

# LUBRICATION ANSWERS FOR CEMENT INDUSTRY

Helping your equipments be more  
reliable and efficient



**TOTAL**

# A COMPREHENSIVE LUBRICATION TOOLBOX FOR YOUR CEMENT MANUFACTURING PLANT

## TOTAL Answers

## Quarry

<b>RUBIA</b> .....	<b>Heavy Duties</b>
<b>DYNATRANS, EP</b> .....	Engine
<b>RUBIA C4, FLUIDE, FLUIDE SYN</b> .....	Manual Transmissions
<b>HYDROFLO, EQUIVIS</b> .....	Automatic Transmissions
<b>CERAN, MULTIS, MULTIS COMPLEX</b> .....	Hydraulic systems
<b>COOLELF, GLACELF</b> .....	Greases
	Antifreeze and coolants

A complete range of OEM approved lubricants for all types of engines and machines

<b>PNEUMA, DACNIS</b> .....	<b>Drilling equipment</b>
Low operation costs, main OEM approvals	Pneumatic tools, air Compressors

## Crushers & Conveyors

**Gear boxes, belts, grinding rollerbearings**  
High loads, shocks and vibrations

<b>KASSILLA GMP</b> .....	<b>Oil Lubrication :</b>
<b>CARTER XEP</b> .....	Extreme-pressure conditions
Extended oil lifetime, reduces wear and prevents micropitting effect	Moisture, dust and heavy loads

<b>CERAN MS</b> .....	<b>Grease lubrication :</b>
<b>MULTIS MS</b> .....	Moisture, dust and heavy loads
<b>MULTIS EP</b> .....	Shocks and vibrations
	Multipurpose EP greases

Equipment protection under extreme conditions. Reduced consumption due to excellent metal adhesion, thermal and mechanical stability. Outstanding water resistance



**TOTAL  
Answers**

**Mills & Kilns**

**Girth gear / open gear**

High loads and shocks, high operating temperature, moisture

**COPAL OGL**

Grease with outstanding adhesiveness to metal and extreme pressure properties

**COPAL GEP**

Grease for superior equipment protection

**CARTER MS**

High temperature stable oil and adherence to metal, excellent EP and anti-wear properties

**Bearings / kilns & cooling unit**

Extremely hot temperature, moisture and shocks  
Support roller internal ring  
Cooling grids

**STATERMIC XHT**

**CERAN WR**

**SPECIS CU**

Prevention of thread stripping, anti-seize at high temperature. Reduced equipment down time, no hardening even at very high temperature, water resistance. No texture modification even at very high temperature

**General Equipment lubrication**

**Industrial gears, fans, air compressors...**

Synthetic oil lubrication

**CARTER SY**

**CARTER SH**

Optimum gear protection against micropitting and wear, high thermal stability

**CARTER EP**

High anti-wear and extreme-pressure properties, protects gears against micropitting

High resistance against oxidation

**CARTER XEP**

Extended lifetime high temperature stability and anticorrosion

**KASSILLA GMP**

Equipment protection against high loads  
Lower energy consumption

**ALTIS EM 2 / ALTIS SH 2**

Superior technology greases allowing significant reduction of temperatures and vibrations

**AZOLLA ZS**

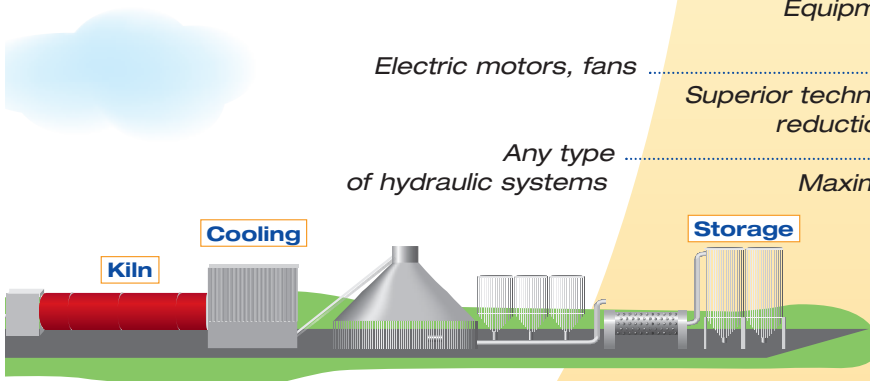
Maximum equipment lifetime, very high performance, anti-wear

Mineral oil lubrication

Mineral oil with solid lubricants

Electric motors, fans

Any type of hydraulic systems



# Lubrication Support

## TIG XP 5 - Maintenance and lubrication management software



- Possibility of data transfer with different software
- Maintenance indicators panel (maintenance operation history, analysis, consumption etc)
- Lubricant analysis management (LUBIANA & ANAC)
- Management of other analysis, or control measurements (vibration, temperature)
- Management of critical points and risk analysis
- Product and stock management



## ANAC - oil analysis for vehicles



- Park management ; vehicles and equipments diagnosis
- Cost reduction of operating expenses
- Optimization of vehicles maintenance tasks and park size

## LUBIANA - oil analysis for industry

**lubiana**

- Extended lubricant life
- Machine monitoring and anomalies detections
- Preventive maintenance : monitoring, detection and correction of potential failures
- Cost savings : less equipment breakdown and production losses.



**INTER ANDEAN  
TRADING**