BLACK BELTS not just for karate!

We recently had an exclusive visit to the Fenner Dunlop BV conveyor factory in Holland and one could be forgiven for thinking that plain old rubber conveyor belts are just that, rubber belts. But hell no! The production required and the lengths Dunlop goes to to produce very high quality products is second to none. Gary Ashe reports.

he Fenner Dunlop conveyor factory in the Netherlands is nestled right in the middle of Drachten, a town in North Holland. In fact the guys at Dunlop tell us the factory was there first in the shape of an old mill which eventually developed into the large operation we see today; kind of like the town of Shannon growing up around the airport.

This is our first factory visit since Covid and it was great to get out and actually see the manufacturing process up close and personal.

Robust belts

Conveyor belts play a pivotal role in the efficient functioning of the quarry industry, facilitating the transport of bulk materials across various stages of the mining and quarrying process. These robust belts are designed to withstand the harsh conditions prevalent in quarries, where abrasive materials, extreme temperatures, and heavy loads are commonplace.

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Constructed from durable materials such as rubber, nylon or steel, quarry conveyor belts are engineered to endure prolonged use and resist wear and tear. They come in various widths and lengths, tailored to the specific needs of each quarry operation. Additionally, features like reinforced edges and rip-resistant fabrics enhance their durability, ensuring uninterrupted operation even in demanding environments.

The conveyor belts in quarries are equipped with advanced mechanisms for efficient material handling. Automated systems control the speed and direction of belt movement, optimising the flow of materials from extraction points to processing areas. Furthermore, conveyor belts are often equipped with sensors and monitoring devices to detect potential issues like belt misalignment or excessive tension, minimising downtime and maintenance costs.

In the quarry industry, conveyor belts not only streamline material transport but also contribute to safety by reducing manual handling and the risks associated with heavy machinery. Their reliability and efficiency make them indispensable assets in maximising productivity and profitability in quarry operations.



First in line in Ireland.

Mark Fitzpatrick from Irish conveyor supplier C&K Fitzpatrick (CKF) joined us at the Dunlop factory as his company is the main supplier in Ireland for Dunlop belts. "We are leading the Irish market with developments such as our maintenance app, belt monitoring and innovative products like UsFlex which our competitors either don't offer or are copying." says Mark.

"Likewise Dunlop is leading the development of the conveyor belt product and we very much see the next step will be towards making conveyor belting more sustainable," adds Mark. "The target is to make a conveyor belt fully from renewable resources by 2050. It is an enormously high bar, because oil is currently the core of most of the raw ingredients. Until they get there, the



most sustainable choice is the one which lasts the longest. It takes the same resources to make a cheap belt as it does to produce a high quality belt, so if the high quality belt lasts two or three times longer then the single set of resources has provided much better value for the customer and the environment."

CKF was established in 1969 and has been providing the highest quality conveyor products and services available in the Irish market ever since. Based in Castlewarden, it has invested heavily in its staff, technology and equipment providing the very highest level of quality and service.









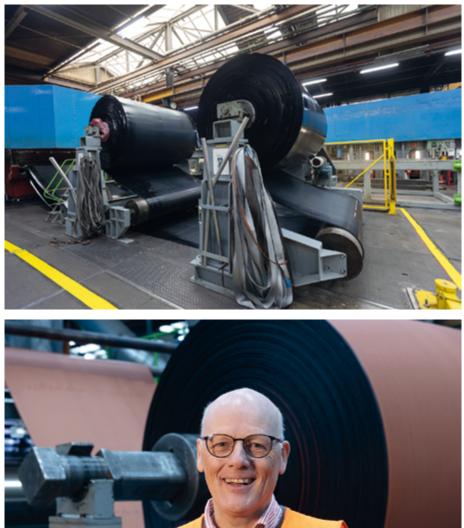
CKF supplies belts for the quarry and mining, chemical and recycling industries and agriculture and continues to grow and explore more sustainable options with Dunlop in the Netherlands.

The science part

Apart from showing us the factory floor and production process, from raw materials to finished product, Dunlop also showed us its state of the art laboratory. The laboratory is at the very heart of Fenner Dunlop's quality process. It is here that raw materials are tested for quality compliance and the finished product is tested to destruction to ensure that its conveyor belts perform exactly as they are designed to.

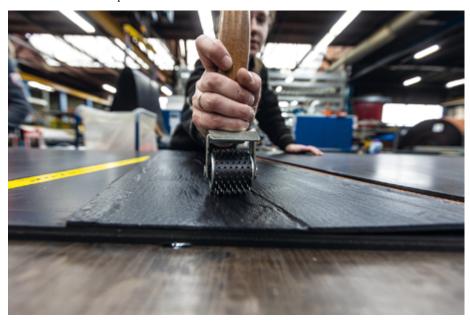
"Other brands might look the same, and feel the same but the fact of the matter is they will only last a much smaller percentage of the time a Dunlop belt will," the company says.

"And that of course means changing out the belt more often and that's if a replacement is even available in a short period, which in turn



Dr. Michiel Eijpe who is technical director of Dunlop Conveyor Belting means more down time for the client. And we all

know too well, time is money." Fenner Dunlop is rightly proud of its products



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and it states very clearly that it produces a high quality belt, especially when compared with some cheaper competitor options. "There is only one way that a manufacturer can have total control over the products that they make and that is to produce those products themselves. It simply is not feasible to guarantee consistent quality if you import from different countries and continents or have products made 'under license'. This is why every single belt that we supply has been manufactured by us in our production facilities in Drachten, The Netherlands," Mark tells us.

"We are always able to guarantee top quality because we control every process ourselves from start to finish. It is Fenner Dunlop engineers and technicians who design and develop every belt we make.

We also make the all-important rubber compounds ourselves, which is something that sets us apart from the vast majority of other manufacturers. Nothing is left to chance so without exception, every single batch of that rubber compound is thoroughly tested and approved by our rubber compound technicians before it is allowed to enter the belt production process."



Amazing black belts

We also spoke to Dr. Michiel Eijpe who is technical director of Dunlop Conveyor Belting in the Netherlands. A former university lecturer, he has worked in the conveyor belt industry for over 25 years. He has a PhD in fibre reinforced polymer composites and is a leading light in the development of high-performance conveyor belting and conveyor belt manufacturing technology.

"I've been here a long time and have had many different titles within Dunlop Conveyors," he says, "it's a great place to work and even after all these years, the black belt still amazes me.





If you talk to any of the staff here in the factory, the one common theme they will all talk about is quality. Quality is what we are about and that's something we are very proud of here.

"We are also actively looking at the sustainability of the belt at end of life," Michiel adds. "If you look at truck tyres for example, they are recycled when they are worn and reproduced as new tyres, Also, when the rubber on a belt is worn, the inner carcass is usually still in perfect condition, so really all you would have to do is grind off the rubber, put fresh layers on and you have a new belt to bring back to the marketplace. These are the options we are looking at here."



