

# Wire rope lubrication system

- Increases wire rope life
- Reduces lubrication time by up to 90%
- Reduces lubricant waste and environmental contamination



**LINCOLN**

**SKF**

## Importance of lubrication

The use of lubricant on a steel wire rope considerably reduces friction and, as a result, it minimizes the following two related factors:

- Abrasion on the wire rope
- Heat generation

Developed as a service tool, the Lincoln wire rope lubricator is attached periodically to equipment on a monthly, quarterly or other cycle to lubricate wire ropes.

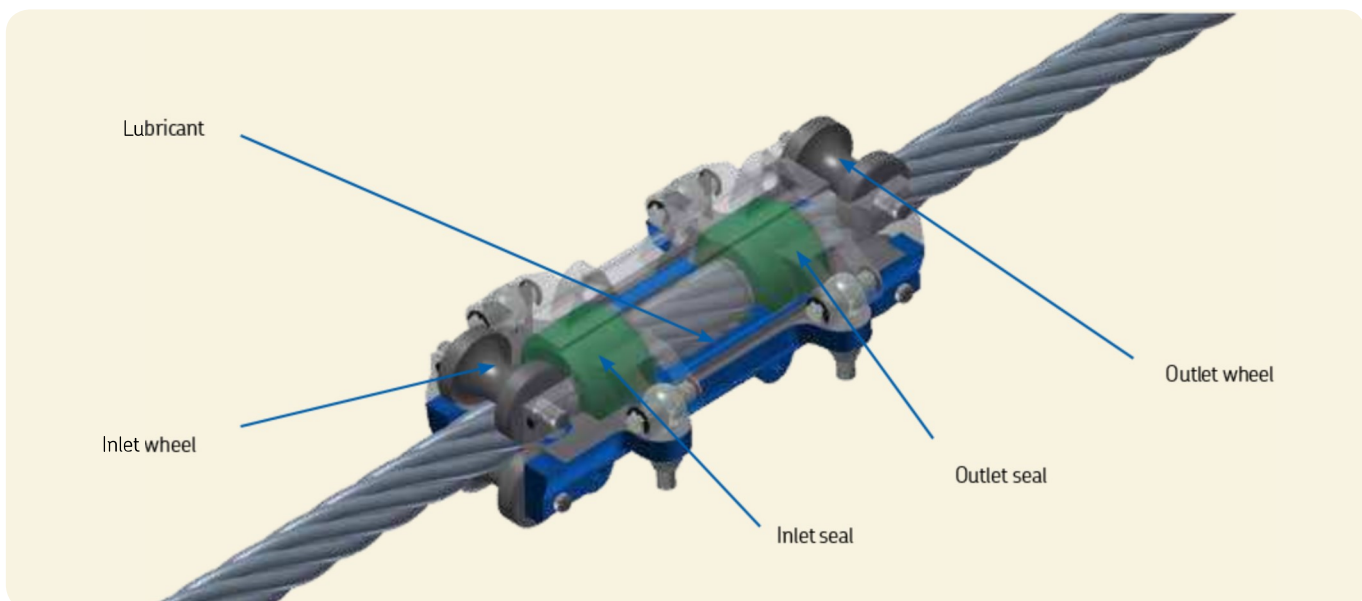
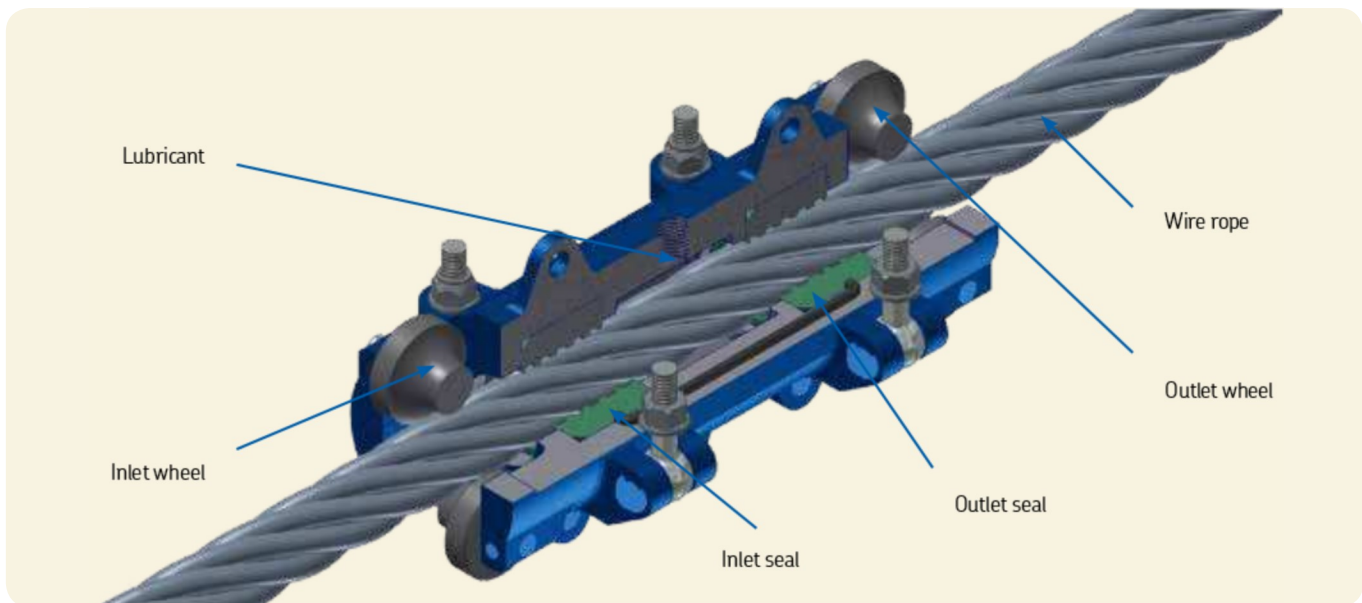
## Benefits of wire rope lubrication

