

FLT-ACADEMY

- international -



Welcome to the presentation

Lubricants for Cement Plants

Kaiserslautern

21.06.2007

Günter Huschitt



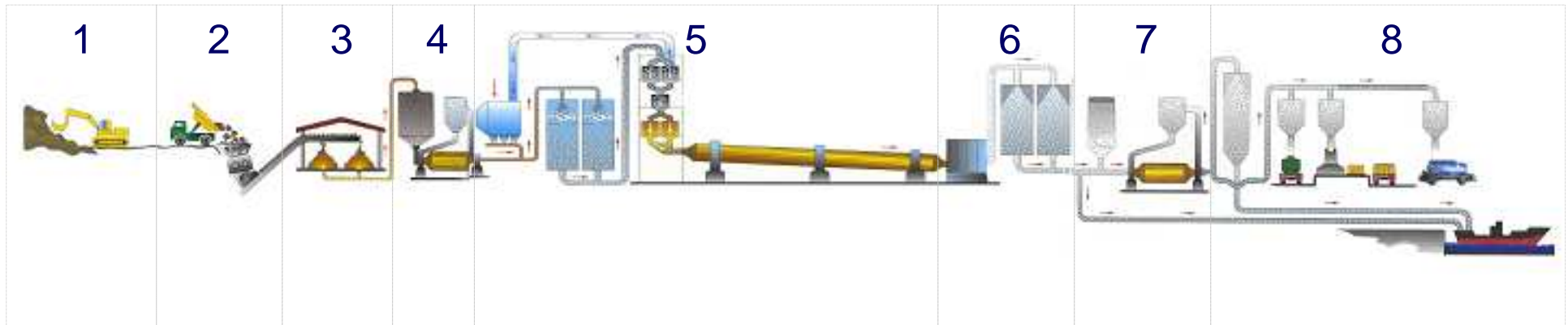


Lubricants for Cement Plants





The lubrication in a cement plant



1. Quarrying

2. Crusher

3. Raw Material Storage

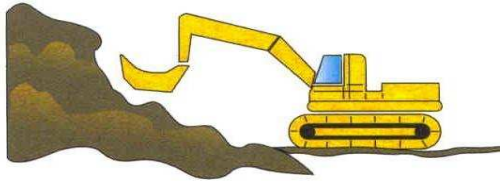
4. Raw Material Milling

5. Firing/Kiln

6. Clinker Cooling

7. Cement Milling

8. Packaging and Transport



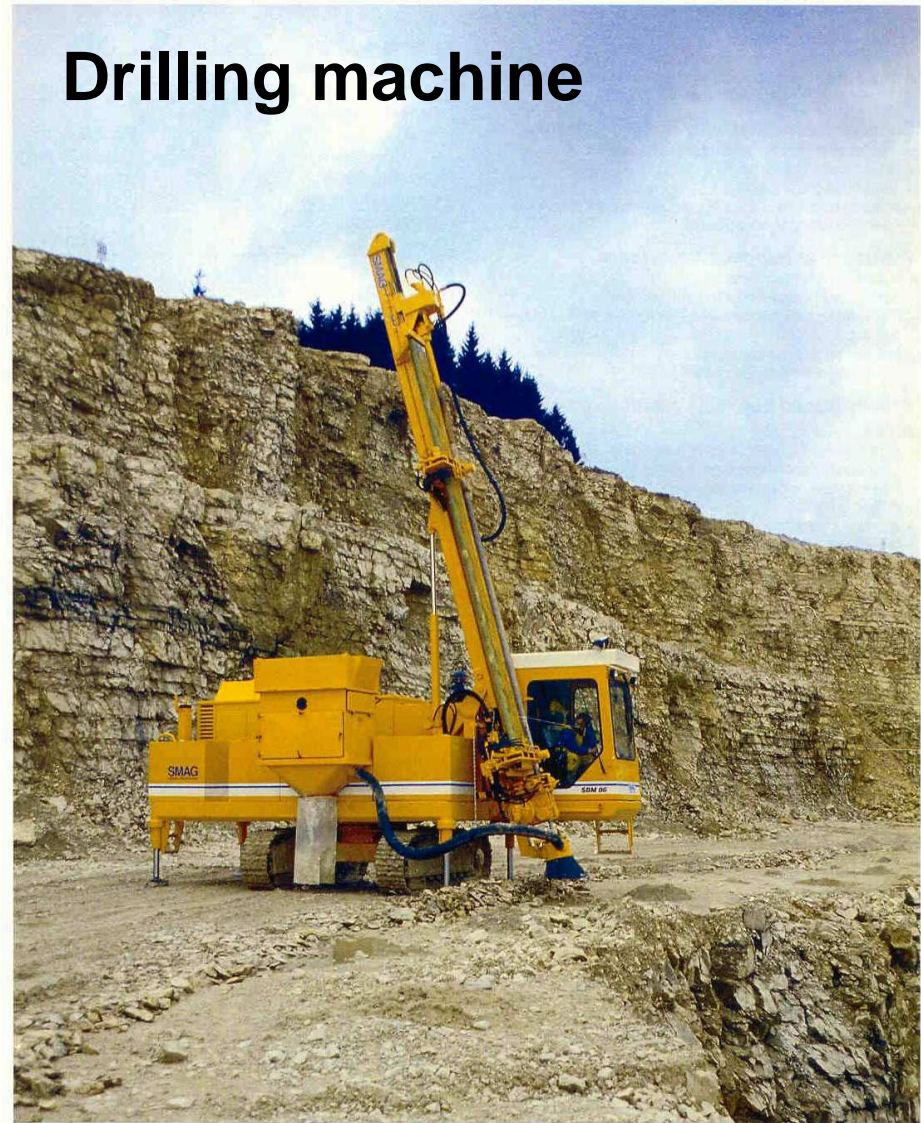
1. Quarrying

Machine	Lubricating area	Lubricant	Biodegradable lubricant
Excavator	Motor	TITAN CARGO Series	
Wheel loaders	Gear	TITAN SUPERGEAR Series	
Dump truck	Hydraulic	TITAN HYD MR	ECO HYD Series
	Central lubricating system	GEARMASTER ZSA	STABYL ECO 00
	Grease fitting	LAGERMEISTER EP 2	STABYL ECO EP 2
	Compressor	RENOLIN D UND SC Series	
Drilling machine	Slideway and Chain	STABYLAN 3001	
Hydraulic hammer	Socket tool	MEISELPASTE	





