

LONGEST LASTING CONVEYOR BELTS

DUNLOP CONVEYOR BELTING **PRODUCT RANGE**

THE TOUGHEST,
HARDEST
WEARING,
LONGEST-LASTING
CONVEYOR BELTS
IN THE WORLD!

R E A D M O R E

WHY CHOOSE
DUNLOP
CONVEYOR
BELTS?



WHAT MAKES DUNLOP DIFFERENT?

- We make **all** of our belts ourselves – we do not import from Asia or elsewhere.
- We make all of our own rubber compounds.
- We test, research and develop using our own facilities.
- We employ world-leading experts who provide first class technical support.
- All Dunlop belts **exceed** international standards.
- Every belt can be used in ATEX regulated areas.
- Every belt is fully ozone resistant and tested according to EN/ISO 1431.
- Safe to handle - every belt complies with European REACH regulations.
- Only the very best quality materials are used.
- Every rubber compound has been specifically developed so that Dunlop belts out-perform our competitors.
- Every compound batch is quality tested in the laboratory **before** it is allowed to be used in belt production.
- Every meter of Dunlop belt undergoes the toughest quality checks throughout the production process.





THE REAL THING

Throughout the industrial world, conveyor belts have to withstand an enormously wide range of physical and environmental conditions as well as increasingly tough safety demands. To meet these demands requires conveyor belts that have a carcass construction that is capable of handling huge strains and forces. At the same time, the rubber covers must have the resistance and durability needed to protect that carcass over a long period of time. It is the combination of top quality carcass construction and rubber covers that will ultimately determine the operational lifetime of a conveyor belt and, as a natural consequence, its cost effectiveness.

Here at Dunlop, we are very proud of the fact that over the course of our long history, our engineers

and technicians have consistently led the world in developing and refining conveyor belts that provide top-class performance combined with the longest possible operational lifetime, even under the most extreme operating conditions imaginable.

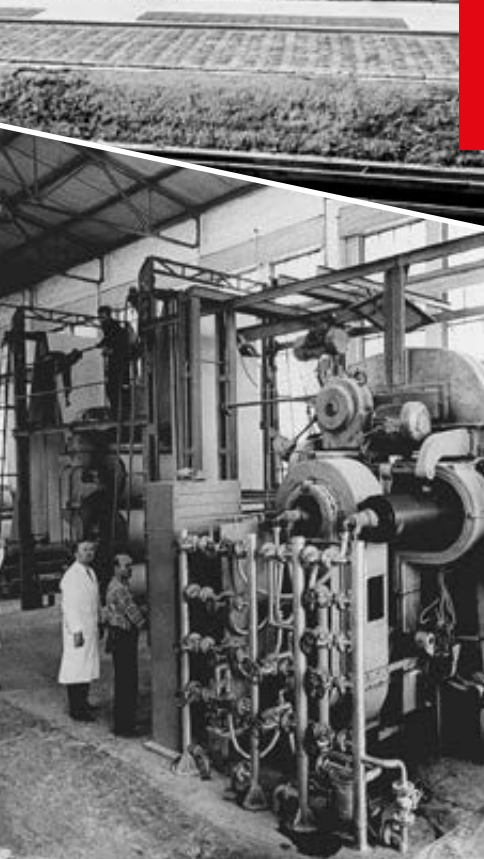
All of our conveyor belts are made exclusively here in The Netherlands. This means that we have total control over the quality of our products from start to finish. In this brochure we explain about the many different types of belt constructions, rubber cover combinations and specialist products that are available. Every single Dunlop conveyor belt has one thing in common – it has been designed to be the toughest, best performing, and longest lasting conveyor belt of its kind in the world.

**“
The longest
possible
operational
lifetime,
under
the most
extreme
operating
conditions
imaginable.”**



The Dunlop Guarantee of Quality

Despite the often extremely hostile and unforgiving conditions that our conveyor belts are required to endure, every single Dunlop "Made in Holland" conveyor belt is backed by a two-year guarantee against premature failure caused by faulty workmanship and/or faulty materials. When you buy Dunlop you also buy peace of mind.



A HISTORY OF EXCELLENCE

Dunlop's story dates back to the end of the 19th century when a local company constructed an oil mill. The walls of the original building still exist as part of the Dunlop Conveyor Belting head office, which is situated on a street called Oliemolenstraat, which means *oil mill street*.

In the 21st century the proud history of this place meets modern technology and science. The original values of product innovation, customer service and quality have remained constant.

1921

NEDERLANDSCHE BALATA INDUSTRIE

The original company changed from oil manufacturing to cotton reinforced transmission belting and rubberised fire hose production.

1945

PVC AND RUBBER

The beginning of PVC and rubber conveyor belt production, which became an amazing success story.

1965

DUNLOP RUBBER COMPANY

The company was acquired by the Dunlop Rubber Company. Specialisation in rubber conveyor belts began.



OTHER MILESTONES

2001

FENNER GROUP

Dunlop becomes a part of Fenner Group, the world's leading conveyor belt manufacturer with twelve manufacturing plants on five continents.

2012

INVESTMENT

Biggest single investment in Dunlop history. The most modern Steel Cord production line in the World.

TODAY

WORLDWIDE REACH

A network of sales and services offices located on 3 continents. Dunlop Conveyor Belting has one of the most experienced technical and production workforces in the industry.



THE TOUGHEST RUBBER TO HANDLE THE TOUGHEST CONDITIONS



The quality of the rubber covers is the single biggest influence on the operational lifetime of a conveyor belt.



ANTI-STATIC, OZONE AND UV RESISTANCE

A major advantage of Dunlop "Made in Holland" rubber belt covers is that they are all fully anti-static (ATEX 94/9/EC) as per EN ISO 284 and ozone and UV resistant according to EN ISO 1431 (50 pphm, strain 20%, 96 hours no cracking) in order to avoid premature failure due to cracking and degradation of the belt surface. For more information on these subjects please visit our website or ask your Dunlop representative.

THE DUNLOP RANGE OF RUBBER CONVEYOR BELT COVERS

Depending on the kind of materials being conveyed and the environments in which they are used, conveyor belts need to be able to withstand an enormous range of demands. These include resisting wear caused by abrasion, damage caused by impact, cutting, ripping & tearing, oil, grease, aggressive chemicals, heat, extreme, and fire. They also need to withstand the extremely harmful effects of ozone and ultra violet, which can significantly reduce a conveyor belt's working life. In many cases, a belt needs to be able to handle a combination of harmful factors all at the same time.

Although the actual construction and physical properties of the carcass are very important, it is the physical strength and durability of the rubber covers that ultimately determines the operational lifetime of a conveyor belt and, as a natural consequence, its cost effectiveness. Here at Dunlop, we are very proud of the fact that over the course of our long history, our engineers and technicians have continually developed, tested and refined a range of world-beating rubber compounds that provide top-class performance and exceptional operational lifetimes, even under the most complex and extreme operating conditions.

On the following pages, we explain about the many different types of rubber cover that make our belts the toughest, longest-lasting conveyor belts in the world.

