

FIRE RESISTANT CONVEYOR AND ELEVATOR BELTS

suitable for the European norm EN 12882





This part describes DEPREUX's heavy duty safety belting where there is a requirement for Anti Static and Flame Resistance in compliance with European norm EN12882.

Product range: 250N/mm to 5400N/mm and to a maximum width of 1800mm.

A standard conveyor belt is highly flammable, because it is mainly composed of petrochemical components. Therefore it is highly combustible and difficult to extinguish.

In a safety belt, components to promote the flow of static electric charges are added to the chemical formula of the elastomers in the carcass and in the cover ; and flame-retardant and special agent are added to contain the fire and the heating build up.

Belt construction

Conveyor and elevator belts are composed of:

- **fabric or steel carcass.**
- **two rubber covers** : a top cover ensuring contact with the transported material and the bottom cover ensuring contact with the conveyors drums.



MULTIPLY

DELTAFLAM



POLYESTER STRAIGHT-WARP

DX FLEX



ARAMID STRAIGHT-WARP

DX FLEXAMID



SOLID WOVEN

DYNAFLAM



STEEL CORD

DX-ST



STEEL STRAIGHT-WARP

DX-MAT

European standard EN 12882 This standard defines the different safety requirements for the different categories of risks identified by the user for the different applications.

The user has to choose the belts categories the most suitable one depending on the application. There are four main risks identify by the european norm EN12882 :

- electrostatic risk according to the norm ISO 284,
- located small flames risk according to the norm ISO 340,
- fire risk EN 12881-1,
- drum friction risk EN 1554.

The frequency of occurrence and the level of hazard is a function of the application and of the working environment.

Consequently, the safety level required varies with each application and the level of risk.

Hazards mentioned above are not the only characteristic to consider. Other aspects to be considered are health, safety and environmental impacts.

DIFFERENT TYPE OF COVERS

Product	Specification	Abrasive index (mm3)	Break resistance (Mpa)	Elongation at break (%)	Composition	Temperature range		Correspondances and other denominations	
						DELTAFLAM / DX FLEX / DX-ST /DX-MAT	DYNAFLAM		
2A / 2B	STD	< 200	> 14	> 350	SBR			DIN22102 - DELTAFLAM K1 & S1	K1 for 2A, S1 for 2B
	Premium	< 120	> 18	> 400	SBR			DIN 22102 - DELTAFLAM K2 & S2	K2 for 2A, S2 for 2B
	MOR	< 170	> 13	> 450	SBR/NBR			DIN 22102 - DELTAFLAM K3 & S3	K3 for 2A, S3 for 2B
2A	SOR	< 170	> 13	> 350	NBR	-25°C to +80°C	0°C to +50°C	-	-
3A / 3B	STD	< 200	> 14	> 350	SBR			-	-
	Premium	< 120	> 20	> 400	SBR			-	-
4A/4B	STD	< 200	> 14	> 350	SBR			-	-
5A	MOR	< 160	> 15	> 350	CR	-25°C to +110°C		DIN 22109-4 - DELTAFLAM VT	-