Drilling machine



Hydraulic
Feed gear
Gear coupling
Diesel engine
Slideway
Rolling chain

Renolin B 10
Titan Gear LS SAE 90
Titan Supergear MC 80W90
Titan Titan Cargo SL 5W30
STABYLAN 3001
STABYLAN 3001



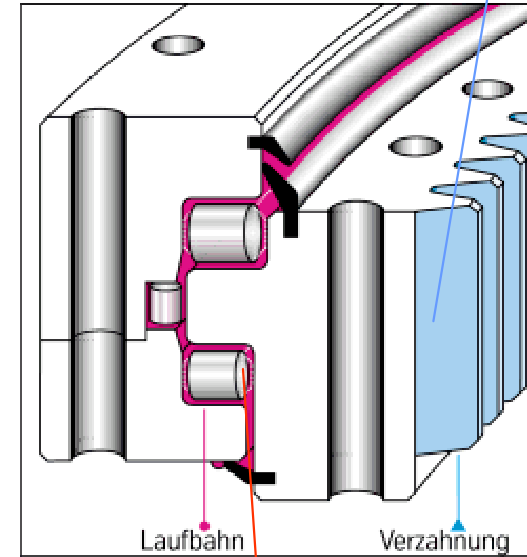


Excavator

Example: slewing ring with gearing



CEPLATTYN KG 10 HMF
CEPLATTYN 300



LAGERMEISTER EP 2
LAGERMEISTER XXL
(Hoesch- Rothe Erde Approval)

