

## Automatic lubrication in steel industry

### Why automatic lubrication?

#### ...reduces your costs

- saves time
- fewer machine breakdowns due to decreased wear
- lower lubricant consumption
- increased service life of bearings

#### ...protects the environment

- needs-based lubricant dosage
- low risk of impurities and contamination

#### ...improves work safety

- ...enables monitoring and provides an overview

### Challenges

In the steel industry the access to many lubrication points is burdensome or dangerous. Manual lubrication is inconvenient due to a large variety of different lubricants and applications. Extreme operating conditions such as high temperature, vibrations, shock loads, high loads and contaminants demand frequent and reliable lubrication in order to prevent costly downtime.

### Advantages of automatic lubrication



#### Heat

- temperature-independent delivery rate
- operation at high temperatures possible



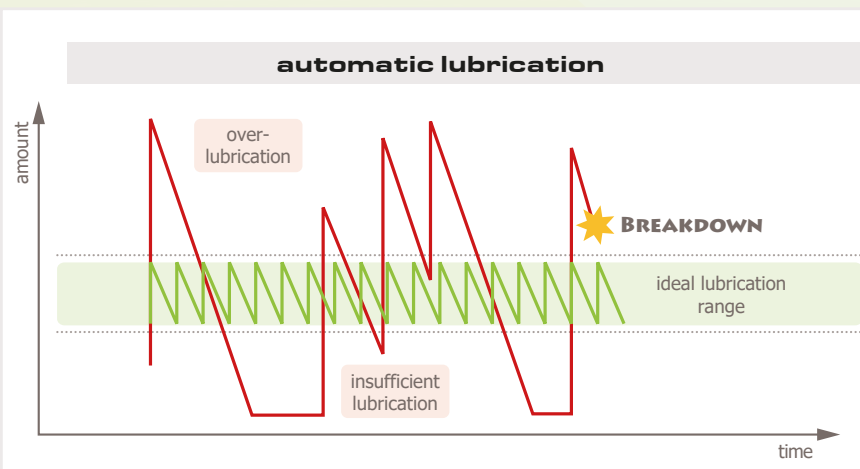
#### Costs

- lower energy costs
- time saving
- sustainable by multiple refills
- increasing production efficiency



#### Safety

- indirect installation possible
- central controlling and monitoring in an user-friendly environment



## Our solutions for automatic lubrication



Specifications	G LUBE	SOLO LUBE	G LUBE OIL	G LUBE VIS	LUB-S	LUBRICUS
Lubrication points	Single	Single	Multiple	Multiple	Multiple	Multiple
Operating temperature	-20 °C to +55 °C	-20 °C to +60 °C	+5 °C to +60 °C	+5 °C to +60 °C	-15 °C to +60 °C	-15 °C to +70 °C
Working voltage	Battery	Battery/24V	Battery	Battery	Battery/24V	Battery/24V
Max. operating pressure	5 bar (73 psi)	7,5 bar (109 psi)	10 bar (145 psi)	60 bar (870 psi)	35/50 bar (508/725 psi)	70 bar (1015 psi)
Max. tube length*	Grease: 0,5 m Oil: 3 m	Grease: 1,5 m Oil: 5 m	Oil: 6 m	Grease: 6 m	Grease: 4 m Oil: 7 m	Grease: 6 m Oil: 10 m
Max. run-time	12 month	12 month	24 month	12 month	24 month	36 month
Lubricating intervals	1/3/6/9/12	1-12 (steppless)	0,5/1/2/4/6/12/18/24	1-12 (steppless)	1-24 (steppless)	1-36 (steppless)
Filling	By yourself or on customer request	By yourself or on customer request	By yourself	On customer request	On customer request	On customer request
Reusable drive	X	✓	✓	✓	✓	✓
Self-refilling	X	X	✓	X	X	X
Control	Empty time	Empty time	Empty time	Empty time	Empty time, pause time, PLC	Empty time, pause time, PLC

\* depends on lubricant and application

## Scopes of application

- cooling sections
- coking plants
- conveyors
- continuous furnaces
- fans