KOTERM

IK isokon

Member of Constantia Industries AG

LINING SYSTEM

Problem

- When using dyke materials in silos and bunkers there are often delays at work due to adhesion and sticking.
- This is the consequence of the fact that there is an inappropriate friction ratio between the wall and banked material, which hinders proportionate pouring out of banked material.
- This causes blockage and congestion.

Solution

- In most cases a proper solution is the use of lining made from thermoplastic materials.
- A low friction coefficient and excellent wear resistance of linings prevents sticking and they essentially influence flow characteristics of dyke materials.

Scope of use and examples

Mining

- Off Road Truck Beds
- Chutes
- Hoppers
- Scrapers
- Shovel liners
- Stacker/Reclaimer Bucket Liners
- Dragline Bucket Liners
- Front-End Loader Buckets

Transportation

- On-Road Truck Beds
- Railcars/Wagons
- Ship Holds

Storage and Handling

- Silos, Bins, Bunkers
- Reclaim Hoppers
- Truck Dump Hoppers
- Rail Dump Hoppers
- Receiving Hoppers
- Dozer Blade Liners
- Slider Beds
- Skirting
- Belt Scrapers

Processing

- Day Bins
- Surge Bins
- Batch Hoppers
- Storage Silos and Bins
- Hoppers
- Chutes
- Feeders
- Screw Conveyors

Bulk materials handled

- Coal
- Iron ore
- Clay
- Copper concentrate
- Limestone
- Soda ash
- Chemical powders
- Nickel ore
- Peat
- Synthetic gypsum
- Kaolin clay
- Silica sand
- Wood chips
- Soap detergent
- Potash
- Zink concentrate
- Phosphate
- Salt
- Dust
- Talcum
- Bauxite
- Asphalt

BASIC CHARACTERISTICS OF KOTERM PE-UHMW MATERIALS FOR LINING APPLICATIONS

KOTERM HX-SLIDE (blue)

- PE-UHMW with excellent wear and abrasion resistance compared to KOTERM 1000
- Improved sliding properties
- Withstands loads as hot as 180 °C (including hot asphalt)

KOTERM 1000 (natural, green, black)

- PE-UHMW with balanced properties
- Very good wear and abrasion resistance
- Good sliding properties
- Excellent impact properties
- FDA approved

KOTERM X-SLIDE (black)

- PE-UHMW with balanced properties
- Very good wear and abrasion resistance
- Excellent sliding properties

KOTERM 1000 FR (black, silver)

- PE-UHMW with balanced properties
- Very good wear and abrasion resistance
- PE-UHMW with self-extinguishable properties
- Meets requirements of UL 94 class V0

KOTERM 1000 FREX (black)

- PE-UHMW with balanced properties
- Very good wear and abrasion resistance
- PE-UHMW with self-extinguishable properties (UL 94 class V0)
- Antistatic

KOTERM 1000 AST (black)

- PE-UHMW with balanced properties
- Very good wear and abrasion resistance
- PE-UHMW with lower surface resistivity

KOTERM 1000 R (black –reprocessed)

- Overall lower properties and lower cost compared to the virgin KOTERM 1000
- A favorable price-performance ration for less demanding applications

KOTERM 500 (natural, green, black)

- For less demanding applications with respect to wear and impact resistance
- KOTERM 500 may present an economical alternative to KOTERM 1000

	KOTERM HX-SLIDE	KOTERM 1000	KOTERM X-SLIDE	KOTERM 1000 FR	KOTERM 1000 FREX	KOTERM 1000 AST	KOTERM 1000 R	KOTERM 500
Wear resistance	+++	++	++	++	++	++	+	+
Sliding properties	+++	++	+++	++	++	++	+	+
Flammability	-	-	-	+++	+++	-	-	-
UV resistance	+++	optional	++	optional	optional	++	optional	optional
Service temp. °C continious	-250..110	-250..80	-250..80	-250..80	-250..80	-250..80	-250..80	-250..80
Service temp. °C shortly	-250..180	-250..130	-250..130	-250..130	-250..130	-250..130	-250..130	-250..130

+++ Very good
++ Good

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