Central lubricating system
GEARMASTER ZSA





Chisel paste
Meisselpaste



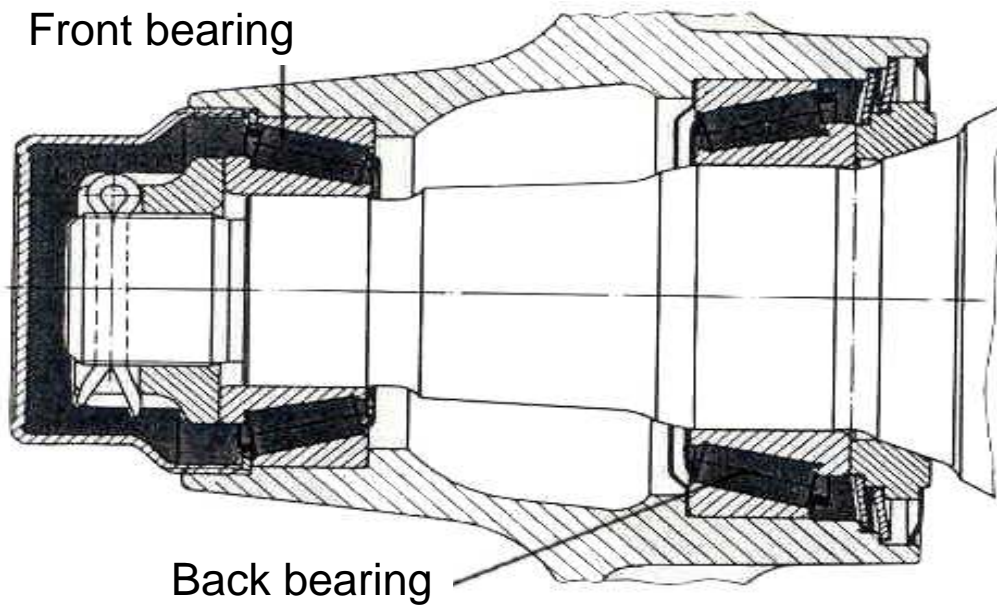


Wheel loader

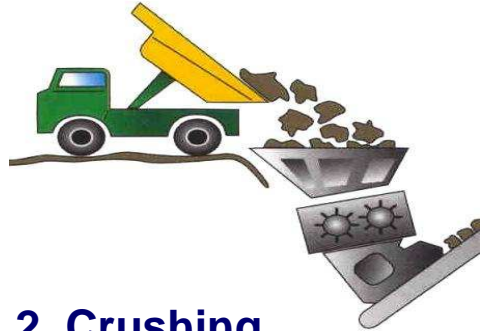




Wheel bearing



LAGERMEISTER LX EP 2
LAGERMEISTER XXL

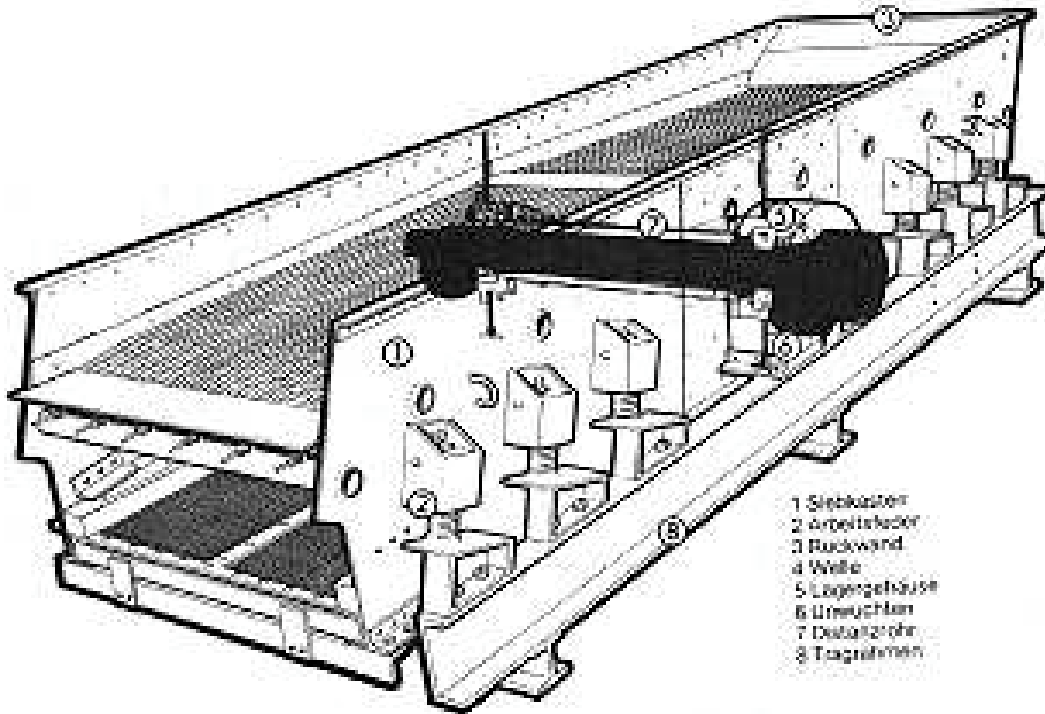


2. Crushing

Machine	Lubricating area	Lubricant	Biodegradable lubricant
Crusher	Motor bearing	STABYL L 120	
	Vertical bearing	LAGERMEISTER EP 2	STABYL ECO 2
	Gear	GEARMASTER CLP Series	GEARMASTER ECO Series
	Hydraulic	RENOLIN B Series	ECO HYD REIHE
	Automatic clutch	GEARMASTER SYN Series	
Vibrating screen	Bearing	STABYL L 120	
Belt	Motor bearing	STABYL L 120	
	Vertical bearing	LAGERMEISTER EP 2	STABYL ECO 2
	Gear	GEARMASTER CLP Series	GEARMASTER ECO Series
Pneumatic breaker	Socket tool	MEISSELPASTE	
	Machine oils	KOMPRANOL 1002	KOMPRANOL GRÜN



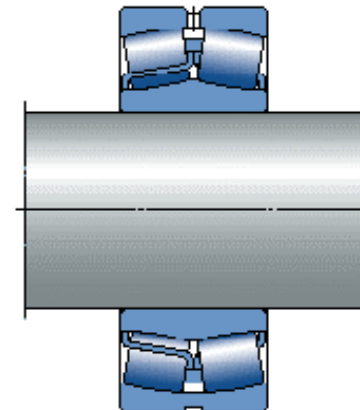
Vibrating screen



- 1 Siebkasten
- 2 Angetriebener
- 3 Rückwand
- 4 Welle
- 5 Lagergehäuse
- 6 Ureuechlen
- 7 Distanzrohr
- 8 Tragrollen

