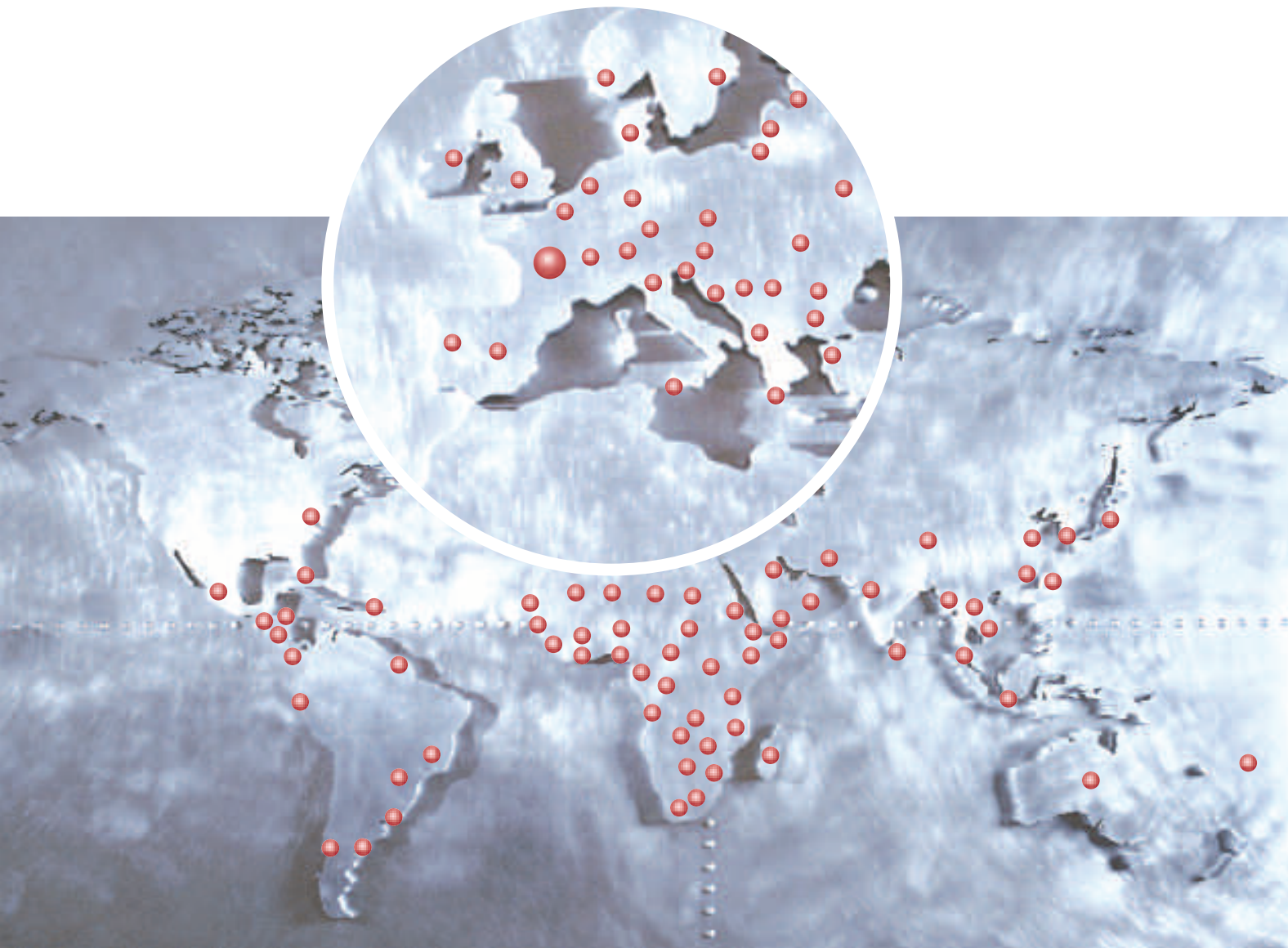


Steel industries

Upgrade your performances
by using the right lubricant



Africa	+33 1 41 35 26 53	Germany	+49 30 20 27 60	Norway	+47 22 01 95 59
Asia	+65 6879 22 00	Great Britain	+44 1923 694 000	Poland	+48 22 435 14 00
Austria	+43 616 46 11 0	Greece	+30 2 10 544 05 40	Portugal	+351 21 723 08 32
Belgium	+32 2 288 99 33	Hungary	+36 23 50 75 00	Spain	+34 91 722 08 40
Czech Rep.	+420 2 2489 0511	Italy	+39 02 54 068 700	Sweden	+46 40 38 36 50
Denmark	+45 45 81 3701	Luxembourg	+352 480 481-1	Switzerland	+41 22 306 66 00
France	+33 1 41 35 81 33	Netherlands	+31 70 318 04 80	Other	+33 1 41 35 40 00



TOTAL

TOTAL LUBRIFIANTS

16 rue de la République - F 92922 Paris La Défense Cedex - FRANCE
Tél. : 33 (0)1 41 35 40 00 - www.lubricants.total.com



TOTAL

Execute trouble-free operations !