A QUICK REFERENCE GUIDE TO DUNLOP ABRASION RESISTANT COVERS

- AA** Standard abrasion resistance for normal service conditions.
- RA** Abrasion resistant for more severe service conditions. Exceeds DIN Y.
- RE** Excellent resistance to cuts, impact, abrasion and gouging caused by large lump sizes. Exceeds DIN X.
- RS** Extra wear resistant to meet the demands of carrying highly abrasive materials. Exceeds DIN W

For more information on abrasion resistant rubber belting please refer to our technical information bulletin available on our website.



ABRASION RESISTANT

ABRASION

The wear (abrasion) resistance of the rubber covers is the biggest influence on the working life of a belt. There are two internationally recognised sets of standards for abrasion, ISO 10247 (H, D and L) and DIN 22102 (Y, W and X). The longer-established DIN standards is most generally recognised and accepted. Generally speaking, DIN Y relates to 'normal' service conditions; DIN W for more abrasive materials and DIN X for resistance to cutting, impact, abrasion and gouging resulting from large lump sizes of heavy and sharp materials.

In addition to the four options listed in the quick reference guide, we also have two cover grades for belt operating conditions that involve extremely abrasive materials. Dunlop RES has similar properties as RE but has even greater wear resistance and also possesses outstanding resistance against tear (rip) propagation. Dunlop (Coldstar) RAS cover compound has the very highest resistance to abrasion with an average of 35mm³. This represents a superiority of some 150% compared to DIN W, which is the highest DIN standard for abrasion available.*

Dunlop abrasion resistant belting provides up to 50% longer wear life because the rubber covers we use exceed international quality standards by a significant margin. An excellent example of this is the Dunlop RA abrasion resistant cover, which exceeds the DIN Y standard by more than 50% and even exceeds the DIN X standard for abrasion resistance.

***IMPORTANT NOTE:** When analysing the mechanical properties of the rubber used for abrasion resistant covers, higher figures equate to higher performance qualities except in the case of the specific abrasion test where higher figures represent a greater loss of surface rubber and therefore a lower resistance to abrasion.



RIP & IMPACT RESISTANT

RIP & IMPACT

In some industries the most common reason for having to repair or replace a belt is due to rip or impact damage rather than day to day wear. In more extreme conditions where heavy, sharp lump sizes and/or large drop heights are involved, it is essential to have a carcass that is designed to dissipate impact and provide strong resistance against trapped objects that rip through the belt. It is also important to have rubber covers that protect the carcass as much as possible against impact and rip propagation. For these kinds of conditions we recommend Dunlop cover grades **RE** and **RS**.

(Please refer to the 'High impact / heavy-duty service belting' section of this brochure for more details.)

HEAT

Of all the demands placed on conveyor belts, heat is usually the most unforgiving and damaging. High temperature environments accelerate the ageing process, which causes the rubber to harden and crack. The three classes of resistance against accelerated ageing within ISO 4195 test methods are: Class 1 (100°C), Class 2 (125°C) and Class 3 (150°C). In order to handle even more extreme temperatures at Dunlop we also carry out routine testing at 175°C.

Dunlop Betahete is a high performance heat and wear resistant rubber compound designed to handle materials at continuous temperatures up to 160°C and peak temperatures of up to 180°C. Betahete consistently exceeds the requirements demanded by ISO 4195 Class 2 (T125) and has an outstanding level of abrasion resistance that exceeds the international standards applicable to purely abrasion resistant belts by more than 50%. **Dunlop Deltahete** is recommended for more extreme temperatures in demanding heavy-duty service conditions to convey high temperature loads of abrasive materials. It is specifically designed to withstand a maximum continuous temperature of the conveyed material as high as 200°C and extreme peak temperatures as high as 400°C. Deltahete exceeds the highest requirements of Class 3 and is therefore effectively Class 4, although this category does not yet exist within the ISO 4195 classifications. ISO 4195 laboratory testing has shown that even when continually exposed to 150° heat for 7 days, Dunlop Deltahete still retains its original (pre-test) resistance to abrasion.

A QUICK REFERENCE GUIDE TO DUNLOP HEAT RESISTANT COVERS

UP TO
180°C

DUNLOP BETAHETE

To handle materials at continuous temperatures up to 160°C and peak temperatures of up to 180°C.

UP TO
400°C

DUNLOP DELTAHETE

Designed to withstand a maximum continuous material temperature up to 200°C peak temperatures up to 400°C.

For more information on heat resistant rubber belting please refer to our technical bulletin available on our website.



HEAT RESISTANT





FIRE RESISTANT

FIRE

Fire safety is such an important issue that there are numerous safety classifications and international standards for which there are many different tests used to measure performance. The basis of most tests involves exposing a sample of belt to the flame of a burner causing it to burn. The burner (flame) is then removed and the combustion time (duration of flame) of the test piece is recorded. A current of air is then applied to the test piece for a specified time after the extinction of the flame. The flame should not re-ignite. The combined duration of continued burning (visible flame) should be less than 45 seconds for each group of six tests with no individual value being longer than 15 seconds. This factor is of critical importance because it determines the distance the fire can be carried by the moving belt.

Under laboratory test conditions, Dunlop fire resistant belting consistently self-extinguishes more than 6 times faster (in less than one second) than the permissible pass rate average time of 7.5 seconds.

A QUICK REFERENCE GUIDE TO DUNLOP FIRE RESISTANT COVERS

BV K/S

Fire resistant for the transport of inflammable and explosive materials such as biomass and coal.

BVA K/S

Fire resistant for the transport of highly abrasive inflammable and explosive materials.

V/VT

Fire resistant qualities specially developed for increased safety, such as covered or underground applications.

BVM K/S

Fire and oil resistant for most products containing animal and vegetable oils.

BVR K/S

Fire and oil resistant for products containing mineral oils.

For more information on fire resistant rubber belting test methods and standards please refer to our technical bulletin available on our website.

EXTREME COLD

When the ambient temperature descends below 0°C rubber begins to lose its elasticity. As the temperature falls, the rubber continues to lose flexibility and its ability to resist abrasion, impact and cutting. Eventually the belt is unable to trough and pass around pulleys. The covers and the rubber between the plies in the carcass also begin to crack. Ultimately, the belt will break because frozen rubber becomes as brittle as glass.

Abrasion resistant belts can usually withstand -30 to -40°C. Other cover qualities (such as oil or fire) are usually only able to withstand a minimum temperature of -20°C. For temperatures lower than this, conveyors should be fitted with belts especially designed to withstand extreme cold. Dunlop Coldstar has been specifically engineered to operate in extremely cold conditions as well as providing outstanding resistance to abrasion and other demands.

A QUICK REFERENCE GUIDE TO DUNLOP COLD RESISTANT COVERS

- 60°C** **COLDSTAR RAS**
Cold and high abrasion resistant.
- 30°C** **COLDSTAR ROS**
Resistant to mineral, animal and vegetable oils.
- 30°C** **COLDSTAR ROM**
Resistant to vegetable and animal oils.
- 40°C** **COLDSTAR BV K**
Fire resistant according to EN 12882 Class 2A.
- 40°C** **COLDSTAR BV S**
Fire resistant according to EN 12882 Class 2B.
- 30°C** **COLDSTAR VT**
Fire resistant according to EN 12882 up to Class 5A.

