

# WIND ENERGY



Keep your costs down  
and your turbines moving



Lubrication Systems

# THE ADVANTAGES

## 1 + Reduce Downtime

- ▶ Critical wear and tear
- ▶ Fewer components
- ▶ Downtime for installation and repairs

## 2 + Increase Reliability

- ▶ Bearing and gear life
- ▶ Turbine operation efficiency
- ▶ Pump to point lubrication

## 3 + Save Money

- ▶ Labor costs
- ▶ Operating costs
- ▶ Replacement bearing and gear costs



< AX-WF  
Multiline  
System

Simple, Efficient, Reliable...

Pump Type	Characteristics	Location and Lubrication of
HDI-WF (spring-loaded follower plate)	<ul style="list-style-type: none"> <li>■ Progressive system for 360-degree rotation applications</li> </ul>	<ul style="list-style-type: none"> <li>■ Rotating hub bearings</li> </ul>
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HDI6	<ul style="list-style-type: none"> <li>■ Progressive system where 360-degree rotation capability is not required</li> </ul>	<ul style="list-style-type: none"> <li>■ Generator bearings</li> <li>■ Yaw bearings</li> <li>■ Main bearings</li> </ul>
AX6	<ul style="list-style-type: none"> <li>■ Multiline system where 360-degree rotation capability is not required</li> </ul>	<ul style="list-style-type: none"> <li>■ Generator bearings</li> <li>■ Yaw bearings</li> <li>■ Main bearings</li> </ul>

Designed specifically for location in and lubrication of rotating hub bearings, the Timken wind farm product range is available in two options. The design allows for both pumps to rotate 360 degrees.



## AX-WF

Specifically designed for utilization of rotating hub bearings, the AX-WF pump provides direct feed to each bearing via a dedicated feed line.



^ Pumping Element

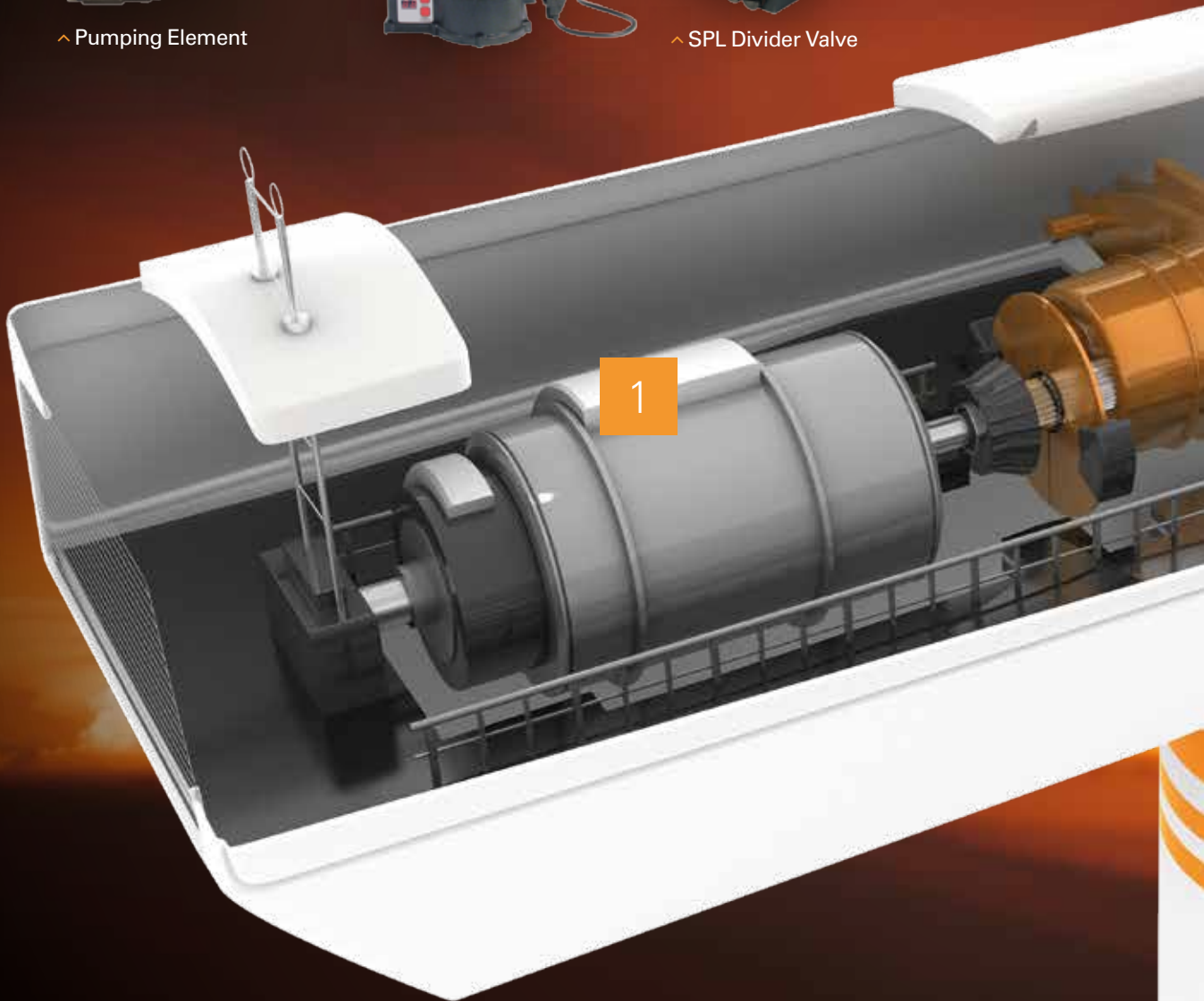


## HDI-WF

The HDI-WF pump is a progressive system that delivers the lubricant via a single pumping element into an SPL divider valve to deliver the grease into the required bearing points.



^ SPL Divider Valve



Interlube Systems, a Timken brand, is a global force in the field of lubrication.





# INTERLUBE

A **TIMKEN** Brand

2

3

4

## + Lubrication Points

- 1 Generator
- 2 Yaw bearing
- 3 Main bearing
- 4 Rotating hub bearing



For more information  
visit [interlubesystems.com](http://interlubesystems.com)

# THE WF LUBRICATION RANGE

Less maintenance time, improved efficiency and lower costs.

Manual lubrication is a thing of the past.

Due to the demands of continuous operation, it is critical that the bearing points in wind turbines receive consistent and reliable lubrication.

With its cost effective and efficient delivery, The WF range provides the ultimate solution in wind turbine lubrication.



WF

WF helps extend bearing life

# TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, gears, belts, chain and related mechanical power transmission products and services.

Stronger. **Commitment.** Stronger. **Value.** Stronger. **Worldwide.** Stronger. **Together.** | Stronger. **By Design.**

[www.interlubesystems.co.uk](http://www.interlubesystems.co.uk)