

TRANSTHERM™

COVER RANGE FOR HIGH TEMPERATURES

PRODUCT SHEET

HIGHLIGHTS

- Excellent rubber compounds for high heat applications
- Transport of material up to 400 °C
- High elongation at break
- Good abrasion resistance
- Ensures longer belt life
- Applicable on steel cord and textile belts

Transtherm™ covers are the right choice whenever hot materials need to be conveyed.

COMPOSITION OF TRANSTHERM

Transtherm conveyor belts are composed of special compounds using special rubber polymers like SBR, EPM or EPDM. Each cover type enhances the heat, ozone and aging resistance characteristics of the covers to an excellent level.

PRODUCT FEATURES of standard types of Transtherm covers

CW: The cover grade especially designed for the transportation of solely coke wharf, providing medium heat resistance combined with flame retardant properties according to DIN EN ISO 340.

TEA: The cover grade with excellent mechanical properties, providing heat resistance for medium temperatures. In specific markets TEA is also known as HR.

TEB: The cover grade for high heat resistance and special applications such as transporting chemicals. In certain markets the cover grade SHR is available for this temperature range, if no specific resistance to chemicals is required.

TEC: The cover grade for extremely high temperatures up to 400 °C short term peaks.

APPLICATIONS



Cement industry



Steel industry



Grain and sugar industries



Overland conveyors
Paper and wood industries
Port operations
Power and heating plants
Recycling industry

AVAILABLE FOR THE FOLLOWING BELT TYPES

- Multitrans
- Sempercord
- Metalcord
- Metaltrans
- Autostable
- Transpipe
- Ripstop
- Translev
- Biathlon
- Transglis



RECOMMENDATIONS: surface temperature vs. product temperature

There is a major difference between the temperature of the product conveyed and the temperature transmitted to the cover by the materials conveyed. This difference between the surface temperature of the belt and the temperature of the product conveyed may vary according to various parameters:

- Particle size of material
- Belt speed
- Length of conveyor (cooling on return strand)
- Ambient temperature
- Ventilation or possible watering



NEED HELP?

Based on your project requirements regarding heat resistance properties, Sempertrans' Sales and Application Engineering experts are at your disposal to recommend the cover grade type best suited for your application needs.

These expert technicians and professionals will also cater to your needs at all stages of your project. Their mission is to provide the right technical solution for your specific conveying belting applications – from consulting services such as the tailored design and configuration of your conveyor belts, to local engineering support functions in case of technical conveyor issues.



TECHNICAL INFORMATION

Mechanical characteristics of Transtherm™ covers:

Cover grade		Tensile strength	Elongation at break	Abrasion resistance	Temperature resistance
CW (flame retardant)	SBR compound	+++	+++	++	+
TEA	SBR compound	+++	+++	+++	++
TEB	BUTYL/EPDM compound	++	+++	+	+++
TEC	EPM compound	++	+++	+++	++++

Temperature ranges:

	CW	TEA	TEB	TEC
1. Maximum continuous allowable surface temperature		120 °C	150 °C	200 °C
2. Average material temperature fine goods	120 °C	130 °C	160 °C	210 °C
3. Maximum allowable local peak temperature fine goods		150 °C	180 °C	230 °C
4. Average material temperature large lumps	130 °C	140 °C	200 °C	250 °C
5. Maximum allowable local peak temperature lumpy goods		160 °C	250 °C	400 °C

Large lumps: materials with large particle size and high abrasiveness such as pitch, iron and steel industry, coke or pellets.
Fine goods: fine materials such as cement, calcium calcinates (CaO), clinker and foundry sand.

	Cover grade	Main relevant standard (other standards may apply)	Characteristics	Main applications	Temperature min	Maximum permanent surface Temperature	Temperature short time peak
Transtherm (heat resistant)	CW	ISO 284 / ISO 340	Flame retardant, heat resistant, good abrasion resistance	Coke transport only	-30°C		120°C
	TEA	Exceeding Standards	Heat resistant, good abrasion resistance	Transport of hot and abrasive material	-35°C	120°C	160°C
	TEB	Exceeding Standards	Heat resistant	Transport of hot material	-35°C	150°C	250°C
	TEC	Exceeding Standards	Heat resistant, good abrasion resistance	Transport of hot and abrasive material	-40°C	200°C	400°C

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