The temperatures shown indicate the limit until which the belt is still flexible enough to function normally.



COLD RESISTANT





OIL RESISTANT

OIL

Conveying materials that contain oil, fat and grease can have a very detrimental effect on the performance and life expectancy of a conveyor belt because it penetrates into the rubber causing it to swell and distort, resulting in serious running problems. In order to achieve the absolute minimum of swelling and distortion caused by oil, even on the most demanding of applications, we apply stringent American ASTM'D' 1460 standard test methods.

Oil resistance can be divided into two sources – mineral oil and vegetable and animal oils. Despite the different characteristics, most manufacturers produce only one oil resistant rubber cover quality compound whereas we have developed two compounds to provide the best possible protection against those differing needs.

Dunlop ROM is specifically designed to resist the penetration and damaging effects of animal and vegetable oils. In the case of highly aggressive mineral oils, our engineers have also developed the extremely successful **Dunlop ROS** cover quality. In situations that involve products with high concentrations of animal and vegetable oils we strongly recommend the use of the superior resistance provided by the ROS cover grade quality. Dunlop BV ROM and BV ROS cover grades are both oil and fire resistant.

Although oil resistant belts usually have a lower resistance to cold, Dunlop ROM and ROS oil resistant belts are designed to operate in temperatures as low as -20°C.

A QUICK REFERENCE GUIDE TO DUNLOP OIL RESISTANT COVERS

DUNLOP ROM

Oil and fat resistant for most products with animal and vegetable oils and fats.

DUNLOP ROS

Oil and fat resistant for products containing mineral oils.

BV ROM

Oil resistant for animal and vegetable oils and fire resistant (K/S grades).

BV ROS

Oil resistant for mineral oils and fire resistant (K/S grades).

RUBBER TYPES

CODE

NR

SBR

NBR

RUBBER TYPE

Natural Rubber

Styrene-Butadiene Rubber

Nitrile Rubber

CODE

EPM

CR

CSM

RUBBER TYPE

Ethylene-Propylene Rubber

Chloroprene Rubber

Chlorosulfonated Polyethylene



	Dunlop Cover Quality	DIN quality	EN/ISO quality	Permissible temp. °C ¹ min.			Base polymer	Technical Features
				Min. Ambient	Cont. Material	Peak Material		
Abrasion resistant	AA			-30	80	100	SBR	Abrasion resistant for normal service conditions.
	RA	Y		-30	80	100	SBR	Abrasion resistant for more severe service conditions.
	RE	X	H	-40	80	90	NR	Excellent resistance to cuts, impact, abrasion and gouging resulting from large and heavy lump sizes.
	RS	W	D	-30	80	90	NR/SBR	Impact and extra wear resistance for conveying highly abrasive materials of mixed lump sizes.
Heat resistant	Betahete	T	T1	-20	160	180	SBR	Heat and wear resistant for high temperature materials.
	Deltahete	T	T3	-20	200	400	EPM	Superior heat resistant for heavy duty service conditions, up to 400 °C for short time intervals.
Oil resistant	ROM	G		-20	80	90	SBR/NBR	Oil and fat resistant for most products with animal and vegetable oils and fats. ²
	ROS	G		-20	80	120	NBR	Oil and fat resistant for products containing mineral oils.
Fire resistant	BV	K/S ³	2A/2B	-20	80	90	SBR	Highly fire resistant according to EN 12882 and EN ISO 340.
	VT	VT	4A/5A ⁴	-15	80	90	CR/SBR	Highly fire resistant according to EN 12882 and EN ISO 340.
	V	V	A/B2/C2 ⁴	-15	80	90	CR	Highly fire resistant according to EN 14973 and EN ISO 340.
Fire resistant & Oil resistant	BVROM	K/S ³	2A/2B	-20	80	90	SBR/NBR	Combines features of ROM and fire resistant according to EN 12882 and EN ISO 340.
	BVROS	K/S ³	2A/2B	-20	80	90	NBR	Combines features of ROS and fire resistant according to EN 12882 and EN ISO 340.
Fire resistant, Heat & Oil resistant	BVGT	T / G K/S ³	T1 / 2A/2B	-20	150	170	CSM	Combines features of Betahete, ROS and fire resistant according to EN 12882 and EN ISO 340.

¹ For elevator belts other values apply.

² In some cases (with products containing high concentrations of animal and vegetable oils) ROS should be selected.

³ K = fire retardant with covers, S = fire retardant with and without covers.

⁴ Limited to specific belt constructions.

SAFE TO HANDLE

All Dunlop rubber cover compounds are made exclusively in the Netherlands in compliance with REACH (Registration, Evaluation and Authorisation of Chemical substances) regulation EC 1907/2006.



CHOOSING THE BEST TYPE OF BELT FOR YOU

Selecting the most suitable belt construction and cover (rubber) quality depends on several different factors. The final choice from the available options for each application will depend on the actual working conditions, which may differ quite significantly from location to location.

In case of doubt, you are welcome to contact our Application Engineering department. At Dunlop Conveyor Belting you get more than just conveyor belts. Our highly experienced engineers provide advice and practical assistance to help you choose the most suitable belt type and cover grade quality for your specific application.

PROBLEM SOLVING

If you have conveyors where belts need to be replaced at frequent intervals, require particularly high maintenance or are perhaps simply performing poorly then we recommend that you contact your local Dunlop representative. Alternatively you can contact our Application Engineering department based in our head office in Drachten.



DUNLOP SPLICING MATERIALS

DUNLOP BELTS PERFORM BEST WHEN FITTED USING DUNLOP SPLICING MATERIALS.

The reliability of any conveyor system depends on many different factors. Regardless of the quality of the belt, it is a fact that the potentially weakest points are the splice joints. A strong, long-lasting splice joint relies on two, equally important factors – the skill of the person making the splice and the actual quality of the splicing materials being used.

To get the best results it is essential that the rubber being used in the splice joint has exactly the same (or better) qualities (heat resistance, oil resistance, etc.) as the rubber used to make the belt itself. Ideally, this is best supplied by the manufacturer of the belt itself. In order to help our customers achieve the best possible results, Dunlop supplies a wide range of splicing materials that have been designed and developed to provide optimum performance in terms of adhesion, dynamic life and usability. The materials can be ordered as full splice kits containing everything needed to make a splice or as bulk material.



HOT SPLICING

Dundisol hot vulcanization solution provides the best possible tack characteristics during the assembly of the splice and excellent adhesion levels in combination with Dunlofol.

Dunlofol uncured inter-ply rubber is designed for use on the 'steps' of the splice to rebuild the belt carcass and to provide maximum adhesion in the cured splice.

Duncover uncured cover rubber is especially designed for use on the top and bottom of the splice to rebuild the belt's cover area and provide maximum adhesion to the carcass and the best possible wear resistance and durability.

Uncured rubberised fabrics can be supplied for specialty splices such as UsFlex finger splices, used as reinforcements in heavy duty, high tensile splices and also to make spot belt repairs.

COLD SPLICING

Enerkol Cold Glue & Hardener Cement

For cold splicing of conveyor belts with textile carcass we supply our highly successful 'two component' (glue and hardener) Enerkol bonding system, which is suitable for abrasion resistant belt qualities. Enerkol is also a highly effective bonding glue for pulley lagging. A special steel primer is required for this purpose.



