## Dumin Ferroflex

## AVAILABLE IN A WIDE RANGE OFI PREMIUM QUALITY GRADES

## STEEL FABRIC REINFORCED BELTING

- Tensile strengths available from $500 \mathrm{~N} / \mathrm{mm}$ up to $2000 \mathrm{~N} / \mathrm{mm}$
- Wide range of widths available, from 500 up to 2200 mm
- Available in a range of cover compounds from $-60^{\circ} \mathrm{C}$ up to $+400^{\circ} \mathrm{C}$ including fire resistant, oil, extreme cold and abrasion resistant
- Low elongation $0.25 \%$ at $10 \%$ of the normal tensile strength
- High impact and tear resistance due to dense steel cord carcass
- Small pulley diameters
- Super-strong carcass ideal for elevator belting

Dunlop Ferroflex steel fabric reinforced belting is specifically designed for demanding service conditions such as carrying heavy bulk materials, particularly where long distances and/or high-impact, ripping and tearing is involved.

Ferroflex has a tension layer composed of longitudinal steel cords through which the power is transmitted. The transverse steel cords reinforce the belt and protect against impact and tears. This well-proven carcass construction has particularly good 'low elongation' characteristics.

## CARCASS CONSTRUCTION

There are two Ferroflex constructions available. These are 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. The FSW carcass has two transversal layers of steel cords situated at both sides of the longitudinal steel cords. Both constructions are available in many Dunlop cover qualities.

## 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, which combined with its low elongation characteristics and high heat resistant Deltahete rubber covers mean that it is ideally suited as an elevator belt for conveying hot materials.
steel reinforged for high resistange to IMPACT, RIPPING \& TEARING LOW ELDNGATION

## 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:

- Belt calculation services
- Technical training (on-site and Dunlop based)
- Splice training
- Trouble shooting and problem solving
- In-house research, testing and development
- After-sales support


## TECHNICAL INFORMATION

| Belt <br> type |  | Carcass thickness [mm] | Carcass weight [kg/m²] | Pulley diameters * |  |  | Min. width ** [mm] | Max. belt width [mm] for satisfactory load support with material density of $\mathrm{t} / \mathrm{m}^{3}$ : ** |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \mathrm{A} \\ {[\mathrm{~mm}]} \end{gathered}$ |  | $\begin{gathered} \mathrm{B} \\ {[\mathrm{~mm}]} \end{gathered}$ | $\stackrel{\mathrm{C}}{[\mathrm{~mm}]}$ |  |  |  |  |  |
|  |  | < 0.75 |  |  |  | 0.75-1.5 |  | 1.5-2.5 | 2.5-3.2 |
| F 500 | IW |  | 3.2 | 5.8 | 500 | 400 | 315 | 500 | 1600 | 1400 | 1200 | 1000 |
| F 500 | SW | 4.7 | 7.7 | 500 | 400 | 315 | 800 | 2200 | 2000 | 1800 | 1600 |
| F 630 | IW | 3.2 | 6.2 | 500 | 400 | 315 | 500 | 1600 | 1400 | 1200 | 1000 |
| F 630 | SW | 4.7 | 8.2 | 500 | 400 | 315 | 800 | 2200 | 2000 | 1800 | 1600 |
| F 800 | IW | 4.5 | 8.8 | 630 | 500 | 400 | 650 | 2200 | 2000 | 2000 | 1800 |
| F 800 | SW | 5.4 | 9.8 | 630 | 500 | 400 | 800 | 2200 | 2200 | 1800 | 1600 |
| F 1000 | IW | 4.5 | 9.5 | 630 | 500 | 400 | 650 | 2200 | 2000 | 1800 | 1600 |
| F1000 | SW | 5.4 | 10.6 | 630 | 500 | 400 | 800 | 2200 | 2200 | 2000 | 1800 |
| F 1250 | IW | 6.0 | 12.5 | 800 | 630 | 400 | 800 | 2200 | 2200 | 2200 | 2200 |
| F 1250 | SW | 7.1 | 13.7 | 800 | 630 | 400 | 1000 | 2200 | 2200 | 2200 | 2200 |
| F 1400 | IW | 6.0 | 13.1 | 800 | 630 | 400 | 800 | 2200 | 2200 | 2200 | 2200 |
| F 1400 | SW | 7.1 | 14.3 | 800 | 630 | 400 | 1000 | 2200 | 2200 | 2200 | 2200 |
| F 1600 | IW | 6.0 | 13.8 | 800 | 630 | 400 | 800 | 2200 | 2200 | 2200 | 2200 |
| F1600 | SW | 7.1 | 15.1 | 800 | 630 | 400 | 1000 | 2200 | 2200 | 2200 | 2200 |
| F 2000 | SW | 7.1 | 16.3 | 800 | 630 | 400 | 1000 | 2200 | 2200 | 2200 | 2200 |

* Diameter for belt-loads from $60 \%$ up to $100 \%$. For lower loads a smaller diameter can also be suitable.
** The load support of a belt is a factor of the belt width, belt strength and bulk material density. The table indicates the limits for correct load support, based on three idlers of the same length set at $30^{\circ}$

1TO DETERMINE THE TOTAL BELT THIGKNESS Add the sum of the covers to the carcass thickness. to the carcass weight.


## A WIDE RANGE OF COVER QUALITIES

ALL DUNLOP COVER QUALITIES ARE ANTI-STATIC ACCORDING TO EN 20284

| Dunlop Cover Quality |  | Permissible temp. ${ }^{\circ} \mathrm{C}$ * |  |  |  |  |  | Technical Features Application Area |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { DIN } \\ \text { quality } \end{gathered}$ | EN/ISO quality | Min. | Cont. |  | Base polymer |  |
| Abrasion resistant | 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 $400^{\circ} \mathrm{C}$ for short time intervals. |
| Oil resistant | ROS | G |  | -20 | 80 | 120 | NBR | Oil and fat resistant for products containing mineral oils. |
| Fire resistant | BV | K/S** | 2A/2B | -20 | 80 | 90 | SBR | Highly fire resistant according to EN 12882 and EN ISO 340. |

* For elevator belts other values apply. For low ambient temperatures please ask for information regarding our Coldstar range.
** K - fire retardant with covers.
$S$ - fire retardant with and without covers.

Other cover grade qualities for special applications are available upon request.

All information and recommendations in this bulletin have been supplied to the best of our knowledge, as accurately as possible and updated to reflect the most recent technological developments. We cannot accept any responsibility for recommendations based solely on this document.

