



# Flygt Bibo<sup>α</sup>

THE NEXT GENERATION OF DEWATERING PUMPS



A photograph of three miners in a dark tunnel. They are wearing high-visibility yellow-green jackets with reflective stripes, dark blue pants, and hard hats (yellow, orange, and red). They are looking at a smartphone held by the miner in the middle. In the background, a large, shiny, curved metal pipe or tunnel structure is visible, illuminated by a bright light source. The rock walls of the tunnel are rough and textured.

## Bibo<sup>α</sup> and the vision of an autonomous mine

A global leader in automated and sustainable mining, New Boliden generates over 5.5 billion USD in annual revenues from its extraction of zinc, copper, lead, gold, silver, and tellurium.

In any mining application, dewatering is a vital process that ensures resources can be mined efficiently and effectively.

In order to improve overall mine productivity through advanced automated solutions, New Boliden partnered with Xylem to test a solution that would complement its wider automation program and improve efficiencies at its Renström mine site. New Boliden saw Bibo<sup>α</sup>'s advanced technology as the pump to support a fully autonomous mine.

After three years of field testing at Renström, Flygt Bibo<sup>α</sup>'s integrated intelligence reduced product and repair costs by as much as 40%. As a result, Bibo<sup>α</sup> has become an important part of New Boliden's smart dewatering solutions and the vision of the autonomous mine.

"The installation of the first Flygt Bibo<sup>α</sup> pumps at Renström brought a significant change to the way we approach traditional dewatering practices due to the pump's ability to utilize intelligence beyond standard solutions. For the first time, we had access to a pumping system that could automatically adapt to its environment, working only to accommodate real-time conditions in the field. This was a game-changer for us as it optimized pumping performance without the need for hands on intervention, allowing our mining processes to continue without interruption."

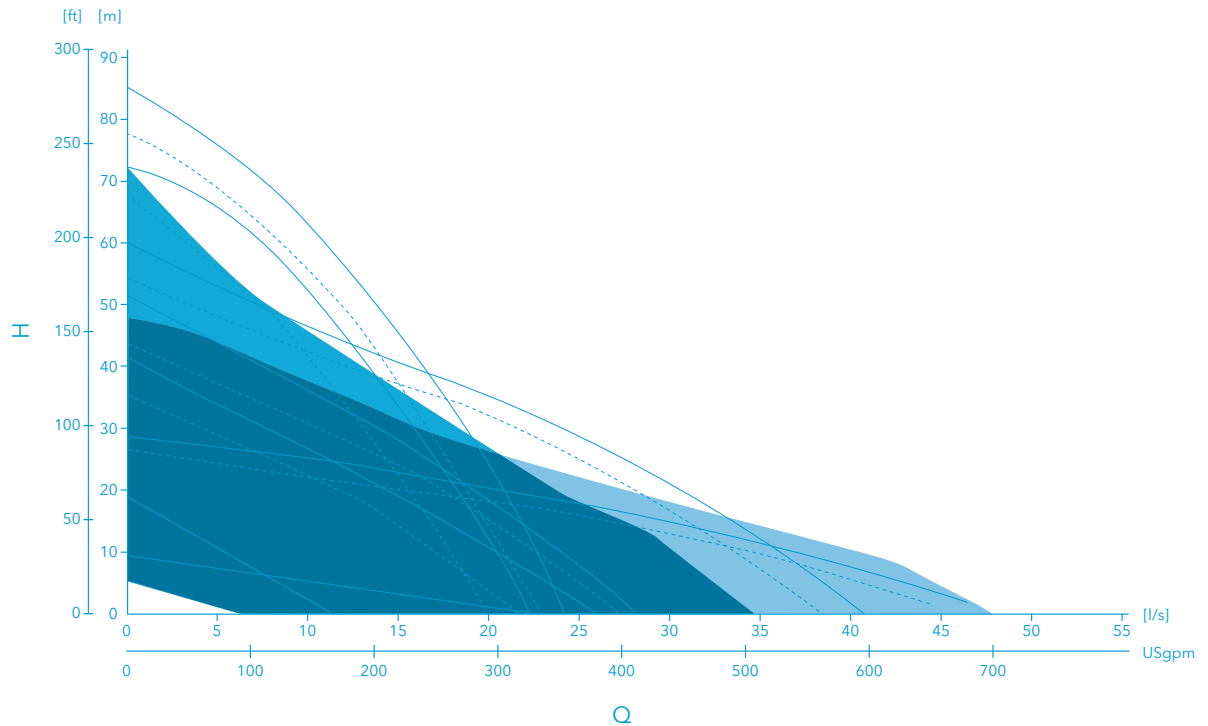
Mats Isaksson Senior Development Engineer, New Boliden



## Flexible and Efficient

The Innovative technology creates the future standard of flexibility.

With built-in intelligence Bibo<sup>®</sup> will cover a range of traditional drainage pumps since it adapts speed and performance in a field instead of a static curve.\*\*



## Reliable and Robust

Extremely robust, compact and easy to use.

**Plug and play** with no configurations needed.

**Robust design** ensures uninterrupted pumping in any dewatering operation.

**Reduced wear** up to 70%\*:

- › Adapting speed to prevent snoring and dry running
- › Always run in the right direction

**Reliable** performance through built-in motor protections, including:

- › Amperage
- › Temperatures
- › Phase loss and imbalance
- › Over / under voltage
- › Soft start and stop

\* Compared to Flygt 2600 and 2800 series.

\*\* Lines represent the performance curve of various traditional pumps. Solid color demonstrates the Bibo's performance field.



## Improved Performance

This compact 8kW pump delivers QH-performance from a 2kW up to 10kW pumps and last up to 4x longer than a traditional dewatering pump.