MULTI-PLY
BELTS

SUPERFORT® 'LONG LIFE' BELTS

Dunlop Superfort 'long life' multi-ply conveyor belts have a long history of outstanding reliability and durability. Dunlop Superfort significantly exceeds the international standards that have the biggest influence on overall belt strength, splice strength and operational lifetime. These factors include abrasion (wear) resistance, tear strength, tensile strength break for both the carcass and the covers and adhesion between the plies and between the covers and the carcass. It also has particularly good low elongation (low stretch) characteristics. Dunlop Superfort 'long life' belts are the ideal solution for a wide variety of applications, from light duty up to the very heaviest, toughest materials and the most demanding working environments.

APPLICATION AREAS

Dunlop Superfort 'long life' belts provide outstanding reliability and durability in a wide cross-section of industries including cement, chemicals & fertilizers, mining, quarries, power plants, recycling, wood, paper and pulp, sugar & food, steel and transshipment.

AVAILABILITY

Dunlop Superfort belts are available from stock in widths from 400mm up to 2200mm and in tensile strengths from 250 N/mm up to 1000 N/mm. Superfort belts with tensile strengths up to 3150 N/mm can be custom made to order. Superfort belting can be supplied in all Dunlop cover grades including abrasion resistant, heat resistant, extreme cold, oil resistant, fire resistant and combinations such as heat and oil.

CARCASS CONSTRUCTION

The Superfort carcass is available with either 2, 3, 4, 5 and 6 synthetic EP (Polyester-Nylon) fabric plies. The EP fabrics that we use are the very best quality available. They are low stretch and have a consistent longitudinal and transversal tensile strength to provide both first class handling characteristics and splice strength.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.

DUNLOFLEX®

Dunloflex is designed for use with all types of bulk material transportation under light to medium-heavy service conditions in raw material, mining, stone and earth handling and building industries. Dunloflex conveyor belts provide particularly good load support with low elongation characteristics.

APPLICATION AREAS

Dunloflex is used in a wide cross-section of industries including mining, quarries, recycling, steel processing and wood, paper and pulp.

AVAILABILITY

Dunlop Dunloflex belts are custom made to order. They can be supplied in all Dunlop cover grades and in tensile strengths ranging from 200 N/mm up to 800 N/mm in widths from 400mm up to 2200mm.

CARCASS CONSTRUCTION

The Dunloflex carcass construction consists of two synthetic EP plies with an extra thick rubber layer between the plies to give excellent impact and tear resistance and higher splice performance compared to conventional multi-ply belting.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.



SUPERFORT
CROSS SECTION

INDUSTRIES



RESISTANCE



DUNLOFLEX
CROSS SECTION

INDUSTRIES



RESISTANCE





**HIGH IMPACT / HEAVY-DUTY
BELTS**

TRIOFLEX®

TrioFlex has been designed in line with the modern MPC-trend (minimum ply concept) and can be used very successfully for medium up to the heaviest service conditions, adverse loading conditions and coarse materials. As its name implies, the TrioFlex carcass consists of three extremely tough and resilient EP fabric plies that are impervious to moisture and have a low elongation. There is an extra tough rubber layer between the plies. This all adds up to outstanding levels of impact and tear resistance.

APPLICATION AREAS

TrioFlex belts provide superb reliability and durability in a wide cross-section of industries, including the steel industry, blast furnaces, mining and coke industry, ore transport, stone industry and processing industries.

AVAILABILITY

TrioFlex belts are available from stock in 500 and 630 N/mm tensile strengths using the Dunlop RS (high wear and cut resistance) cover quality. Other tensile strengths and cover grade options can be made to order. Available in widths from 400mm up to 2200mm.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.

USFLEX®

In some applications, especially primary and secondary crushers, even the strongest and heaviest conventional belts can be ripped or torn by large lumps of heavy, sharp objects, either falling from height or becoming trapped. In extreme cases, belts can be destroyed within a matter of weeks or months. The Dunlop solution to this problem is UsFlex, which has a longitudinal rip resistance that is more than five times stronger than multi-ply belts of equivalent rating because of its unique 'straight-warp' construction. UsFlex provides impact resistance up to three times greater than that of conventional plied belting. This unequalled toughness means that UsFlex will provide the longest belt life even in the harshest conveying conditions.

Some of the key features of UsFlex include:

- Unrivalled impact, rip and tear resistance
- High strength
- Excellent load support
- Outstanding troughability

APPLICATION AREAS

Suitable for use in all areas, especially in high impact conditions and low maintenance environments including the mining, quarry, wood, paper and pulp, recycling, road construction, steel and transshipment industries.

AVAILABILITY

Dunlop UsFlex is available from stock in two tensile strengths; 630/1 6+3 and 1000/2 8+3 in widths up to 2000mm. UsFlex belts are supplied with the abrasion resistant 'RS' cover as standard. The Dunlop RS cover grade exceeds the very highest DIN and ISO grades (DIN W and ISO 14890 'D'). Other tensile strengths and cover qualities can be made to order. Available in widths from 400mm up to 2200mm.

CARCASS CONSTRUCTION

The UsFlex carcass is based on the straight-warp principal and can be supplied in either single ply or two-ply versions.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.

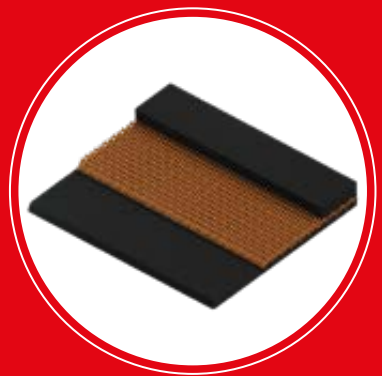


TRIOFLEX
CROSS SECTION

INDUSTRIES



RESISTANCE

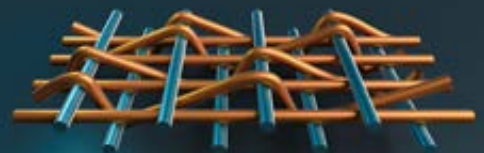


USFLEX
CROSS SECTION

INDUSTRIES

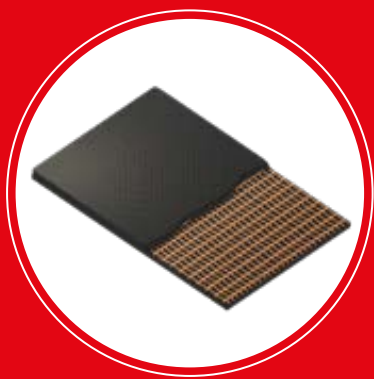


RESISTANCE





STEEL FABRIC REINFORCED BELTS



FERROFLEX
CROSS SECTION

INDUSTRIES



RESISTANCE



FERROFLEX®

Dunlop Ferroflex has a tension layer composed of longitudinal steel cords through which power transmission is effected. The transverse steel cords reinforce the belt and protect against impact and tears. This well-proven carcass construction has particularly good 'low elongation' characteristics. Ferroflex is an excellent, highly durable solution wherever tensile strength and cover grade qualities need to be adaptable to meet demanding service conditions. This applies to all areas of bulk material handling, particularly long distance applications and high impact conditions.