The life cycle of a steel wire rope that has been periodically lubricated is approximately six to eight times longer than a wire rope that has not been lubricated.

Also, lubricating a wire rope while in service helps to prevent corrosion of the wires. Corrosion can be internal and external, and it often is caused by acids, alkaline waters, salt air, humidity, fumes, and abrasive and industrial environments, in general.

### Lubrication of wire rope:

- Reduces friction
- Protects against corrosion
- Enables lubricant to adhere to each wire and penetrate to the core for long-lasting protection





The Lincoln wire rope lubrication system eliminates manual lubrication and, in turn, yields improved results. This reliable tool forces lubricant into the wire rope core to reduce friction and heat generation for longer service life.

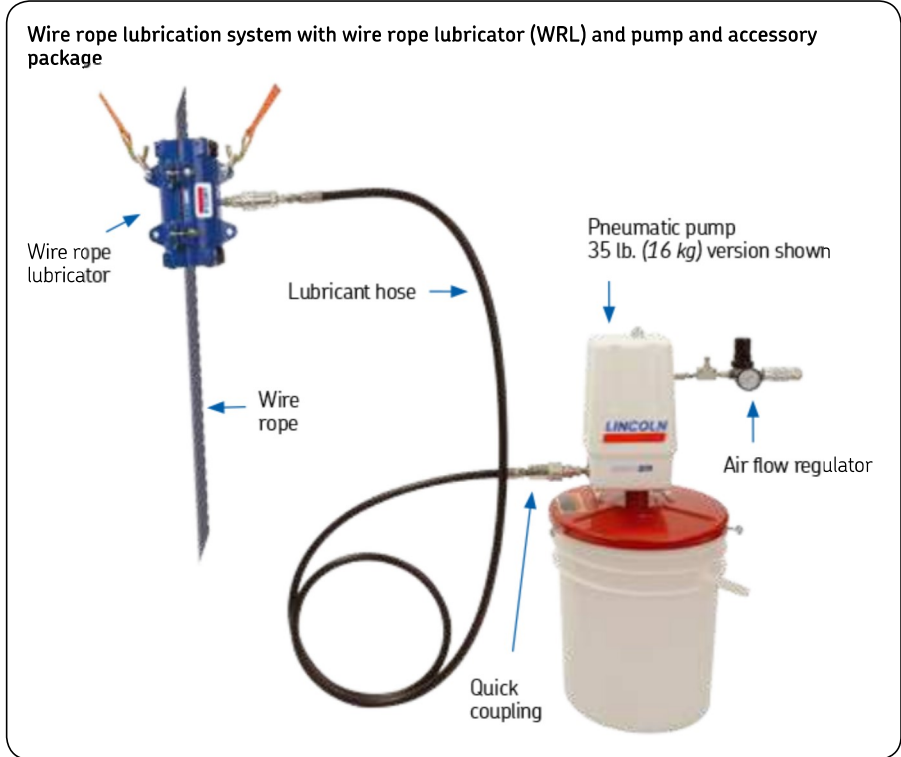
The wire rope lubrication system applies the right amount of lubricant, distributes it evenly and eliminates over-lubrication waste.