GREASES USED IN STEEL MILLS

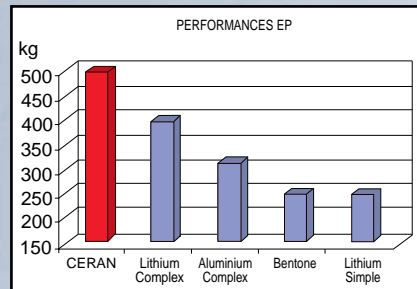
CERAN RANGE

Calcium sulfonate complex greases



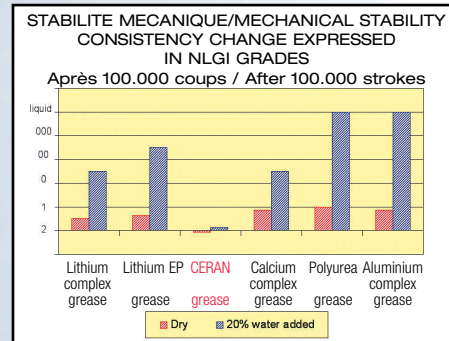
PERFORMANCES

- High temperature resistance
- Excellent mechanical stability even exposed to water
- Exceptional intrinsic EP and AW properties
- Very good antirust and anticorrosion properties



APPLICATIONS

- Heavily loaded roller bearings
- High temperature
- Wet conditions
- Allows consumption reduction
- Allows product standardisation
- Increases maintenance intervals

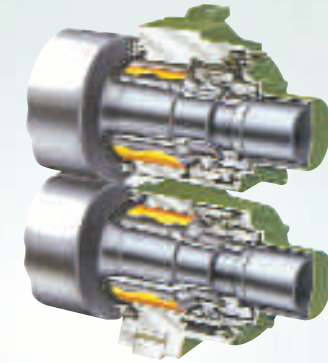


Use the OEM's approved products !

HYDRODYNAMIC BEARING OILS

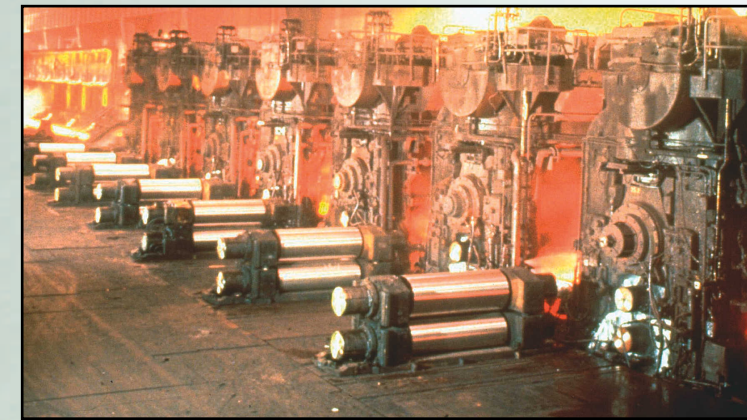
CORTIS RM

CORTIS MS



ADVANTAGES

- Outstanding water separation properties : giving extended life
- Very good antirust : protection of the metallic surfaces
- Excellent lubrication properties



2 specific types of bearings

**DANIELI®
MORGAN®**

2 specific lubricants

**CORTIS RM
CORTIS MS**

Operate safely !

FIRE RESISTANT HYDRAULIC FLUIDS

HYDRANSAFE : to meet all your needs

HFA E Milky emulsion

HFA S1 Water soluble synthetic concentrate

HFC Water/Glycols mixture

HFDU Organic ester - base fluids

HFDR Organic phosphate ester - base fluids

APPLICATIONS

- When the hydraulic fluids are operated near a hot environment

RISKS

- When oils leak or splash and come in contact with hot surfaces



INFLAMMATION

Add more value to your products !

FLUIDS FOR METAL WORKING

MACHINING OPERATIONS :

grinding, milling, cutting, slitting, forming operations and dedicated range for rust prevention.

NEAT OILS (**VALONA** Machining
SCILIA Combining machining and lubrication

WATERMISCIBLE FLUIDS (**LACTUCA** Milky emulsion
SPIRIT Semi-synthetic
VULSOL Fully synthetic solutions

METAL FORMING (**MARTOL** Stamping, pipe drawing, bar drawing,...

CORROSION PROTECTION (**OSYRIS** All kinds of protective films

PRELUBES (**FINAROL** Combined protection and stamping