CARCASS CONSTRUCTION

There are two Ferroflex constructions available, which are referred to as 'FIW' and 'FSW'. The FIW carcass has a single transversal layer of steel cords on top of the longitudinal steel cords, whereas the FSW has two transversal layers of steel cords situated at both sides of the longitudinal steel cords.

APPLICATION AREAS

Ferroflex provides top class reliability and durability in a wide cross-section of industries including cement, quarries, wood, paper and pulp, recycling, steel and transshipment. The FSW reinforced belt can be supplied with cable free zones to make the installation of buckets and fasteners easier and to create a dynamically stronger belt that is ideally suited as an elevator belt where it is used in combination with the high heat resistant Deltahete rubber covers for the conveying of hot materials.

AVAILABILITY

Ferroflex FIW and FSW belts are custom made to order and can be supplied in all Dunlop cover grades. All Ferroflex belts are supplied with moulded rubber edges. Available in widths from 500mm up to 2000mm. Tensile strengths (N/mm) : 500, 630, 800, 1000, 1250, 1600 and 2000.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.

ARAMID REINFORCED BELTS

STARAMID®

Dunlop Staramid has been specially developed as a lighter weight alternative to steelcord belt. It is designed for use on very long conveyors with centre distances of up to several thousand meters. The outstanding characteristics of the Staramid belt include low elongation and a low weight together with highly dynamic splice efficiency. Staramid belts have exceptional durability and in some cases have been known to operate for more than 25 years.

CARCASS CONSTRUCTION

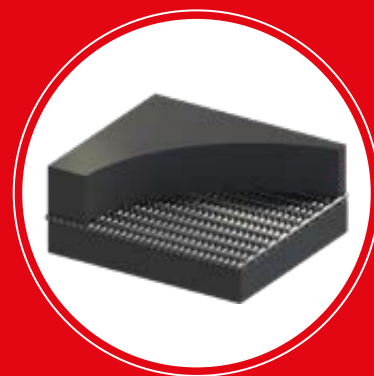
The carcass is based on the 'straight warp' principle. Power transmission is effected through longitudinal Aramid cords. Aramid is made from heat-resistant, extremely strong synthetic fibers commonly used in aerospace and military applications including ballistic-rated body armour. On either side of the Aramid and nylon cords there are transverse nylon cords. For particularly demanding applications it is possible to add extra transverse reinforcement without adversely affecting the belt's longitudinal flexibility.

APPLICATION AREAS

Suitable for use in all areas including mining, fertilizer and quarry industries.

AVAILABILITY

Staramid belts are custom made to order and can be supplied in all Dunlop cover grades. All Staramid belts are supplied with moulded edges. Tensile strengths (N/mm): 630, 800, 1000, 1250, 1600 and 2000. Available in widths from 500mm up to 2200mm.



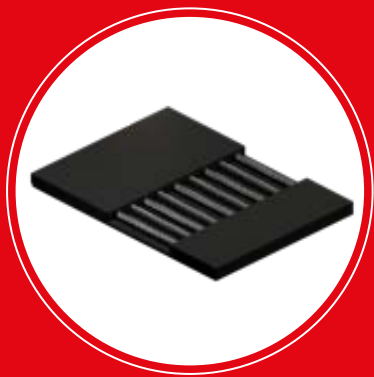
STARAMID
CROSS SECTION

INDUSTRIES



RESISTANCE





STEELCORD
CROSS SECTION

INDUSTRIES



RESISTANCE



STEELCORD BELTS

The worldwide Fenner Dunlop Group has more than 40 years of experience in producing top quality steelcord belting. Here in Holland we combine that experience with the latest, most technologically advanced steelcord manufacturing line in the world. This combination is used to produce belts that provide outstanding reliability and durability and exceed just about every international standard imaginable.

Some of the key features of Steelcord include:

- Unbeatable wear resistance – longer operational lifetime
- Low elongation
- Low maintenance
- First class splicing characteristics

APPLICATION AREAS

Dunlop steelcord belts are used in a wide cross-section of industries.

AVAILABILITY

All Dunlop steelcord belts are custom made to order and can be supplied in a wide range of Dunlop abrasion, cut, rip & tear cover grades as well as oil resistant and fire resistant. Available in widths from 500 to 1600mm, all Dunlop steelcord belting has moulded rubber edges.

SLIDER FRICTION BACK BELTS

Slider belting is most commonly used in the transportation of individual items and packages but is also used to carry a wide variety of materials. Dunlop slider belts have a special rubber layer that provides the necessary transverse rigidity to create the flat, even surface needed to run smoothly and efficiently. The low friction polyester fabric used on the bottom of the belt provides low power consumption properties. Rufftop and Fishbone profiled covers are often used on slider belts to provide the surface grip needed to avoid slippage when steep inclines are involved.

CARCASS CONSTRUCTION

The carcass consists of either 2 or 3 plies plus a low friction (low power consumption) polyester fabric slider-ply.

APPLICATION AREAS

Slider belting is used on installations where the idlers in the top part have been replaced by wood, metal or plastic slider plates. These installations are ideal for conveying either individual items or raw materials.

AVAILABILITY

Dunlop slider belting is available from stock in 250/2 with high abrasion resistant cover grade and 400/3 with both ROM (vegetable) and ROS (mineral) oil resistant covers. A 250/2 version with a Rufftop profile is also available. Other specifications including a fishbone profile top cover can be made to order. Available in widths up to 2000mm.

CAUTION: In dry conditions, double-sided slider belts with a fabric surface on both sides would not be sufficiently conductive to meet the EN/ISO 284 standard relating to anti-static properties.



SLIDER
CROSS SECTION

INDUSTRIES



RESISTANCE



PROFILED BELTS

CHEVRON AND HIGH CHEVRON BELTS

Dunlop 'super strength' chevron belts are quite simply the strongest and most reliable chevron belts available today. Unlike nearly all other manufacturers, Dunlop profiles are moulded and vulcanised in one continuous production process together with the base belt to form a single, homogeneous belt structure. Apart from the far superior strength, another key advantage is that this allows the use of smaller pulley diameters. The 32mm high Chevron profile is typically suitable for smaller lump sizes and conveyor angles up to 20 to 25 degrees. For larger lump sizes and steeper inclines the Dunlop High Chevron profile with 32mm high profiles will provide the solution.

APPLICATION AREAS

Chevron and High Chevron is successfully used on incline angles up to 30° for a wide variety of materials including domestic and commercial waste, gravel and coal. For sticky materials such as wet sand and earth it can be used on inclines as steep as 40°. It is also a highly effective for conveying packages such as sacks and bales.

CARCASS CONSTRUCTION

The ultra-strong Dunlop Superfort and Dunloflex carcasses with their polyester-nylon (EP) fabric plies provide strong low elongation and are impervious to moisture.

AVAILABILITY

Standard widths range from 400 up to 1600mm, depending on profile height. Dunlop 'super strength' chevron belts are available in RA (high abrasion resistant), and ROS (mineral oil resistant) qualities*. Other cover grades available on request. All Dunlop chevron belts are supplied with moulded edges.

