

OIL resistant covers provide good tear, cut and abrasion resistance and also are resistant to swelling when caused by absorption of oils and grease.

The oil resistant cover is available in two grades, MOR and HOR. They are used when the material transported contains oils such as fuel oil in coal or fertilizers, lubrication oils in metal recycling, foundries, steel processes, waste industries or in the case of special processes such as glass or chemical.

The presence of oil in the transported material can have detrimental effects on standard rubber covers:

- it will degrade the physical properties such as abrasion resistance, tensile strength and tear strength
- the belt covers will absorb the oil causing them to swell and loose adhesion with the carcass



The extent of degradation is dependant on the type of oil and the temperature.

There is an exponential increase in rate of degradation and amount of swelling with respect to the increase in temperature. Therefore, it is important to consider the operating temperature and types of oily substances when choosing the most suitable OR cover.

Oil resistance of a belt cover is evaluated by measuring the swelling of the rubber after immersion in oil. For purposes of comparison specifications of oils used for the evaluation are standardised.

The two standard oils:

- IRM902, a medium aggressiveness oil
- IRM903, is an aggressive oil containing naphthenic, aromatic and aliphatic constituents

All conveyor belts are antistatic according to DIN EN ISO 284:2004. Oil resistance depends on the construction of the belt (ratio between cover and skim, cut or moulded edges, with or without a bottom cover). These belts are available in different constructions ranging from smooth belts, supergrip, finegrip, noppen to chevron belts.

Belt Type	Cover Type	Rubber	Temperature °C	Hardness SH°A	Abrasion mm ³	Application
EP250/2 EP400/3 EP500/3 EP630/4 EP800/4	MOR	NBR/ SBR/ BR	-20~100	61	130	Moderately oil and grease resistant cover. Suitable for products with medium quantity of animal and vegetable fats and oils (grain, oilseed rape and tailings, compost, fodder mixtures, sawdust and wooden chips with a low pitch/terpene content)
	HOR	NBR	-20~80	68	120	Highly oil resistant type for products containing mineral oils, diesel fuel, terpene, etc. - even at increased temperatures. This type is resistant to lillamins that are used in fertilizer industry.