## Improved Asset Management

Reduced inventory due to:

- › **30% fewer parts\*** than traditional pumps
- › Since the pump covers a QH-field it enables standardization to fewer pump sizes



## Improved Life Cycle Cost

- › Increases **time between service** and decreases **maintenance cost** by up to 50%\*
- › Reduces **energy consumption** by up to 60%\* since always operating at best efficiency point



## Improved Design

Integrated Control System

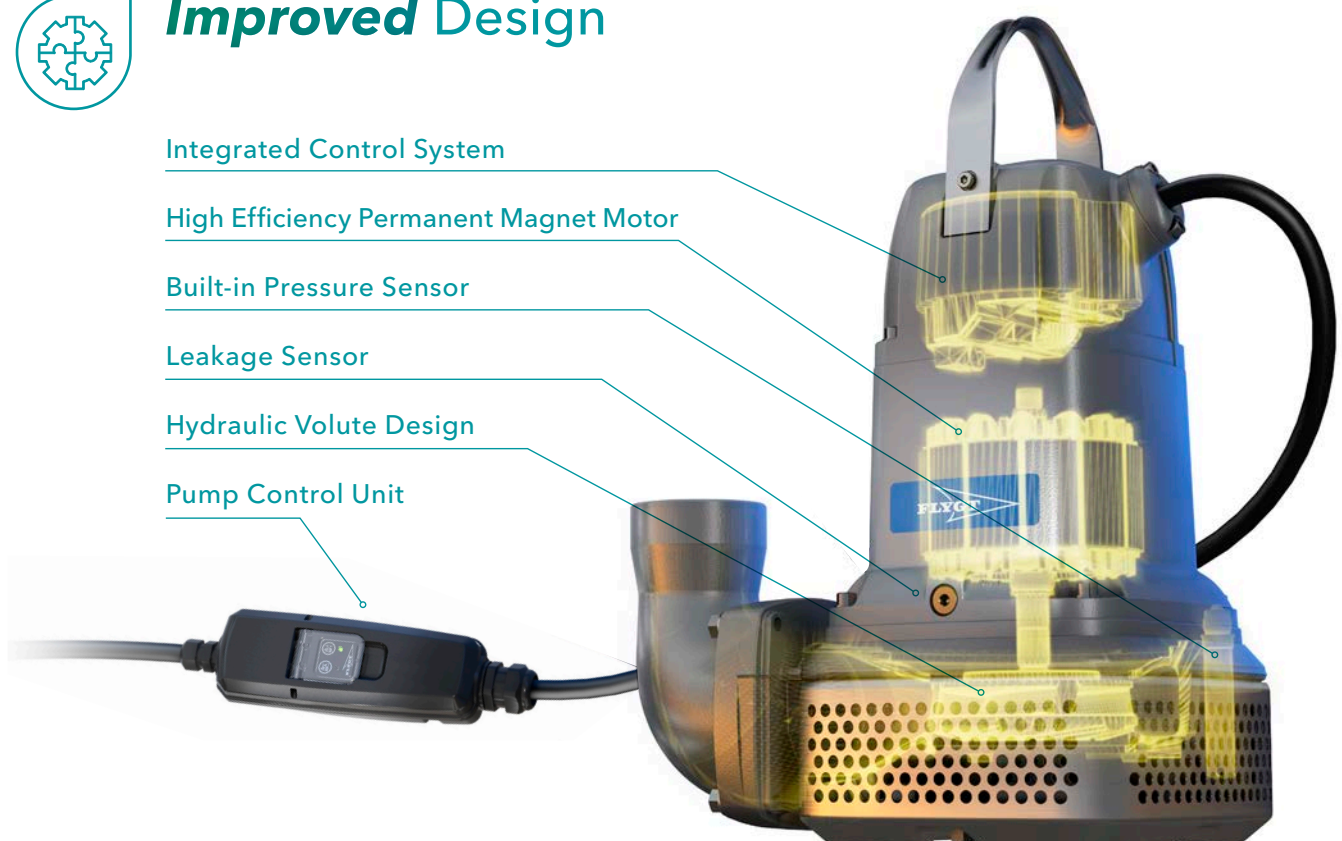
High Efficiency Permanent Magnet Motor

Built-in Pressure Sensor

Leakage Sensor

Hydraulic Volute Design

Pump Control Unit





# Welcome to the future of dewatering pumps.

Flygt Bibo<sup>α</sup> offers you increased savings opportunities through:

## Innovation

Game changing technology pioneers the next generation of drainage pumps

## Performance Field

Expand performance beyond a static QH curve

## Reduced Wear

Adapt speed to any need, no snoring or dry running

## Reliability and Robustness

Compact design out-performs traditional drainage pumps

## Improved Performance

Enhanced flexibility and easy to use

**α**

**Alpha** | al-fuh |

*(Noun, Greek)*

1 The first; beginning.

*(Adjective, Greek)*

1 Having the highest rank in a dominance hierarchy.

2 Being the most dominant, powerful, or assertive of a particular group.

# Xylem ['zīləm]

- 1) The tissue in plants that brings water upward from the roots
- 2) A leading global water technology company

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to [xyleminc.com](http://xyleminc.com)

## Free Line group

We offer:

- Engineering and technical solutions of Xylem for water supply, wastewater and water purification systems, which are leading in the world.
- A full range of pumps and equipment for such applications as supplying drinking or untreated water, diversion of industrial wastewater, sewage, drainage, monitoring installations and operation, primary and secondary biological treatment, filtration and disinfection.
- Technical support and maintenance of pumps. Our local service center provides comprehensive services and support for safe, efficient and reliable operation. You can rely on us to ensure trouble-free operation and minimal downtime. We will quickly respond and give a professional answer to your questions, as well as provide high-quality service using original spare parts.

### Free Line Group LLC

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