultimax PRO, Ultimax XS and Ultimax HQ belts are backed by a one year limited warranty; two years on Ultimax UA belts and three years on Ultimax XP belts.

Exactly which belts are Ultimax belts?

• The Ultimax belts family includes Ultimax MAX, Ultimax PRO and Ultimax XS snowmobile drive belts; Ultimax HQ, Ultimax **UA and Ultimax XP d**rive belts for ATVs, UTVs and SxSs; and Ultimax MD (Multi-Duty) belts for use on go-karts, golf carts, junior dragsters, and a variety of other applications.



The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, gears, chain, belts and related mechanical power transmission products and services.



TECHTIPS

Performance Driven. Performance Proven.

Understanding Ultimax Belt Dimensions

Traditionally, Timken Belts has published outside circumference and top width dimensions for snowmobile and ATV drive belts. However, outside circumference and top width can vary from one manufacturer to another based on belt construction, thickness and cog design. These dimensions should not be used to determine product fit and functionality. Since these dimensions can be more misleading than helpful, they will no longer be published.

Snowmobiles and ATVs operate based on cord (or "pitch") width and length, both of which are difficult to measure without specialized equipment. Ultimax belts are manufactured to tight tolerances – the same tolerances demanded by the OE manufacturers. Every Ultimax belt is built to exacting specifications and inspected with calibrated equipment to assure strict dimensional compliance.

Ultimax belts are designed for specific applications.

"Judge a belt not by its dimensions but by how it fits and performs on the machine."

What matters dimensionally in a **CVT** belt?

- Cord width and cord length is critical
 - Cord width and length is difficult to measure without specialized equipment
 - The cord transmits the power
- Angle
 - The rubber does the wedging, so the • angle is critical
- Bottom width
 - Sets the gap in the primary so you have good engagement

What doesn't matter dimensionally in a CVT belt?

- Outside length and top width
 - Outside circumference and top width can vary from one manufacturer to another based on belt thickness and cog design

Understanding Top Width

width gives

- Measuring top width gives the mistaken impression of top width variation
- Top width is directly related to the ride out of the belt
- The projected top width is what counts
- If the belt had perfectly sharp corners, they would be the point of measurement for top width
- Belts do not have perfectly sharp corners
- The corners are trimmed from Ultimax belts in the manufacturing process to increase the life and performance of the belt

- Corners are removed to prevent them from catching on the sheaves which can rip the top section off the belt and reduce belt life
- Trimming the corners has no affect on the ride position (ride out) of the belt
- Unlike other manufacturing processes that are tightly controlled, the corner trim operation does not demand tight tolerances
- Trimming .020" or .050" accomplishes the same thing with no affect whatsoever on belt performance



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Stronger. By Design.