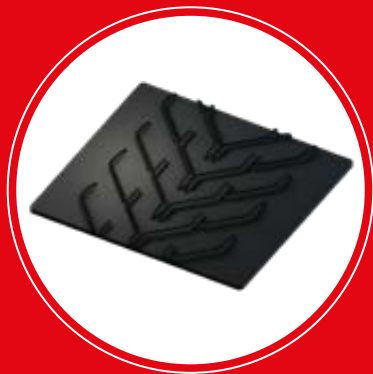
* For oil resistant and, for example, heat resistant cover qualities it is recommended that pulleys should be one step larger in diameter.



INDUSTRIES



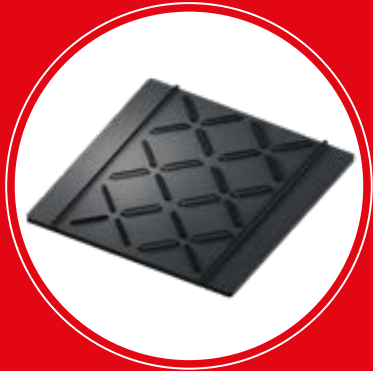
RESISTANCE



LOW CHEVRON



HIGH CHEVRON

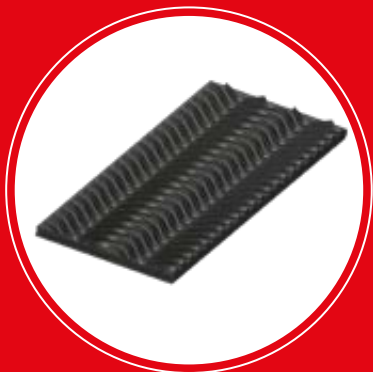


MULTIPROF

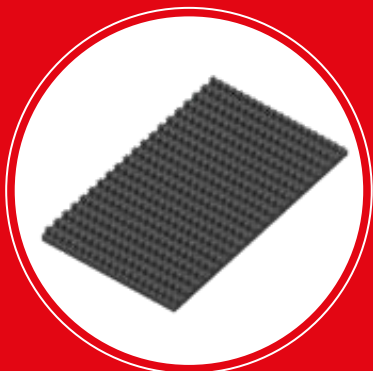
INDUSTRIES



RESISTANCE



FISHBONE SURFACE



RUFFTOP SURFACE

INDUSTRIES



RESISTANCE



MULTIPROF

Dunlop Multiprof is a multi-purpose profiled belt for inclined conveying that has been developed specifically for transporting packaged goods such as boxes, bags and baggage as well as bulk materials including agricultural products, oily materials, woodchips and wet sand. Multiprof profiled belting can be used for incline angles as high as 30°. It has excellent drainage qualities, runs quietly and is easy to clean.

CARCASS CONSTRUCTION

All constructions have EP fabric plies that provide low elongation, high tensile strength and are impervious to moisture.

AVAILABILITY

Standard widths range from 700mm up to 1200mm. Dunlop Multiprof can be supplied to order in various carcass constructions. The Multiprof profile can be created in RA (high abrasion resistant), Betahete (heat resistant) and ROM and ROS (oil resistant) cover grades.

FISHBONE AND RUFFTOP PROFILED BELTING

Fishbone and Rufftop profiles provide a highly durable and efficient surface grip. They are most commonly used in the transportation of individual items and packages, particularly where steep inclines can cause slippage of the goods being carried.

CARCASS CONSTRUCTION

EP fabric plies (SUPERFORT or DUNLOFLEX), strong, low elongation.

AVAILABILITY

Rufftop is available from stock in 250/2 construction in both regular and slider belt formats. Fishbone is available from stock in 250/2 construction. The standard quality cover is the high abrasion resistant 'RA'. Other cover grades and belt strengths can be custom made to order.



For more detailed technical information regarding this product please download a copy of the applicable technical datasheet from our website.

SPECIALIST BELTS

SAW MILL BELTS

Dunlop saw mill conveyor belts have been especially developed for the conveying of woodchips, planks, bark etc. The rubber used in these belts can be non-staining and has been formulated by Dunlop rubber technicians to provide first-class resistance to oils and resins found in the enormously diverse range of trees now used within the timber industry.

AVAILABILITY

Dunlop sawmill belting is made to order in widths up to 2000mm supplied as standard without covers or 1.5mm top and 0mm friction back for slider belt applications. Other thicknesses are available upon request. It is available in two different oil resistant cover grades, ROM (animal & vegetable oils) and ROS (extra resistant to mineral oils and high concentrations of vegetable oils and resins). Both Dunlop ROM and ROS oil resistant rubber also have excellent wear resistance, giving a much greater operational lifetime as well as being resistant to ozone and UV (EN ISO 1431).

DUNLOPIPE CONVEYOR BELTING

Dunlop produces a wide variety of belts for use within pipe conveyor systems. The many advantages of pipe conveyors include secure, spillage-free transportation and the flexibility to negotiate tight curves in multiple directions as well as vertical inclinations. These can be as much as 50% higher compared to conventional conveyors. Pipe conveyors often provide the most efficient solution in locations where there are environmental, safety or space limitations and are used to convey a broad spectrum of materials in many different industries ranging from chemicals to power plants.

AVAILABILITY

All Dunlopipe conveyor belting is custom made to order and can be supplied in a wide range of Dunlop cover grades including abrasion resistant, oil resistant and heat resistant.

PASSENGER CONVEYOR BELTS

Dunlop's Starglide conveyor belts carry passengers safely, comfortably and economically. Starglide belts are installed all over the world in a wide variety of locations including airports and station terminals, parking facilities, pedestrian areas, supermarkets, exhibition centres, artificial ski grounds and casino entrances. Starglide belts are able to operate safely at higher speeds, consume less energy and have lower maintenance costs compared to traditional pallet system passenger conveyors.

Product properties

- | | | |
|---|---|---|
| 1. Fire resistant (EN 115 standard) | 4. Easy to install (including existing buildings) | 7. Low maintenance (up to 35% less than pallet systems) |
| 2. Slip resistant | 5. Low intermediate height | 8. Quiet operation (noise level below 55dB) |
| 3. Excellent resistance to wear and tear (long life-span) | 6. Available in unlimited length and width up to 1600mm | 9. Rubber surface ensures optimum comfort and safety |

INDUSTRIES



RESISTANCE



CARCASS CONSTRUCTION

The carcass consists of at least two plies of wholly synthetic Polyester fabric (EE). The advantages of EE fabric are that it is impervious to moisture, has low elongation and has a high tensile strength.

INDUSTRIES



RESISTANCE



CARCASS CONSTRUCTION

Dunlopipe is constructed using a uniquely adapted cross-rigidity fabric multi-ply carcass, specifically designed to allow consistent tube formation. It also features special flexible belt edges to enable efficient closure. Because they are under permanent stress (elongation), the outer covers used for Dunlopipe conveyor belts are made from a rubber compound that has a significantly enhanced level of ozone and ultra violet resistance.

INDUSTRIES



RESISTANCE



AVAILABILITY

All Starglide passenger conveyor belts are made to order.