Self-aligning roller bearing

STABYL L 120



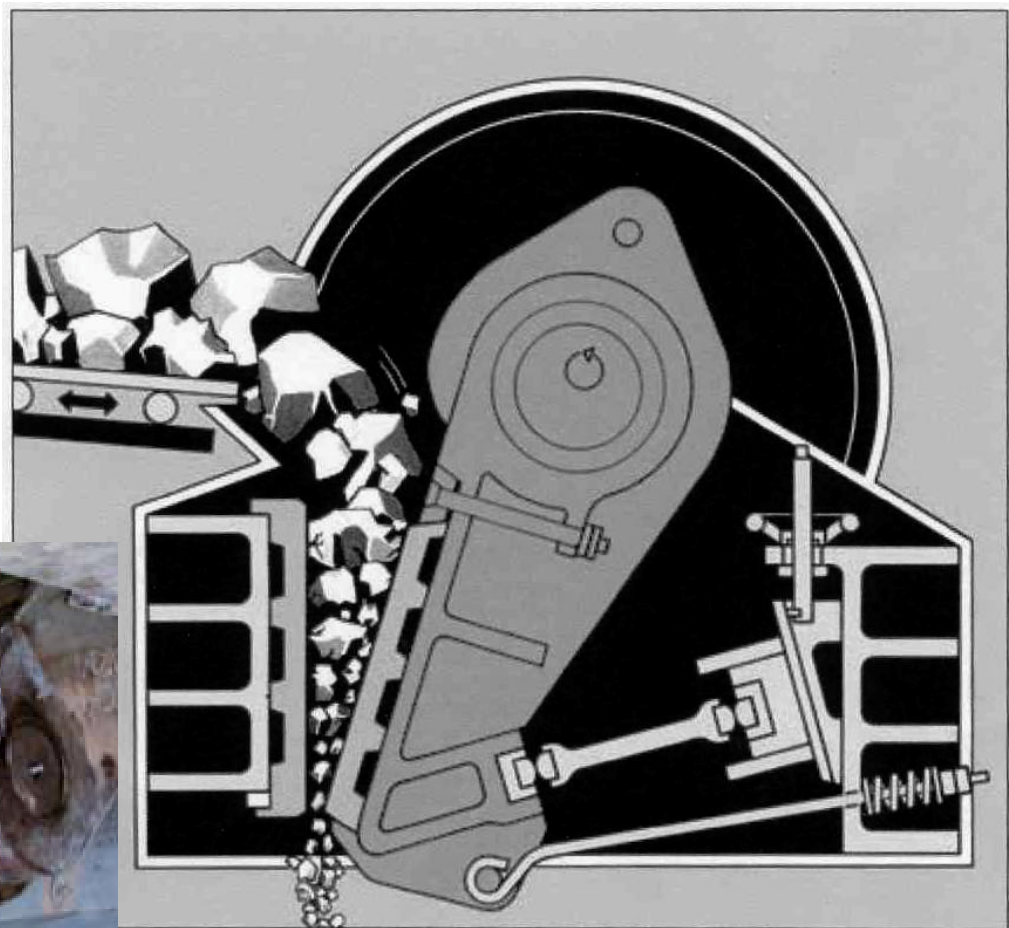


Jaw crusher



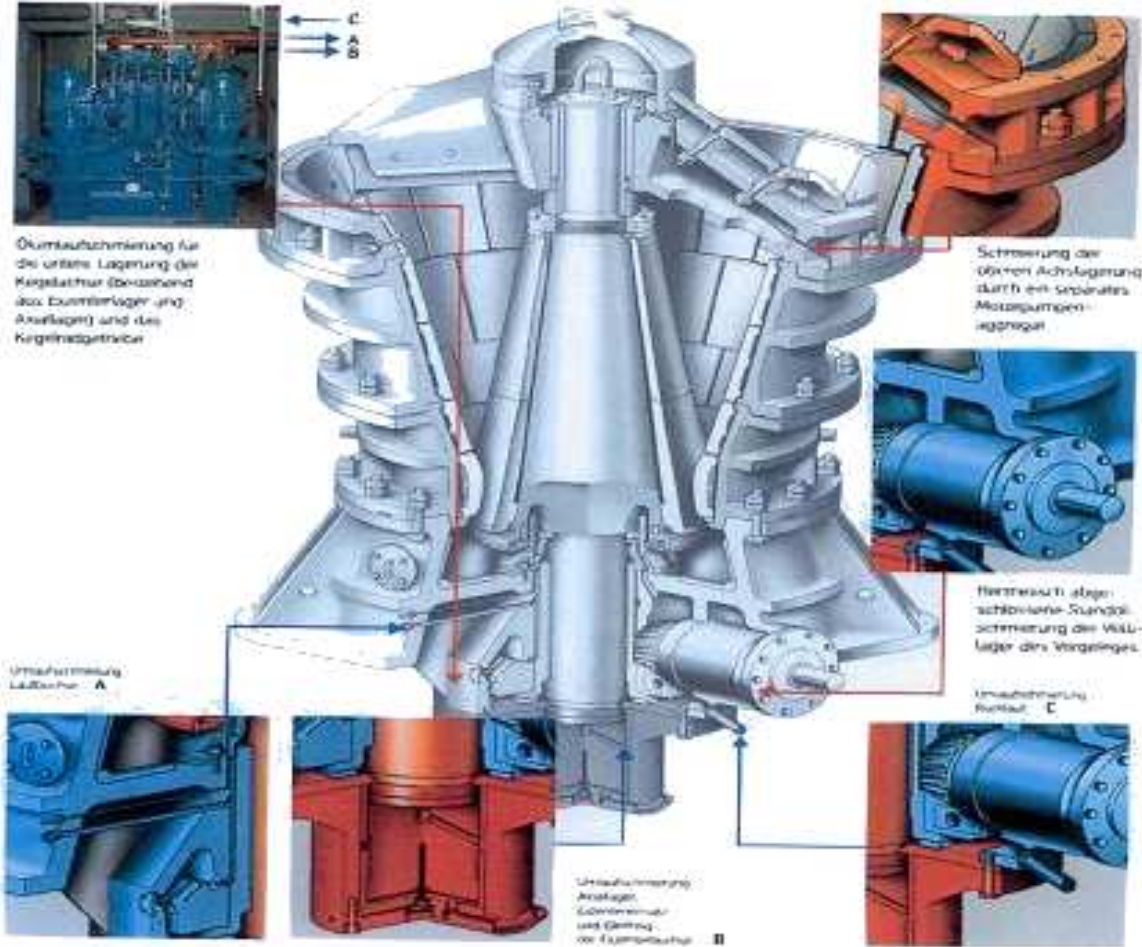
Roller bearing
LAGERMEISTER EP 2
LAGERMEISTER XXL

Ball joint
gleitmo 805





Gyratory crusher



Hydraulic
Renolin HLP 68

Gear and Shaft bearing
GEARMASTER CLP 150

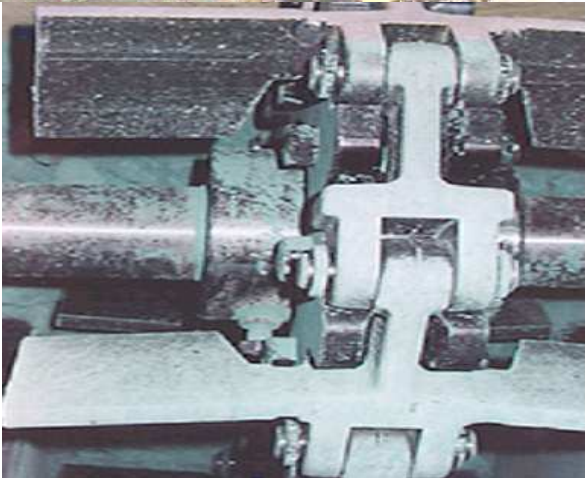
Sometimes the shaft bearing
is lubricated with
LAGERMEISTER HDG 00





Long mixing bed

Circular mixing bed

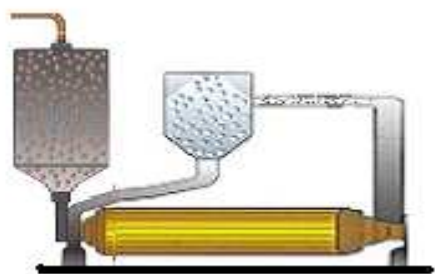


**Scraper chain
STABYLAN G 1000**

**Arm rope
CEPLATTYN 300**

**Slewing ring with gearing
LAGERMEISTER EP 2 or ...XXL**





4. Raw Material Milling

Machine	Lubricating area	Lubricant	Biodegradable lubricant
Ball mill	Electro motor	STABYL L 120	
	Open gear	CEPLATTYN KG 10 HMF	
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Vertical bearing	GEARMASTER CLP 150	GEARMASTER ECO 150
Vertical mill	Electro motor	STABYL L 120	
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Roller bearing	GEARMASTER PGP 1000	
	Hydraulic	RENOLIN B HVI Reihe	
Rolling press	Electro motor	STABYL L 120	
	Planetary gear	GEARMASTER SYN 460	
	Roll bearing	STABYL HD	
Air seperator	Electro motor	STABYL L 120	
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Bearing	URETHYN MP 2	





