

SPECIAL LUBRICANTS & MAINTANENCE PRODUCTS

Cement industry





Cement production – extreme requirements for special lubricants

Limestone – the base for manufacturing cement. For this hard work from the rock mining to processed cement, machines and plant equipment are exposed to extreme operation conditions. An efficient and effective maintenance is essential for a high machine availability and thus maximum profitability.

High temperatures, strong vibrations and shock loads challenge lubricants and require much more than standard lubricants.

For more than 50 years, setral[®] produces special lubricants based on selected base oils and thickener components with state-of-the-art additives. Decades of experience in development, manufacturing and distribution result in a complete portfolio of special lubricants. A precise choice of lubricant for the individual machine component is essential to ensure economical and efficient maintenance.

setral® optimizes your lubricant use and makes it more sustainable with special lubricants that are available worldwide in high and consistent quality.

The company setral® is certified climate positive.





Crushing

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MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
CRUSHER	Main bearing	MI-setral-LI/C1-1000 MG	-20 to +150
		MI-setral-CA/C2-400	-25 to +150 (short +180)
	Gearbox	MI-setral-GEAR/EPL series	-10 to +120*
		SYN-setral-GEAR/PGW series	-35 to +150*
SEPARATOR	Upper and lower bearing	MI-setral-5 B	-25 to +150 (short +180) -10 to +120*
		MI-setral-LI/PD 2-400	
	MI-setral-LI/C1-1000 MG -20 to	-20 to +150	
	Gearbox	MI-setral-GEAR/EPL series	-10 to +120*
		SYN-setral-GEAR/PGW series	-35 to +150*

MACHINE LUBRICATION POINT PRODU SLAT CONVEYER BELT CONVEYER Cardan MI-setral MI-setral Bearing MI-setral MI-setral-SYN-setra Drive gearbox SCREW CONVEYER SILOS SYN-setra Fan bearing

* Varies depending on ISO-VG or NLGI

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CT	TEMPERATURE RANGE [°C]
I-LI/PD 2	-30 to +140
I-LI/C 2	-20 to +150 (short +180)
I-CA/C2-180 M	-20 to +160
I-CA/C2-400	-25 to +150 (short +180)
ral-GEAR/PGW series	-35 to +150*
ral-PU 2	-30 to +140

* Varies depending on ISO-VG or NLGI







Vertical raw mill

MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
VERTICAL RAW MILL		MI-setral-GEAR/EPL series	-10 to +120*
		SYN-setral-GEAR/PGW series	-35 to +150*
	Main bearing	MI-setral-LI/C1000 MG series	-20 to +150*
		MI-setral-LI/PD series	-35 to +140*
		MI-setral-CA/C2-180 M	-20 to +160
	Elastomer roller seals	SYN-setral-PG 814	-40 to +150 (short +160)
		MI-setral-LI/C1-1000 MG	-20 to +150

Preheating tower

MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
PREHEATING TOWER	Drive gearbox	SYN-setral-GEAR/PGW series	-35 to +150*
	Axle bearing	MI-setral-LI/C 2	-20 to +150 (short +180)
	Fan bearing	SYN-setral-PU 2	-30 to +140

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Rotary kiln

MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
ROTARY KILN	Running ring	SYN-setral-CG FLUID	RANGE [°C] -20 to +1000 -20 to +150 -10 to +120* -35 to +150* -20 to +150
	Thrust roller bearing / Support roller bearing/ Pinion bearing	MI-setral-LI/C1- 1000 MG (greased)	-20 to +150
		MI-setral-GEAR/EPL series (oil lubricated)	-10 to +120*
		SYN-setral-GEAR/PGW series (oil lubricated)	
	Open gears	MI-setral-OG/0-800	-20 to +150
		MI-setral-AL/CO-500 G	-30 to +120 (short +150)

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Clinker cooler

MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
CLINKER COOLER	Grates bearings	SYN-setral-PU 460	-30 to +180 (short +200)
		MI-setral-PU 460	-20 to +180
	Fan bearing	SYN-setral-PU 2	-40 to +180
	Gears	MI-setral-GEAR/EPL series	-10 to +120*



setral[®] Technical Training Hydraulic vs. non-hydraulic cement

Talking about cement usually hydraulic cement is meant. Hydraulic cement hardens when water is added by hydration of the clinker minerals. This reaction emits carbon dioxide. Hydraulic cement can be used under water.

Much less common is non-hydraulic cement that hardens by carbonation in contact with carbon dioxide. Such slaked lime - chemically calcium hydroxide - can only be exposed to air.

* Varies depending on ISO-VG or NLGI

Clinker cooler





Cement mill and roller press

MACHINE	LUBRICATION POINT	PRODUCT	TEMPERATURE RANGE [°C]
ROLLER PRESS	Main bearing	MI-setral-LI/C1-1000 MG	-20 to +150
	Planetary gear	MI-setral-GEAR/EPL series	-10 to +120*
		SYN-setral-GEAR/PGW series	-35 to +150*
CEMENT MILL	Roller bearings	MI-setral-LI/C1-1000 MG -20	-20 to +150
	Pillow block		
	Reduction coupling		
	Rotary joints	MI-setral-CA/C2-180 M	-20 to +160
	Scrapper bearing / Bevel gearbox	MI-setral-GEAR/EPL series	-10 to +120*
		SYN-setral-GEAR/PGW series	-35 to +150*
	Coupling bearing	MI-setral-GEAR/EPL series	-10 to +120*

* Varies depending on ISO-VG or NLGI

setral® lubricants for maintenance and assembly

	LUBRICATING PURPOSE / COMPONENT	PRODUCT	TEMPERAT RANGE [°C
	Assembly paste / protection for fretting corrosion	MI-setral-HPP 1200 S	-30 to +120
	Screw compressors	COVA-setral-SMG series	-35 to +120° (short to +150)
	Piston compressors	COVA-setral-SE series	-30 to +200
	Bearing in pumps	MI-setral-LI/C 2	-20 to +150 (short to +180)
	Joints of loading arms	MI-setral-CA/C2-180 M	-20 to +160
	Penetrating oil / rust remover	GLIS-setral-SQ	-20 to +80
		GLIS-setral-SQ (Spray)	
	Cleaner	CLEAN-setral-AN/U	-40 to +40
		CLEAN-setral-AN/U (Spray)	
	Ropes	setral PLASTOLUB GK	-20 to +80
		setral PLASTOLUB GK (Spray)	
		SYN-setral-CA 2 B	
	Chains	SYN-setral-54 NF (Spray)	-20 to + 180



Successful in more than 90 countries with satisfied customers



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Competence in Lubricants Setral Chemie GmbH and Sétral S.à.r.l. are each certified according to DIN EN ISO 9001, DIN EN ISO 21469 and DIN EN ISO 14001.



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setral® offsets the greenhouse gases generated by its business activities with climate certificates in double the amount