PERFECT FOR
MOVING WALKWAYS

INDUSTRIES



RESISTANCE



HARVESTING BELTS

Dunlop belts for use with harvesting machinery are precision moulded for smooth, trouble free operation. A wide range of profile dimensions are available. Both height and pitch can be varied to suit several different models of harvesting machines. Dunlop harvesting belts provide excellent fastener strength and low elongation plus outstanding resistance to wear, ozone and ultra violet exposure, all which results in a superior product life.

AVAILABILITY

Dunlop harvesting belts are made to order and are available in tensile strengths ranging from 600 to 1250N/mm and in thickness over 30mm.

ROUND BALER BELTS

Dunlop Round Baler Belts come in 2 tensile strengths: 520 and 430. Regardless of the tensile strength, the construction consists of 3 extremely strong fabric plies with an extra tough, highly resilient rubber layer between the plies. This provides an outstanding performance, even on high production speed. The fabrics are impervious to moisture and have particularly low elongation characteristics, providing a multifunctional solution for a wide variety of Round Baler Machines. Our available profiles provide excellent grip and highly efficient baling of any kind of crop.

AVAILABILITY

All Dunlop round baler belts are made to order.

INDUSTRIES



RESISTANCE



TRANSVERSE RIGID BASE BELTING RIGITRA

The Dunlop Rigitra cross-stabilized base belting has been designed to provide the high transverse rigidity needed to operate with optimum stability and efficiency when fitted with sidewalls and/or cleats.

AVAILABILITY

Rigitra cross-stabilized belt types are custom made to order.

INDUSTRIES



RESISTANCE



CARCASS CONSTRUCTION

The Rigitra carcass consists of at least two plies of wholly synthetic Polyester-Nylon fabric (EP). EP-fabric is impervious to moisture and has low elongation and a very high tensile strength. Two extra plies of special fabric (textile or steel) are also used to create the essential transverse rigidity. The choice of either textile or steel depends on the level of rigidity needed.

ULTRA X

THE SUPER-STRENGTH ALTERNATIVE TO CONVENTIONAL MULTI-PLY BELTING

Even the strongest, heaviest belts can be ripped, torn or punctured by heavy, sharp materials or foreign objects, either falling from height or becoming trapped. Belts can often be destroyed within a matter of weeks or months. The Dunlop solution to this very old problem is a new and unique belt design – **Dunlop Ultra X**.

CONSTRUCTION

Ultra X is a super strength abrasion resistant breaker weft construction single-ply belt that is **exclusively** made by Dunlop Conveyor Belting including the patented super-tough fabric, which is made in our in-house fabric weaving facility. Ultra X is designed to be a much stronger, more durable alternative to conventional multi-ply belting.

ADVANTAGES OF ULTRA X COMPARED TO TYPICAL MULTI-PLY BELTING

- More than 3 times greater longitudinal rip resistance
- Up to 5 times better tear resistance
- Far superior impact resistance
- Up to 90% tensile splice strength (using finger splice method)
- Excellent mechanical fastener retention
- Greater flexibility – can be used on smaller than usual pulleys

APPLICATIONS

Ultra X1 is designed as a stronger alternative to 250/2, 315/2 and 400/3 abrasion resistant multi-ply belts.

Ultra X3 is designed as a stronger alternative to 500/3, 500/4, 630/3 and 630/4 abrasion resistant multi-ply belts.

Ultra X belts are produced with Dunlop AA anti-abrasion covers as standard. This ensures excellent resistance against the cutting and wearing caused by aggregate materials, with a resistance to abrasion that outperforms typical DIN Y requirements (average loss of less than 150mm³) by as much as 20%. And as with all Dunlop cover qualities, Dunlop AA is extensively tested in compliance with EN ISO 1431 for ozone resistance (50 pphm, strain 20%, 96 hours no cracking) and resistance to the damaging effects of UV light.

INDUSTRIES



RESISTANCE



SPLICE STRENGTH ADVANTAGES

Ultra X is best joined using the finger splice method. This creates the strongest and most reliable joint possible by retaining up to 90% of tensile strength. This is because the step splice will always create a proportional 'loss' of tensile strength that is the equivalent of one ply.

AVAILABILITY

In order to provide the most economical prices as possible, Ultra X is only available in full rolls of 300m or alternatively of 2 X 150m rolls if necessary.

The minimum order for each type is 600 square meters (300m X 2000mm) cut in any combination of the following widths:

Ultra X1

500mm, 650mm, 800mm, 1000mm, 1200mm, 1600mm or 2000mm.

Ultra X3

500mm, 800mm, 1000mm, 1200mm, 1600mm and 2000mm.





RUBBER MATTING AND SHEETING

IMPORTANT SAFETY DECLARATION

All Dunlop rubber matting, lagging and sheeting is safe to handle and safe for livestock because it is made exclusively in the Netherlands in compliance with REACH (Registration, Evaluation and Authorisation of Chemical substances) regulation EC 1907/2006. These regulations include the stipulation that potential harmful chemicals such as SCCP's (short chlorinated paraffin's) should either not be used at all or at least only used on a very restricted basis because of their category 3 carcinogenic classification and their threat to the environment. The unpleasant smell given off by some rubber products can be a strong indicator that chlorinated paraffin's have been used within the rubber compound. REACH regulations do not apply to rubber sheeting and matting made outside of Europe although they should apply if imported into Europe.



RUBBER MATTING

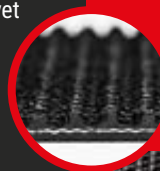
DUNLOMAT®

Dunlomat rubber matting is made exclusively here in Holland. It was originally developed for heavy livestock in the farming industry including stall and stable flooring and livestock transportation. Dunlomat is now used for a multitude of applications in a wide cross-section of industries. It is resistant to premature degradation caused by ozone pollution, UV exposure, animal urine, high-pressure washing, cleaning and disinfecting agents. Dunlomat has a 'Fabric print' on the top cover for optimal comfort and is easy to clean. The bottom cover has a 'Rufftop profile' to prevent slippage. It is even the officially recommended matting of TWIF, the world indoor tug of war association!

The high quality abrasion resistant rubber is reinforced by an extremely strong yet flexible polyester carcass nylon to provide excellent strength and durability. The non-skid top and bottom surfaces reduce the risk of injury to legs and udders.

AVAILABILITY

Dunlomat 10mm is available from stock in various widths between 1000 and 2000mm.

**INDUSTRIES****RESISTANCE**

DUNLOMAT "10MM" IS AVAILABLE FROM STOCK IN 1000 AND 2000MM WIDTHS.

DUNLOMAT "6MM" IS AVAILABLE IN A WIDTH OF 2000MM.

REINFORCED RUBBER SHEETING

DUNLOSHEET®

Made exclusively here in Holland since 1997, Dunlosheet is an extremely strong, hard-wearing, 3.5mm thick rubber sheet with polyester carcass. It has a 'Fabric print' on the top cover, which helps to prevent slippage, and a smooth bottom cover surface. It is used for a wide range of industrial and agricultural applications including dust and pollution protection and in stables as cover for animal bedding mattresses.