Ball mill

Electro motor

STABYL L 120

Open gear

CEPLATTYN KG 10 HMF

Gearbox

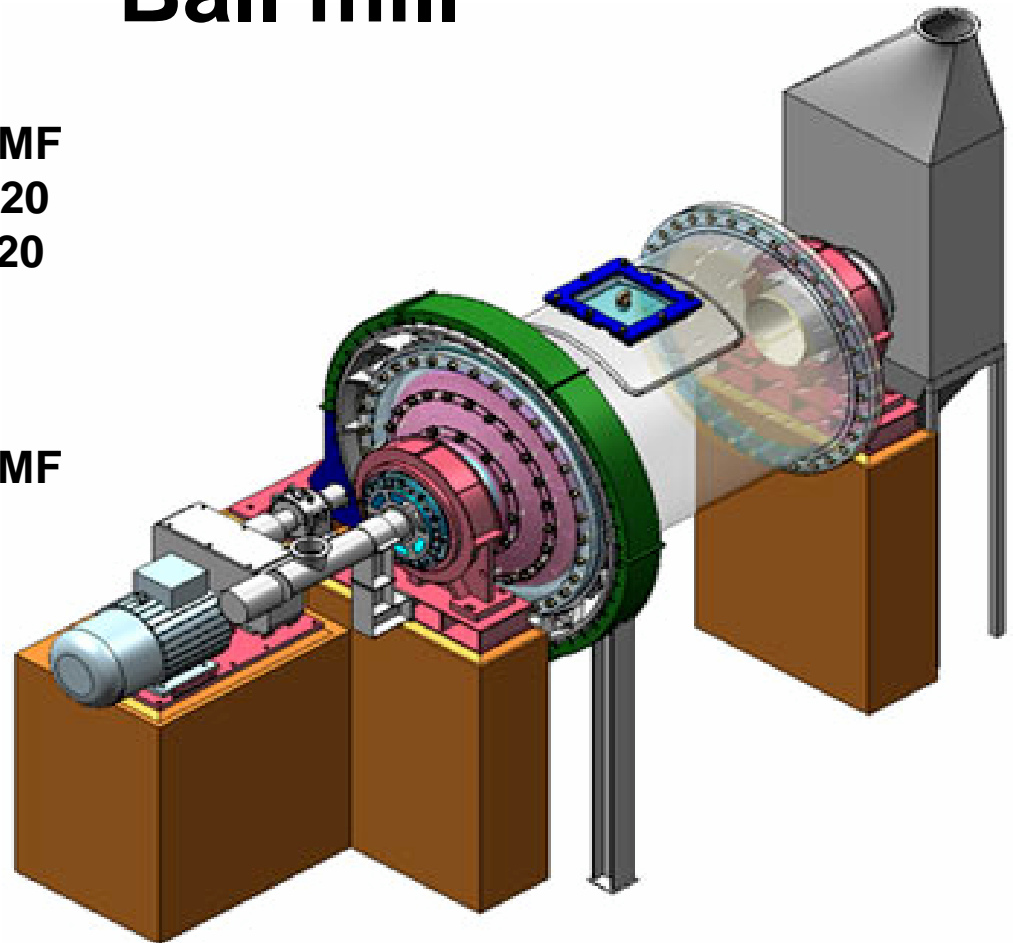
GEARMASTER CLP 220

Vertical bearing and
pinion bearing

**GEARMASTER CLP 220
or URETHYN MP 2**

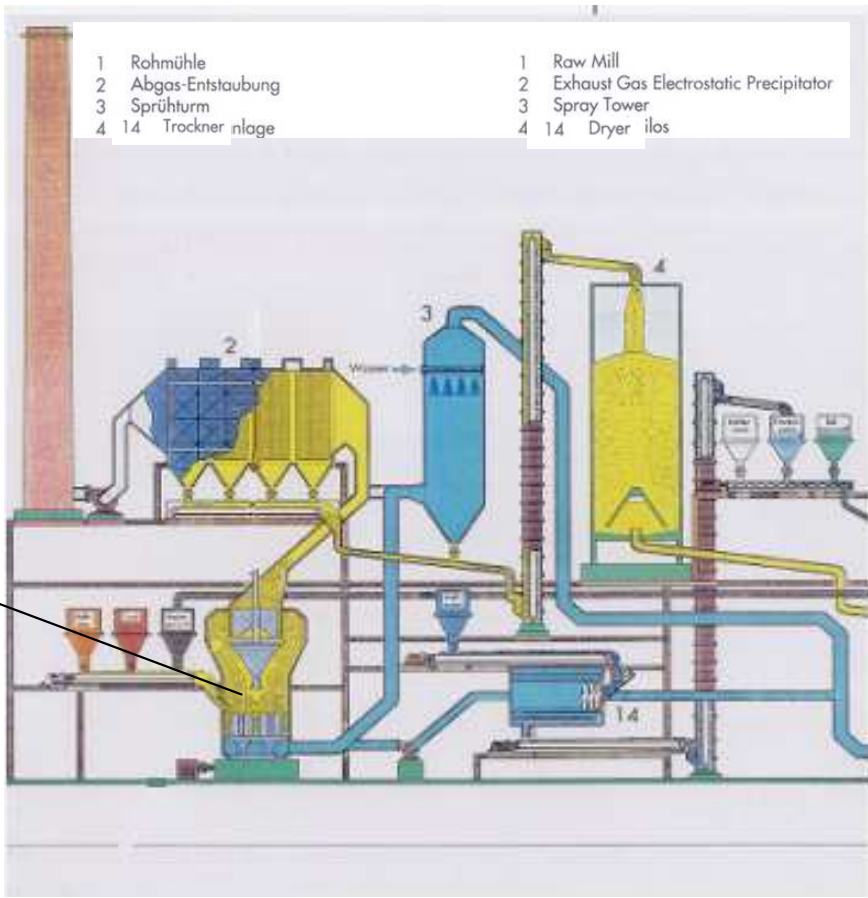
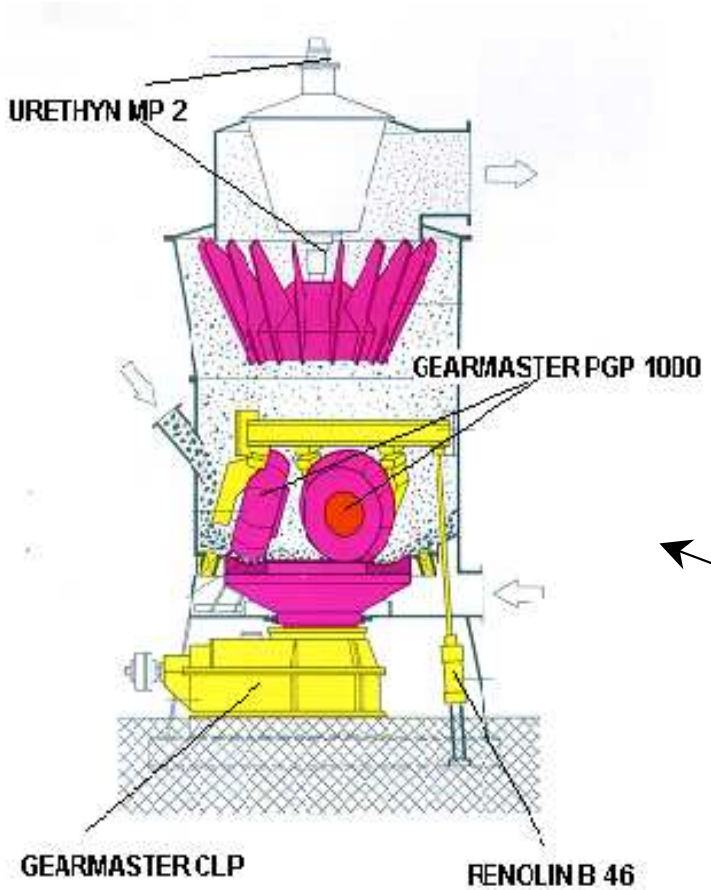
Gear coupling

