### Stationary track lubrication



Central lubrication

Systems for vehicles



## Stationary track lubrication MKO Application

The MKO rail lubricator is used for lubrication of rail curves where the rails get damaged during operation, but also for lubrication of train and tram flanges. The lubricant is automatically applied by a steel lube strip to the flanges of the passing trains, thus reducing grinding of the rails' sides, the train's rolling resistance and the noise. It is a universal product for several types of channel and grooved rails. Its modern ecological system excels in fully automatic operation adjustable in line with the route's needs (frequency of car units, curve radiuses, weather conditions, etc.). Besides supplementing the lubricant, the system is maintenance-free and is very reliable.



# A CTriboTec

### **Benefits:**

- significant reduction of noise during the run of a vehicle especially through switches and curves
- reduced risk of a vehicle's derailing
- reduction of costs connected with replacement of wheels due to the wear of flanges
- · reduction of wear and deformation of rails
- saving of energy by reducing friction between the flange and the rail
- shortening of frequency and length of the vehicles' idle time







280 bar

	Working pressure		250 bar
	Nominal delivered quantity		3.8 cm³/min./outlet
	Regulation range of the nominal charge		0 to 100 %
	Lubricant container capacity		8 dm³
Service of the last	Adjustment of lubrication time		1 to 59 seconds; increment 1 second
			1 to 99 minutes; increment 1 minute
	Lubricant strip length		ca. 570 mm
	Effectiveness of lubrication		750 m
	Number of outlets		2
	Electric motor		24 V DC, 24 W, 1 A, IP 65
	Supply voltage of the lubricator		24 V DC - 3A
-			After consultation also:
			115 V AC - 1 A, 60 Hz
			230 V AC - 500 mA , 50 Hz
	Supply voltage of external signalling		max. 30 V - 1 A
	Lubricant	grease	NLGI000
	Grease consumption		ca. 8 kg / 2÷3 months
- •			depending on the route's traffic
	Lubrication mode is controlled by		Actuating sensor
			(starting the equipment)
			The delivered amount per a time
			unit (from 0 to 3.8 cm³/min)
			Operating time of the lubricator
	Rails		Shape of rails suitable
			for installation of MKO:
			S 49, R65, NT1, NT3, R60
			and other rails of similar
			dimensions, then NT1, NT2, NP3,
			NP3a, NP4 facing rails
	Working temperature		-35 to 80°C
	Working temperature		







TRIBOTEC is a Czech manufacturing company concentrating on deliveries of central lubrication systems, lubrication technology, hydraulic systems and systems for rail transport.

The selling and manufacturing activities are supported by consultations and project elaborations of individual systems based on the customer's demands, installations and assemblies on the customer's premises including commissioning and optimizing the operation with subsequent servicing, preventive maintenance and consultancy. All our activities are realized in agreement with a quality management system as per ISO 9001:2008. We hold an authorizing Management System Certificate issued by DET NORSKE VERITAS.

We also hold a Qualification Certificate of a ČD Supplier (Osvědčení o způsobilosti dodavatele ČD) and a Certificate of Professional-Technical Qualification (Potvrdenie o odborno - technickej způsobilosti) issued by Železniční společnost Slovensko a.s.

TRIBOTEC produces and delivers systems for lubricating wheel flanges (OK-02, OK-01) and sanding equipment for railway vehicles (KOVA-03D, PZKV-01), systems for lubricating rail curves (MKO) and systems of central lubrication for trolleybuses and buses (CMS).

In hydraulic systems, the company concentrates on building hydraulic aggregates in the customer's design and a complex solution incorporating the project, production and delivery of the hydraulic system.

In central lubrication systems, the company produces and delivers central systems of total loss lubrication, multitube, progressive, double-tube and single-tube for lube oils, liquid plastic lubricants and plastic lubricants up to the consistency NLGI-3, systems of circulation lubrication, spraying lubrication systems with application of plastic lubricants and oils, oil-air lubricating systems, mobile and portable lubricating instruments, lubricating stations for oil and plastic lubricants and combined systems according to the customer's specification.



#### www.tribotec.cz

**TriboTec, spol. s r.o.** Košuličova 4, 619 00 Brno, CZ

phone: +420 543 425 611, +420 543 425 613

fax: +420 543 212 328 e-mail: tc@tribotec.cz