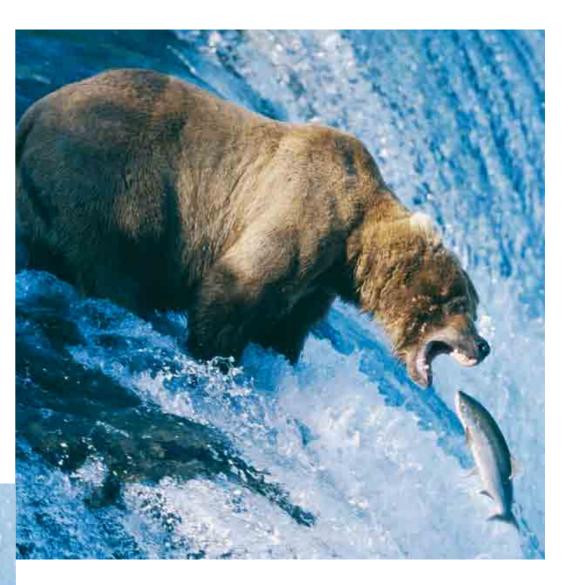


### www.statoillubricants.com

# TurbWay SE LV

Reduce the power losses...





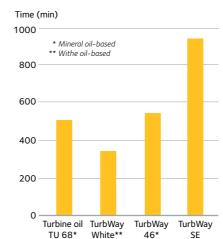
# ...with unique environmentally adapted turbine oils.



TurbWay SE and TurbWay SE LV are setting a standard for the new generation of turbine oils within the hydro electric power industry. We can demonstrate significantly lower power losses with retained lubricating capacity. In addition, Turbway SE and TurbWay SE LV are biodegradable and based on renewable raw materials.

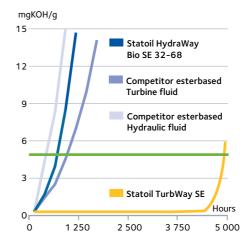
TurbWay SE and TurbWay SE LV deliver superior performance in comparison with traditional mineral oils as well as PAO-based products.

#### **Rotary Pressure Vessel Oxidation Test**



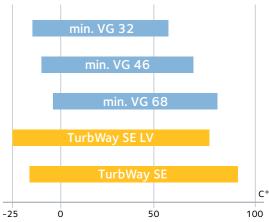
The test oil is kept under oxygen pressure along with water and a copper spiral at 150°C until the pressure

#### Hydrolytic stability RR 1006 mod.



TurbWay SE and SE LV are more than 20 times more stable than the commercial, ester-based turbine oils

## Working temperature range min. VG 32



#### Reduced power losses

Compared to a mineral or PAO based oil ISO VG 68, the reduction of power losses can be more than 20% with the same oil film thickness. In real life, we have meassured as much as 48.5% reduction in combination with PTFE coated bearings.

#### **Environmental benefits**

TurbWay SE and TurbWay SE LV are based on unique saturated synthetic esters which are biodegradable and based on renewable raw materials. Making a change to either of these products will contribute positively to our environment.

#### **Durability**

A high oxidation stability combined with a superior hydrolytic stability, guarantees a long life time. In addition, both these products are fully shear stable, which means that the viscosity does not reduce when the oil is loaded and sheared.

#### One product

Thanks to a high viscosity index and the adaptation of the properties for both bearing and control lubrication, the logistics are significantly improved. It is no longer necessary to have different products for the various applications.

#### Saving output losses

When switching from
TurbWay 68 to
TurbWay SE or
TurbWay SE LV
without or with
PTFE bearing.

Saving output losses					
Oil	Reduced losses kW MWh/year		Equivalent to household electricity for household/year*		
TurbWay SE	26,000	132,000	26,000		
TurbWay SE/PTFE	36,000	178,000	36,000		
TurbWay SE LV	39,000	198,000	40,000		
TurbWay SE LV/PTFE	49,000	244000	49,200		

\*Source: ÅF Energi & Miljöfakta 2003