**Advantages:**

- Fast and efficient – reduces lubrication time by up to 90% vs. manual lubrication
- Increase operator safety
- Easy to use with any wire rope up to 2 in. (52 mm)
- Helps to prevent corrosion
- Protects the wire ropes
- Penetrates the wire rope core
- Reduces waste and contamination
- Robust design for harsh environments

**Applications:**

- Traveling cranes
- Wharf cranes
- Ship cranes
- Deck winches
- Ship hoists
- Wire ropes for ROVs (remote-operated vehicles)
- Winding machines in mines
- Mobile cranes
- Oil and gas rigs
- Chains and ropes



*Newly installed wire rope lubricator on wire rope previously lubricated manually. Note: Even, clean penetrating distribution vs. uneven, messy coverage from previous method.*

## Typical wire rope lubrication system components

### Ordering wire rope lubrication (WRL) systems:

1. Select seal and roll kit to fit the wire rope diameter. Interchangeable kits include seals and rolls to fit wire rope diameters in their respective size ranges.

2. Choose wire rope lubricator body or bodies to fit the seal and roll kit selection.

#### Seal and roll kits

| Model  | Description  | Nominal wire rope diameter <sup>1)</sup> |         | Use with WRL body |
|--------|--|--|---------|-------------------|
|        |  | in.                                      | mm      |                   |
| 802185 | WRL seal and roll kit  | 7/16                                     | 11 – 12 | 802175 small      |
| 802188 | WRL seal and roll kit  | 1/2                                      | 13      | 802175 small      |
| 802191 | WRL seal and roll kit  | 9/16                                     | 14 – 15 | 802175 small      |
| 802194 | WRL seal and roll kit  | 5/8                                      | 16      | 802175 small      |
| 802197 | WRL seal and roll kit  | 11/16                                    | 17 – 18 | 802175 small      |
| 802200 | WRL seal and roll kit  | 3/4                                      | 19 – 20 | 802175 small      |
| 802203 | WRL seal and roll kit  | 13/16                                    | 21      | 802175 small      |
| 802206 | WRL seal and roll kit  | 7/8                                      | 22 – 23 | 802175 small      |
| 802209 | WRL seal and roll kit  | 1  | 25 – 26 | 802175 small      |
| 802221 | WRL seal and roll kit  | 1 1/8                                    | 28 – 29 | 802180 large      |
| 802212 | WRL seal and roll kit  | 1 1/4                                    | 32 – 33 | 802180 large      |
| 802224 | WRL seal and roll kit  | 1 3/8                                    | 35 – 36 | 802180 large      |
| 802227 | WRL seal and roll kit  | 1 1/2                                    | 38 – 39 | 802180 large      |
| 802230 | WRL seal and roll kit  | 1 5/8                                    | 41 – 42 | 802180 large      |
| 802233 | WRL seal and roll kit  | 1 3/4                                    | 44 – 45 | 802180 large      |
| 802215 | WRL seal and roll kit  | 1 7/8                                    | 48 – 49 | 802180 large      |
| 802218 | WRL seal and roll kit  | 2  | 51 – 52 | 802180 large      |
| 802236 | WRL seal and roll kit<br>small lubricator –<br>interchangeable | 7/16-1                                   | 11 – 26 | 802175 small      |
| 802237 | WRL seal and roll kit<br>large lubricator –<br>interchangeable | 1 1/8-2                                  | 28 – 52 | 802180 large      |

#### WRL body models

| Model  | Description | Wire rope diameter |         |
|--------|-------------|--------------------|---------|
|        |             | in.                | mm      |
| 802175 | Small       | 7/16-1             | 11 – 26 |
| 802180 | Large       | 1 1/8-2            | 28 – 52 |

3. Select pump and accessory package to fit the required grease container size.

#### Pump and accessory packages

| Model  | Size |     |
|--------|------|-----|
|        | lb.  | kg  |
| 802238 | 35   | 16  |
| 802239 | 120  | 54  |
| 802240 | 400  | 180 |

Pump and accessory package includes the reliable Lincoln series 20 50:1 grease pump, air filter, regulator, gauge, flow control, WRL sling with ratchet, grease quick disconnects and adapter fittings

<sup>1)</sup> See WRL installation guide, form number 801975A section J3 3A, for wire rope measuring instructions to ensure correct fit

Please contact:  
**SKF USA, Inc.**  
 One Lincoln Way  
 St. Louis, MO 63120 USA  
 Tel. +1 (314) 679-4200

WRL seal and roll kit



WRL body



WRL body with seal and roll kit installed



© SKF is a registered trademark of the SKF Group.

© Lincoln is a registered trademark of Lincoln Industrial Corp.

© SKF Group 2015

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB LS/P2 16063 EN · September 2015