AVAILABILITY

Dunlosheet 3.5mm is supplied from stock in seamless rolls of 100 or 200 meters at a width of 2000mm. It has excellent resistance to high-pressure washing, cleaning and disinfecting agents as well as the highly damaging effects of ozone and ultra violet.

During the last ten years alone we have produced and sold more than 500,000 square meters of Dunlosheet. We provide full warranty cover for the first three years against premature failure caused by faulty materials or workmanship. This includes surface cracking and rubber degradation caused by ozone and ultra violet. Anticipated lifetime depends very much on how the sheeting is used and maintained but we would expect a working life of longer than 10 years.

FABRIC PRINT

RUFFTOP PROFILE

INDUSTRIES**RESISTANCE**

**PERFECT FOR
ANIMAL BEDDING**

INDUSTRIES



RESISTANCE



RUBBER SHEETING

DUNLOP ULTIMA

Designed and developed strictly in accordance with DIN 7715 international standards by the Dunlop Research & Development team in Holland, Dunlop Ultima is available in 60 Shore A and 40 Shore A in a range of thicknesses, widths and roll sizes with or without an Adhesion Layer (AL).

BONDING SYSTEM

Dunlop Ultima can be bonded to most surfaces using the majority of good quality cold bonding systems available in the market. In applications where Ultima with an adhesive layer (AL) is used there is no need for time consuming grinding prior to bond. The adhesive layer is protected by a plastic film, which enables rapid processing. The combination of high adhesion and high tensile strength in the adhesive layer ensures maximum bond strength and increased reliability.

PULLEY LAGGING

Because it is made from high abrasion resistant premium grade rubber, Dunlop Ultima Pulley Lagging provides outstanding wear life and value for money. The grooved diamond profile allows moisture to disperse and reduces material build-up and slippage between the belt and the pulley. The lagging also effectively acts as a wear indicator so maintenance can be planned before the steel face of the pulley becomes damaged.

ULTIMA, CUSTOM-MADE TO HANDLE SPECIFIC TASKS

At Dunlop we produce our own rubber and manufacture all of our products using our own production facilities in Holland. This self-sufficiency enables us to have total control of the quality process as well as the flexibility to create custom-made solutions when they are needed. This includes being able to produce Ultima rubber sheeting in thicknesses from 3mm up to 40mm in roll lengths of up to 100 meters depending on the thickness.



UNRIVALLED TECHNICAL SUPPORT AND GUIDANCE

When you buy from Dunlop you get more than just quality conveyor belts because we have one of the largest, most experienced and highly trained teams of conveyor belt specialists and application engineers in the industry.

Dunlop provides an unrivalled level of customer service – visiting our customers on-site, providing advice, guidance and practical support including:

- SITE VISITS AND SURVEYS
- BELT CALCULATION SERVICE
- TECHNICAL TRAINING (ON-SITE AND DUNLOP BASED)
- SPLICE TRAINING
- TROUBLE SHOOTING AND PROBLEM SOLVING
- IN-HOUSE RESEARCH, TESTING AND DEVELOPMENT
- AFTER-SALES SUPPORT

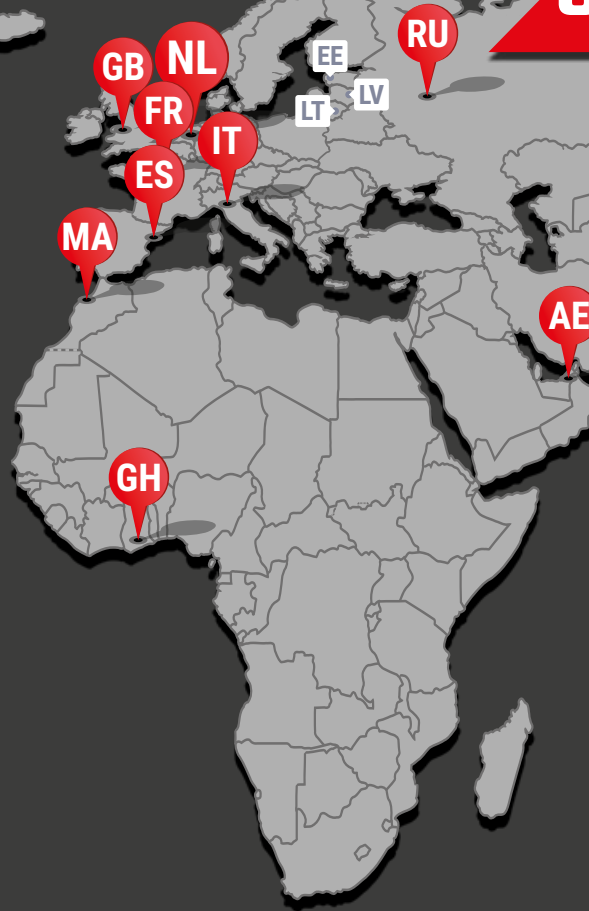
WE ARE HERE TO HELP!

If you have any concerns or questions, please call our Application Engineering Department on
+31 (0) 512 585 555

Dunlop Conveyor Belting
www.dunlopccb.com

Dunlop Conveyor Belting (Fenner Dunlop BV) reserves the right to modify specifications stated in this brochure so that it can continue to comply with new legislation, changes in applicable international standards and/or to incorporate new technology as well as making changes to its product range in order to meet changing business requirements.

HOW TO CONTACT US



HEAD OFFICE

THE NETHERLANDS

☎ +31(0) 512 585 555
✉ INFO@DUNLOPCB.COM

Oliemolenstraat 2
P.O. Box 14 9200 AA Drachten



INFO@DUNLOPCB.COM
INTERNATIONAL E-MAIL ADDRESS

UNITED KINGDOM

☎ +31(0) 512 585 555
✉ INFO@DUNLOPCB.COM
📍 FARINGTON (PRESTON)

FRANCE

☎ +33 1 3055 5419
✉ INFO@DUNLOPCB.COM
📍 ELANCOURT (PARIS)

SPAIN

☎ +34 93 77 04 597
✉ INFO@DUNLOPCB.COM
📍 ESPARREGUERA (BARCELONA)

ITALY

☎ +39 0363 906266
✉ INFO@DUNLOPCB.COM
📍 CALCIO (BERGAMO)

RUSSIA

☎ +7 (495) 780 88 64
✉ INFO@DUNLOPCB.COM
📍 MOSCOW

MOROCCO

☎ +212 (0) 522 34 65 80 / 85
✉ INFO@DUNLOPCB.COM
📍 CASABLANCA

GHANA

☎ +31(0) 512 585 555
✉ INFO@DUNLOPCB.COM
📍 OBUASI

UNITED ARAB EMIRATES

☎ +971 (0) 4 880 6337
✉ INFO@DUNLOPCB.COM
📍 DUBAI

technobalt
Fenner Dunlop Conveyor Belting

ESTONIA

☎ +372 661 3160
✉ INFO@TECHNOBALT.EE
📍 HARJU MAAKOND

LITHUANIA

☎ +372 505 8721
✉ INFO@TECHNOBALT.LT
📍 VILNIUS

LATVIA

☎ +371 27 071584
✉ INFO@TECHNOBALT.LV
📍 JAUNMARUPE