**gleitmo 805 K 0
CEPLATTYN KG 10 HMF**



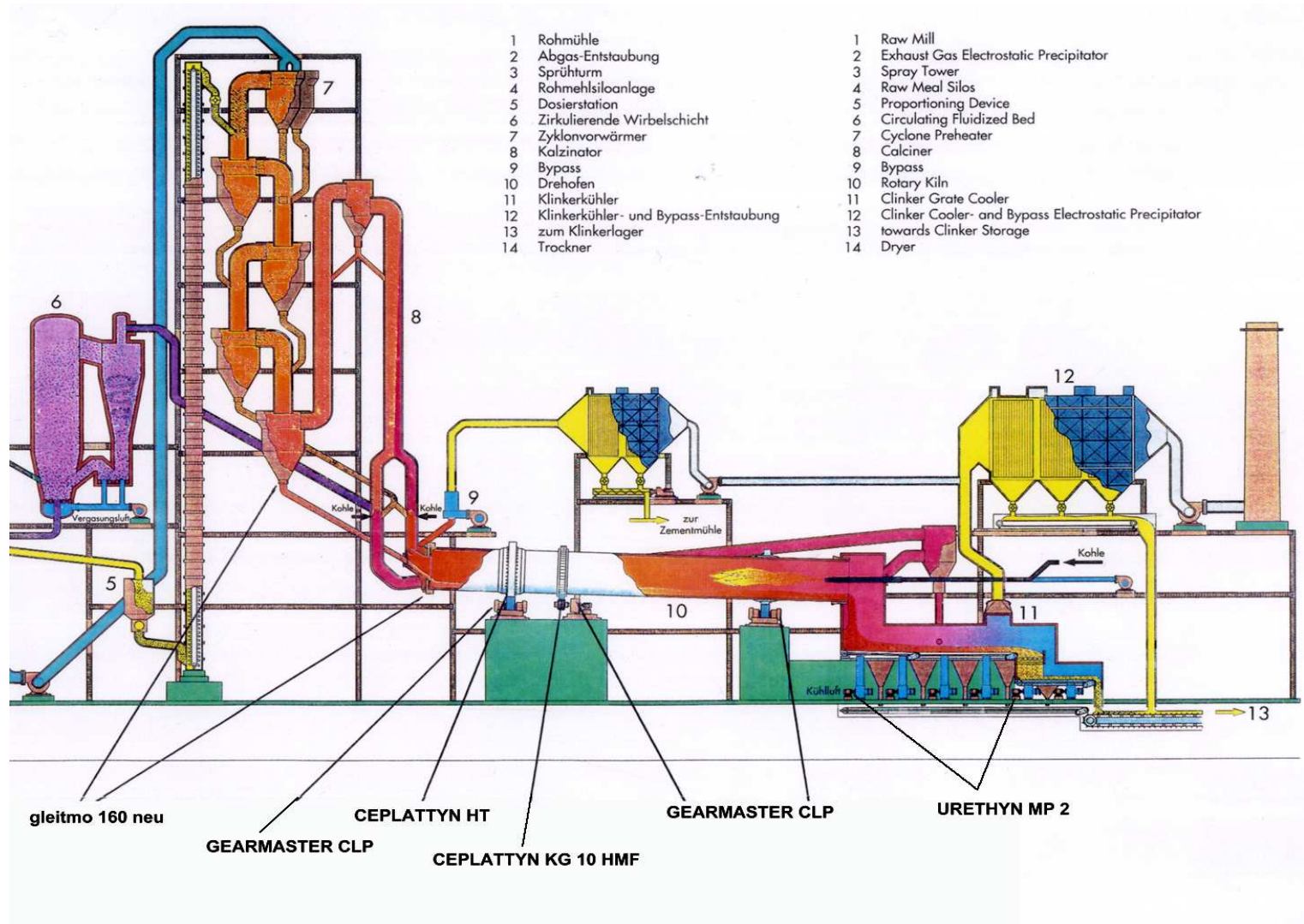


Vertical mill





Special lubricant for the kiln with cyclone-heater



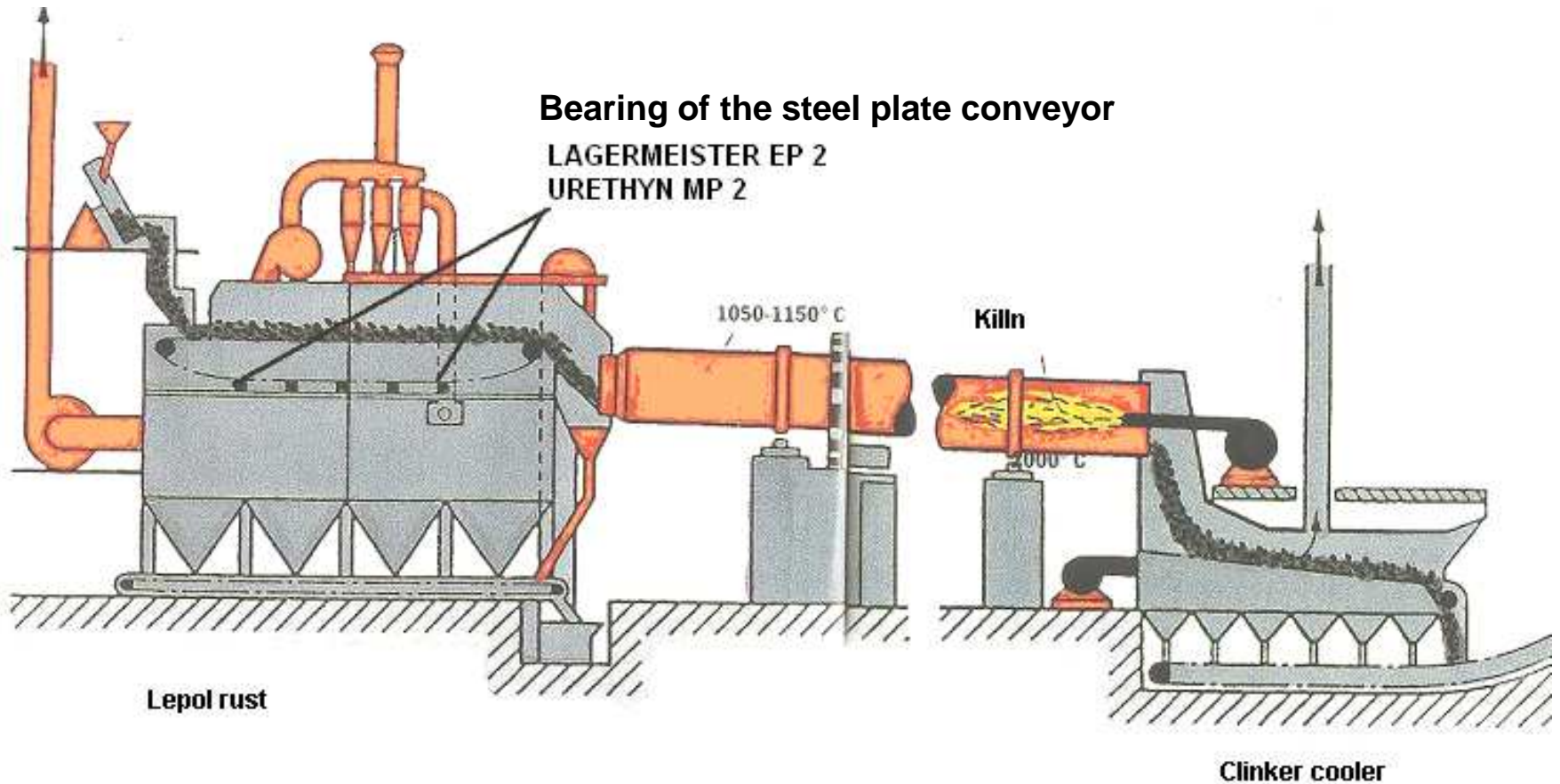


Ball race inside CEPLATTYN HT





Special lubricant for the kiln with lepol grate





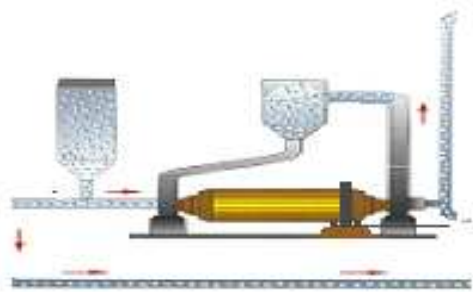
Steel conveyor belt for clinker transport



Bearing:
LAGERMEISTER LX EP 2
LAGERMEISTER XXL

Chain:
STABYLAN 2001

Gearbox:
GEARMASTER LI 400



7. Cement milling

Machine	Lubricating area	Lubricant	Biodegradable lubricant
Ball mill	Electro motor	STABYL L 120	
	Open gear	CEPLATTYN KG 10 HMF	CEPLATTYN KG 10 ECO
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Vertical bearing	GEARMASTER CLP 150	GEARMASTER ECO 150
Vertical mill	Electro motor	STABYL L 120	
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Roller bearing	GEARMASTER PGP 1000	
	Hydraulic	RENOLIN B HVI Reihe	
Rolling press	Electro motor	STABYL L 120	
	Planetary gear	GEARMASTER SYN 460	
	Roll bearing	STABYL HD	
Air separator	Electro Motor	STABYL L 120	
	Gear	GEARMASTER CLP 220	GEARMASTER ECO 220
	Bearing	URETHYN MP 2	





Electro motor bearing
Planetary gear
Roll bearing

STABYL L 120
GEARMASTER SYN 460
STABYL HD

(Approval from KHD and Polysius)

