

DECANTER CENTRIFUGES & PLANTS FOR SOLID/LIQUID SEPARATION



HILLER 4.0 INNOVATIVE SOLUTIONS FOR OUR CUSTOMERS

Industry 4.0, Internet of Things (IoT), cloud, machine-learning and predictive maintenance - all terms that are now an everyday part of industry. This digital revolution also offers opportunities in dewatering using HILLER decanters, offering additional value to our customers.

Predictive maintenance, condition monitoring of the centrate, automated polymer dosing, remote monitoring of the

decanter and the integration of the innovative HILLER control system *SEE-Control pro* into the overall control of the plant: all this leads to a networking of man, machine and data which ensures highest operational safety and efficiency for the customer.

HILLER CENTRATE CONTROL

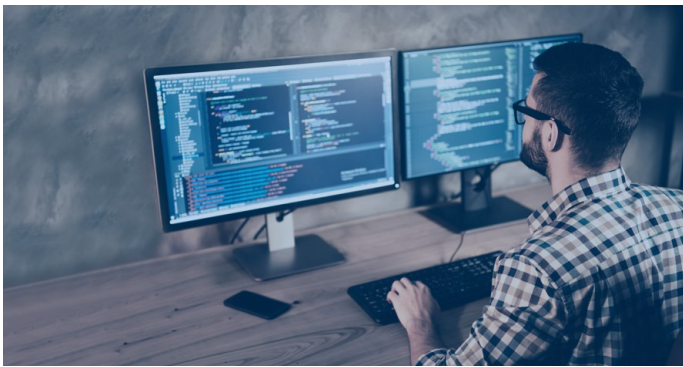
The highest possible process stability is also guaranteed by HILLER's automatic

centrate control. This system uses an 'object sensor' to monitor the quality of the centrate water and can intervene to regulate the process. By means of an intelligent module specially developed by HILLER, the polymer or feed quantity is changed depending on the measured centrate colour. This automatically optimizes the polymer consumption and prevents overdosing.

HILLER REMOTE MONITORING

With the development of the Remote Cockpit, HILLER established a leading position in the market years ago. The flexible remote maintenance solution via an internet-based service portal and network of intelligent terminals considerably reduces downtime of decanter plants or even avoids it completely.

HILLER remote maintenance is designed as a complete universal solution for the secure connection of industrial networks via the internet. It is equally as suited for the operation of a small sewage treatment plant as for the connection of a large number of industrial decanters which are serviced worldwide. All you need is access to the internet, either via your company network, via the DSL connection at home or remote office, or on the road via mobile network. If required, a HILLER service technician can reach the machines and plants within minutes at the click of a mouse.



ADVANTAGES:

- fast support in case of incidents
- continuous process optimization
- low technical effort
- warning messages before maintenance or malfunctions
- simple and safe connection
- simple administration
- detailed reporting
- intelligent machine learning

HILLER remote maintenance can be offered with optional data recording. Data is stored in the cloud and analysed and displayed using dashboards (trends, real-time values). In case of alarms or maintenance messages both the customer and the HILLER service team can be informed immediately via email. For example, when an oil change is due, the appropriate measures can be taken at an early stage.

MACHINE-LEARNING

Due to further development of data analysis and by means of „machine-learning“, the system automatically recognizes whether the decanter is running optimally or whether there is a need for maintenance or readjustment. Added to this is the online condition monitoring CMS from Siemens, which monitors the condition of the main bearings and issues a message before damage occurs.

This system can be retrofitted in all HILLER decanters.

HILLER SEE-CONTROL PRO

There is also a new generation of the HILLER control unit, the *SEE-Control pro*. It incorporates a larger display with the usual mobile phone touch ProCap and a high resolution 1280x800px screen. Interface to the main plant PLC is by Profinet.

The visualisation has a completely new and modern design, which has also won the German Design Award in the category „Excellent Product Design - Human-Machine-Interface“.

Integrated tutorial videos support the operator during operation or maintenance of the decanters.

The SSD extension integrated as standard allows trend data to be stored for up to 2 years. A specially developed coating protects the boards better and longer than conventional coatings.

Additional system components, such as the solids conveyor, are integrated into the *SEE-Control pro*.

