Conveyor Belt Group

Flame Resistant Conveyor Belts to EN 14973 and EN 12882

Continental CONTITECH

For use underground with electrical and fire safety requirements to EN 14973

UTS conveyor belts

UTS

Requirements to EN 14973

- Electrical conductivity
- Drum friction test
- Resistance to ignition
- Determination of fire propagation

Standard range

	Width	Strength	Cover stock
from	650	EP 400/**3**	4+2
to	1800	EP 1250/**3**	8+5
from	650	EP 500/**4**	4+2
to	1800	EP 2000/**4**	8+5
from	650	EP 630/**5**	5+2
to	1800	EP 2000/**5**	18+6
from	650	ST 630	5+4
to	2600	ST 1250	12+8
from	800	ST 1400	6+4
to	2600	ST 3500	12+8

For this design of belt, compliance with the safety requirements to EN 14973, classes A and B2 has been proven by an external test institute. If an order is placed, this certificate can be made available.

Special versions:
Other fire classes, other versions of belt and special physical properties (e.g. resistance to abrasion) are possible on request.

Splicing with corresponding high-quality materials:
To splice conveyor belts with fireproof cover stock, we recommend that only ContiTech splicing materials be used. This then ensures optimum splice strength and service life.

Example applications for UTS conveyor belts used underground:

- Tunnels
- Mining

For general use with electrical and fire safety requirements to EN 12882

FRS conveyor belts

FRS

Requirements to EN 12882

- Electrical conductivity
- Drum friction test
- Resistance to ignition
- Determination of fire propagation

Current test standards for fire and safety requirements on fabric and steel cord conveyor belts

Category	Application	Assessment of flame resistance	Surface resistance to EN ISO 284	Drum friction EN 1554					
				Processes	Flame	Glowing	Load	Time	Maximum drum temperature
1	General use, risk only through electrostatic discharge.		≤ 300 MΩ	Not required					
2A	As for category 1, additional hazard from small open flames on the cover stock (additional causes of fire).		≤ 300 MΩ	Not required					
2B	As for category 2A, the additional risk is smaller, open flame on the carcass.		≤ 300 MΩ	Not required					
3A	As for category 2A, additional hazard of local heating due to friction.		≤ 300 MΩ	A1	No	Permitted	Constant 343 N	1 h	No
3B	As for category 3A, there is an additional risk due to small, open flame on the carcass.		≤ 300 MΩ	A1	No	Permitted	Constant 343 N	1 h	No
4A	As for category 1, additional risk of fire spreading caused by additional fire sources. Secondary safety device?		≤ 300 MΩ	Not required					
4B	As for category 4A, additional hazard of local heating due to friction. Secondary safety device?		≤ 300 MΩ	A1	No	Permitted	Constant 343 N	1 h	No
5A	As for category 4B, there is however an increased risk of local heating due to friction. Secondary safety device?		≤ 300 MΩ	A2	No	Permitted	Max. 1,715 N	2.5 h	No
5B	As for category 5A, with an additional risk from glowing. Secondary safety device?		≤ 300 MΩ	A2	No	No	Constant 343 N	2.5 h	No
5C	As for category 5B with an additional risk when operating in a potentially combustible atmosphere. Secondary safety device?		≤ 300 MΩ	A2	No	No	Constant 343 N	2.5 h	400° C

Ignition to EN ISO 340			Process to determine the fire propagation to DIN EN 12881-1, process A
Summary of six test specimens	**Maximum for each test specimen**	**Cover stock**	
Not required			Not required
45 s	15 s	With	Not required
45 s	15 s	With/ without	Not required
45 s	15 s	With	Not required
45 s	15 s	With/ without	Not required
Not required by the standard. We do however strongly recommend this, due to the wear of the cover stock in operation, as there is no guarantee that the conveyor belt will meet the fire safety requirements over the entire period of operation.			Undamaged piece over entire width of a 100 mm length
			Undamaged piece over entire width of a 100 mm length
			Undamaged piece over entire width of a 100 mm length
			Undamaged piece over entire width of a 100 mm length
			Undamaged piece over entire width of a 100 mm length

Standard range:
For this design of belt, compliance with the safety requirements to EN 12882, category 1-5A has been proven by an external test institute. If an order is placed, this certificate can be made available.

- Conveyor belts with **EP plies** for belt widths from 650 to 1,800 mm and in the following belt strengths:
  - EP 400/3, 4+2 to EP 1250/3, 8+5
  - EP 500/4, 4+2 to EP 2000/4, 8+5
  - EP 630/5, 5+2 to EP 2000/5, 18+6

and

- Conveyor belts with **steel cord tensile members** for belt widths from 650 to 2,600 mm and in the following belt strengths:
  - ST 630, 5+4 to ST 1250, 12+8
  - ST 1400, 6+4 to ST 3500, 12+8

belong to our standard range.

Special versions:
Other fire categories (5B and 5C), other versions of belt and special physical properties (e.g. resistance to abrasion) are possible on request.

Splicing with corresponding high-quality materials:
To splice conveyor belts with fireproof cover stock, we recommend that only ContiTech splicing materials be used. This then ensures optimum splice strength and service life.

Example applications for FRS conveyor belts:
- Coal-fired power stations
- Biomass power stations
- Fertilizer industry
- Wood processing industry
- Port operations
- Open-cast mining
- Waste incineration plant




ContiTech has developed fabric and steel cord conveyor belts which meet the much higher requirements of EN 12882 and EN 14973. Due to our many years of experience in the field of fire safety, we are able to offer our customers conveyor belts certified by an external test institute.

UTS conveyor belts to EN 14973

FRS conveyor belts to EN 12882

ContiTech Conveyor Belt Group

We are manufacturers of fabric and steel cord conveyor belts, special products and service material – for mining, mechanical and plant engineering, and many other branches of industry. At our plants – the most modern production facilities anywhere in the world – we turn out a complete range for all conveyor jobs. With our comprehensive service, we can provide support for the trade, for OEMs and operators.

Continental CONTITECH

www.contitech.de
www.contitech-online.com

Conveyor Belt Group

Market segment
Industry
Mining Europe
Mining World

Contact
ContiTech
Transportbandsysteme GmbH
D-37154 Northeim, Germany

Phone +49 5551 702-1647
transportbandsysteme@cbg.contitech.de

Your local contact
www.contitech.de/contactlocator

The ContiTech division of the Continental Corporation is a development partner and original equipment supplier to numerous industries for high-quality functional parts, com-ponents and systems. With its know-how in rubber and plastics technology, ContiTech contributes signifi-cantly to industrial progress and mobility that is safe, comfortable and eco-friendly.

WT 8137 E 08.11 (Be) Printed with ContiTech offset printing blankets on bleached paper free of chlorine

Continental CONTITECH