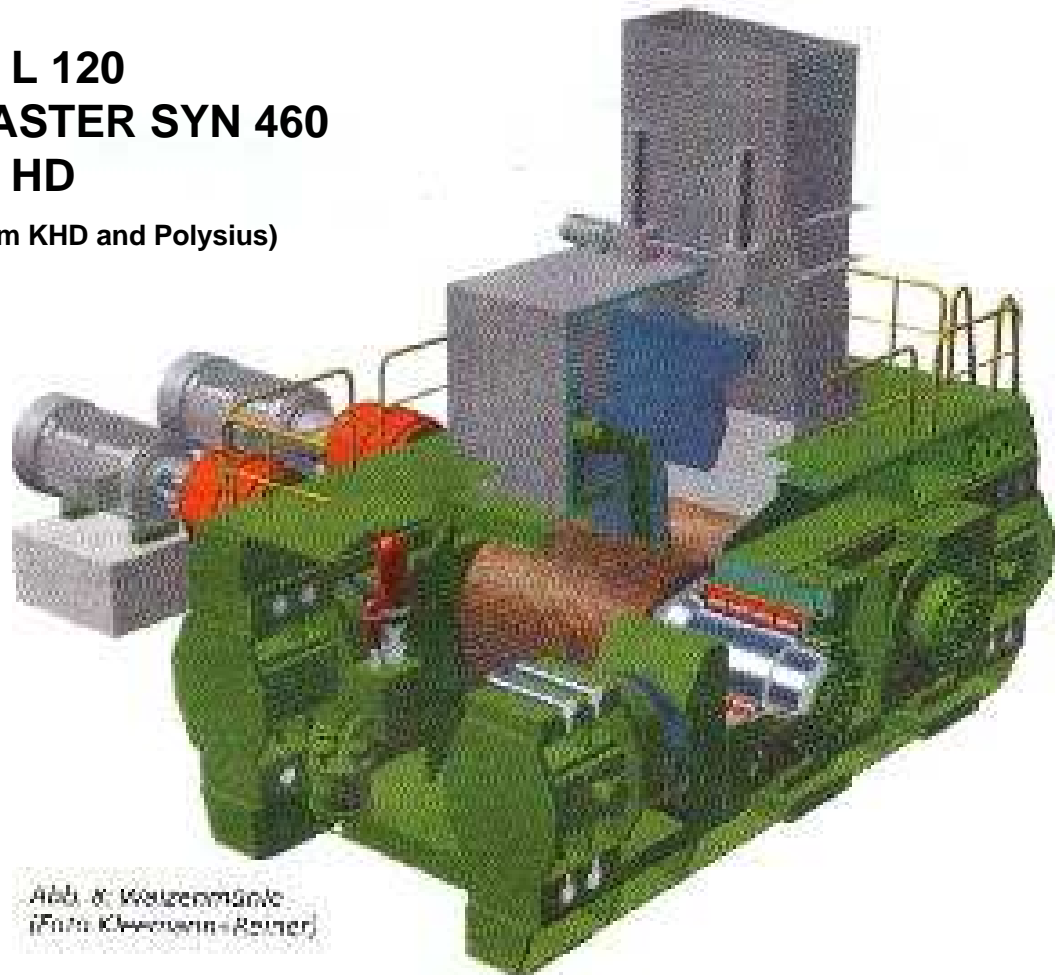


Abb. 8: Walzenmühle
(Foto: Klemm-Beiner)



Ball mill

Electro motor

STABYL L 120

Open gear

CEPLATTYN KG 10 HMF

Gearbox

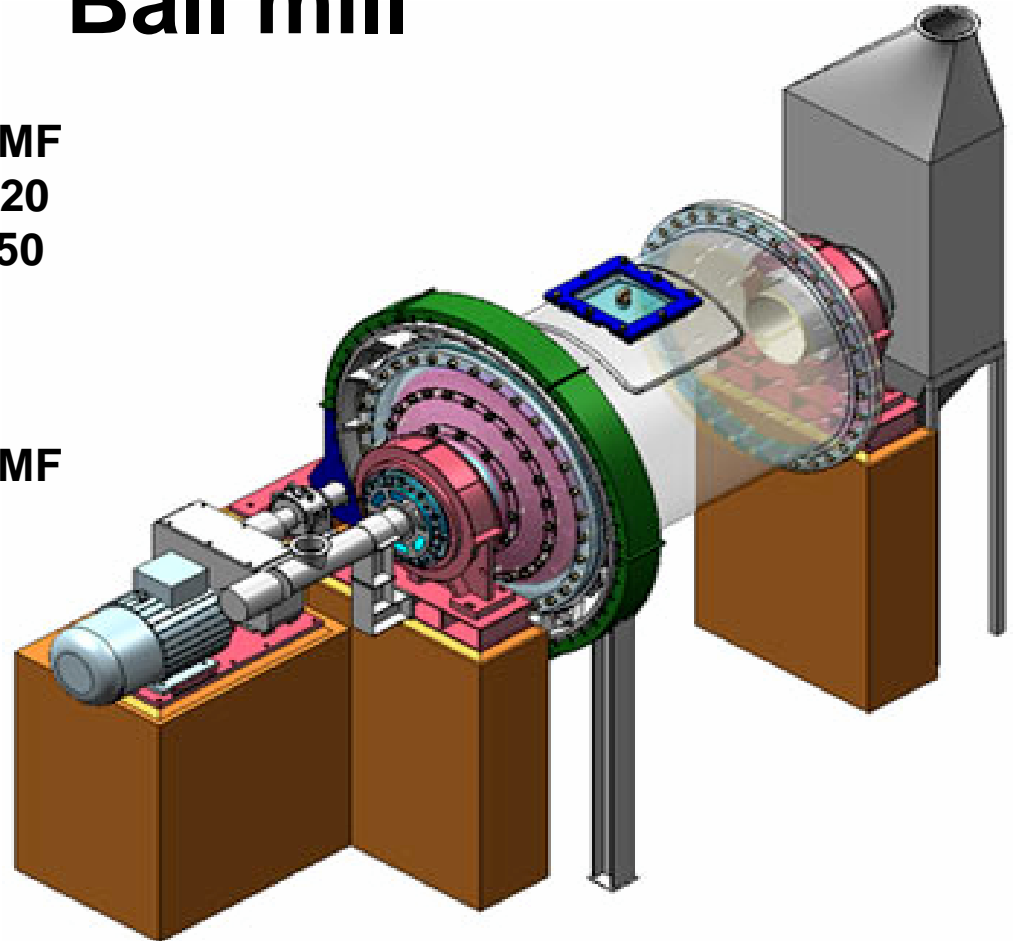
GEARMASTER CLP 220

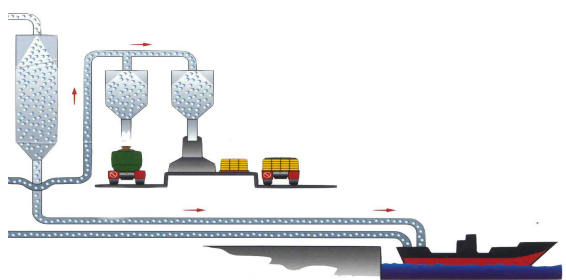
Vertical bearing and
pinion bearing

GEARMASTER CLP 150
or **URETHYN MP 2**

Gear coupling

gleitmo 805 K 0
CEPLATTYN KG 10 HMF





8. Packaging and Shipping

Machine	Lubricating area	Lubricant	Biodegradable lubricant
Packaging machine	Gear motor Vertical bearing Hydraulic Pneumatics Chains	GEARMASTER LI 400 LAGERMEISTER EP 2 RENOLIN B 10 KOMPRANOL 1002 STABYLAN 2001	STABYL ECO EP 2 ECO HYD 32 KOMPRANOL GRÜN STABYLAN ECO 30
Fork lift truck	Motor Automatic gearbox Hydraulik	TITAN TRUCK TITAN ATF RENOLIN B 10	ECO HYD 32
Discharge silos	Gear motors Bearings Valve	GEARMASTER LI 400 LAGERMEISTER EP 2 gleitmo WSP 5040	STABYL ECO EP 2





Thanks for your kind attention

