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all things flow

Pressure control FPPU

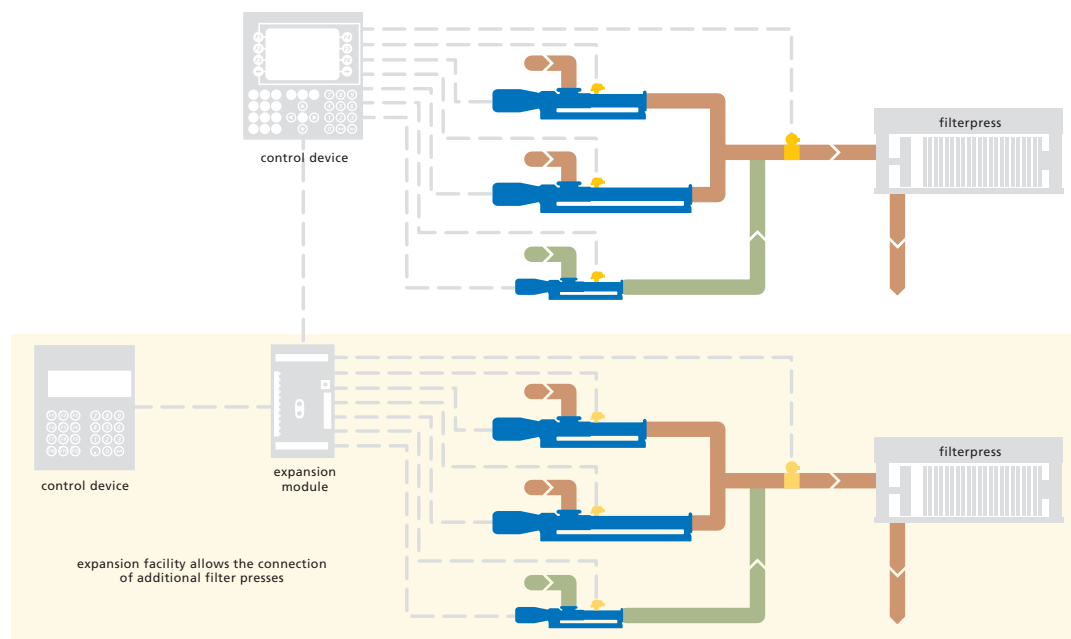**seepex filter press feeding system**

The FPPU pressure control is a complete system solution for filling filter presses. The modular structure permits a simple and cost-efficient adaptation to the respective customer demands. Connection to a site control system is possible through various bus systems. Several filter presses can be charged through the use of expansion modules. The following functions are integrated in the compact control:

Setting of the delivery rate	The delivery rate of the pumps depends on the filtration pressure and is set through a freely programmable characteristic curve.
Integrated prefilling pump	A prefilling pump can be connected for faster filling of the filter press.
Integrated dosing pump	A dosing pump can be connected to dose additional chemicals.
Pressure control	In the final phase of the filling process, the filter press is filled with constant pressure. The reference variable of the pressure control can be set as desired.
Operating and fault messages	Depending on the type of fault, either a warning is issued or the process is switched off. Faults are listed in clear text.
Dry running protection	for protecting the pumping elements rotor and stator against dry running.
Overpressure protection	with freely adjustable shut-off pressure.
Settable parameters	Plant and control parameters such as drive data and limit values can be set. All the entries are password-protected.
Saving the plant-specific characteristic curves	For fast and simple plant setting, the characteristic curves can be saved and retrieved again later on.
Connection to site systems	Connection to a site control system is possible through various bus systems.
Remote data transfer	permits fault diagnosis through a GSM modem controlled from the **seepex** headquarters.

Process of filter press feeding

control device

filterpress

control device

expansion module

filterpress

expansion facility allows the connection of additional filter presses

Characteristics of the pressure control FPPU

~ Simple operation through various display pages

~ Different operating languages can be set

~ Membrane keyboard for parameter entry and switching the control functions

~ Storage of the control parameters in the user ROM that is not affected by power loss

~ Additionally integrated resettable operating hours meter
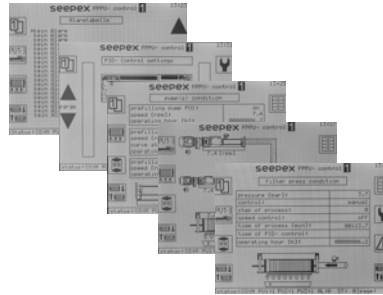
Control device with various display pages permits simple and user-friendly operation

Technical Data

Structure:	PLC with integrated LC-display	**Processor**	
Supply:	24V DC	**Command cycle time:**	approx. 0.4µs (with 70% bit and 30% analogue processing)
Power consumption:	max. 20W		
Front:	LC-display: 5.7" 320 x 240 pixels, monochrome Multilingual display Membrane keyboard with 40 keys 16 keys with LEDs Protection class IP65 (front)	**Memory structure:**	User RAM 700 kByte System PROM 600 kByte FlashPROM User PROM 1.4 MByte FlashPROM
		Signals:	10 digital inputs with 24 V DC rated voltage
			4 analogue power inputs 0 (4) - 20 mA (optionally 0 - 10 V DC possible)
Dimensions:	220 x 205 x 111 (HxWxD)		8 digital outputs with 24V DC rated voltage, maximum load 400 mA
Installation:	in the control cabinet door		4 analogue power outputs 0 (4) - 20 mA (optionally 0 - 10 V DC possible)
		Expansions:	Three expansion slots for adaptation to additional customer demands
		Communication:	Serial RS232 interface for connecting a programming device or a modem for service purposes. A CAN interface can be used for additional expansions.
		Buffer battery:	Lithium battery 3V / 950 mAh, life cycle approx. 5 years