



Upgrade your efficiency

Klüber high-performance lubricants for hydropower applications

KLÜBER
LUBRICATION
your global specialist

Hydropower is one of the most important sources of renewable energy – all over the world. While the ecological benefits of hydropower are undisputed, operators are encouraged to further reduce any negative impact on the environment to improve their eco-balance.

Energy losses, wear, and sometimes the need for overhauls are additional aspects to be managed if operators wish to ensure profitable operation also in future. What is often underestimated in this context is the role of lubricating oils or greases and how

they can decisively alter a hydroelectric power plant's energy efficiency and maintenance requirements.

With its innovative specialty lubricants, Klüber Lubrication supports you in meeting rising expectations in terms of performance, energy efficiency and eco-compatibility. Our solutions are tailored to your individual plant and developed in cooperation with you, drawing on our future-oriented, application-specific product portfolio.

The right solution for every component –
a selection of our high-performance lubricants

Gears

Klüberbio EG 2, Klübersynth GEM 4

Even during stress peaks, these energy-efficient and biodegradable gear oils maintain their abrasion resistance.

Distributor

Klüberbio AM 12-501

Improves sustainability and profitability without any system design changes. Pumpable in centralised lubricating systems.

Turbine support bearings and plain bearings/hydraulic system

Klüberoil EE Series, Klüberbio LM 2 Series Klüber Summit HySyn FG

By enabling low friction resistance, these biodegradable oils contribute to higher energy efficiency. Their high resistance to ageing reduces the formation of oil deposits.

Rolling bearings and generators

Klüberbio BM 32-142

Extends maintenance intervals and component life due to optimised protection against wear and corrosion.

Pins and bushings

Klüberbio M 72-82

Pumpable in centralised lubricating systems over a wide temperature range.

Open drives

Klüberbio AG 39-602

Adhesive water-resistant lubricant offering equal protection against corrosion and wear.

Chains and steel ropes

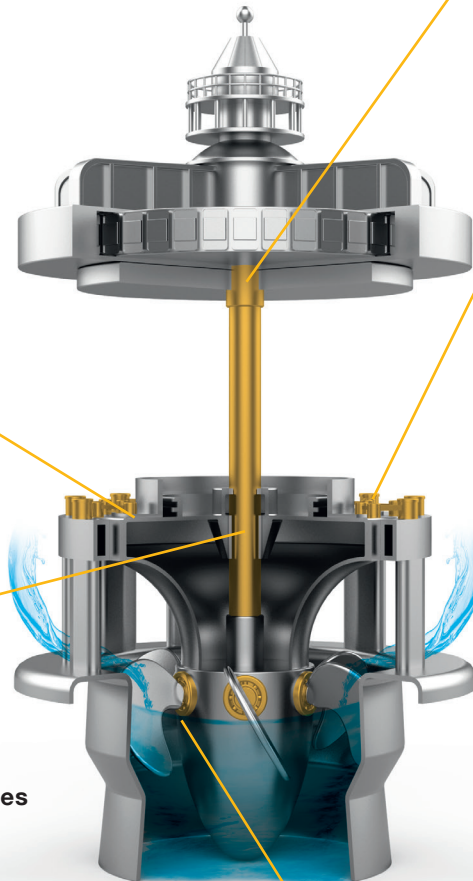
Klüberbio AM 92-142

For heightened requirements regarding load-carrying capacity and resistance to water.

Hydro lubricants

e. g. Klüberbio MW 0-100

With water as a functional component, these products enable reduced friction for more energy-efficient operation.



Our lubricants are as varied as your hydroelectric plants. Our experts in tribology and application engineering will be pleased to advise you on the selection of the right product to make sure the right solution for your specific application will be found.

Mastering economic and ecological challenges – with high-performance lubricants from Klüber

Profitability

Klüber offers specialty lubricants that are specifically designed to operate in hydropower applications. Turbine oils such as the Klüberoil EE Series or the Klüber Summit HySyn FG Series enable power plant operators to generate more energy with a given volume of water – without any costly rebuilding, high capital investment spending or interference with ongoing plant operation.

Sustainability

All Klüberbio products for hydropower applications are biologically degradable (according to OECD standard 301B) and partly made of regenerative raw materials. This is how we at Klüber make our contribution to improving your ecological footprint and attaining your sustainability goals.

Cost optimisation

The use of products like Klüberbio BM 32-142 has proven to reduce lubricant consumption volumes – and hence also purchasing and warehousing costs. Furthermore, the excellent adhesive characteristics of Klüberbio AG 39-602 N help extend relubrication intervals.

Increasing efficiency

Characteristics such as optimum lubricity, high protection against wear and corrosion, or resistance to temperature and ageing are common to all specialty lubricants from Klüber. They help minimise downtime and enhance the reliability and service life of hydroelectric power plants.

Do you need help with selecting the right lubricant? Would you like to find out your plant's potential for energy efficiency gains?

Whether you need us for consulting or specific calculations – the specialists from Klüber Lubrication are happy to assist you!

hydropower@klueber.com



Edition 10.24

Publisher and copyright:
Klüber Lubrication München GmbH & Co. KG
Geisenhausenerstraße 7, 81379 München, Germany, HRA 46624
www.klueber.com