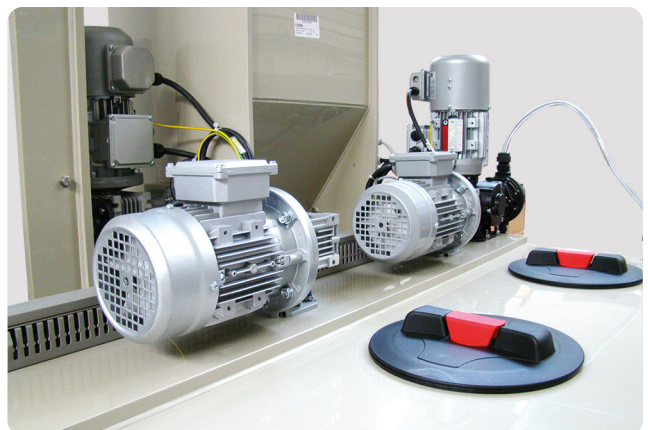
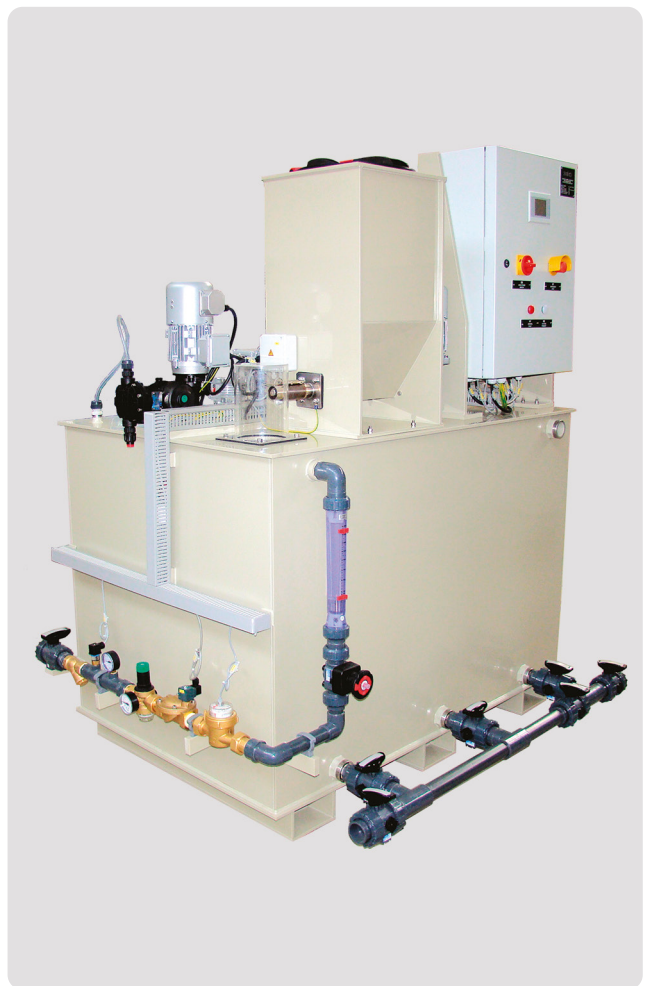


# seko

## PolyCendos

Effective polymer  
metering



# PolyCendos

## Effective polymer metering

The PolyCendos family offers a complete range of polymer preparation systems. Covering all the most common application needs where polymer solution preparation is required, PolyCendos offers ease of installation and maintain, with features designed to optimise costs throughout the process.

SEKO's PolyCendos Series has been specifically designed to provide effective solutions to the needs of water-treatment professionals



## A complete range of polymer batching and metering systems

PolyCendos automatically prepares polymer solutions which are used as coagulants for the eventual removal of suspended particles in multiple water-treatment processes. These applications include swimming pool maintenance, oil recovery, colour removal, paper production, mineral processing and the various stages of wastewater treatment.

The PolyCendos family comprises four models offering up to 8,000 litres of polymer solution per hour. The range also comes with a variety of electrical control panels, mixers, diaphragm pumps and tank sizes to offer an optimal solution for every application. Its design also means that PolyCendos delivers flexible and compact footprint solutions to fit even confined spaces.



# Industry Applications



## Municipal Water Treatment

In both drinking water and process water treatment, polymers play a crucial role in improving clarification and filtration. When properly prepared and dosed, they facilitate the aggregation of fine particles, colloids and suspended matter into larger flocs that can be easily removed by sedimentation or filtration. This ensures higher water quality, greater process reliability and reduced operating costs, while meeting regulatory and safety standards for potable and industrial applications.



## Wastewater Treatment

In industrial wastewater treatment, polymers and flocculants accelerate the separation of solids from liquids by enhancing settling and flotation processes. Proper polymer preparation ensures that suspended solids, organic matter, oils and other impurities can be efficiently removed from the effluent stream, reducing environmental impact and helping treatment plants comply with strict discharge regulations. This also makes subsequent treatment stages more effective and energy efficient.



## Sludge Treatment

Sludge treatment relies heavily on polymers to improve dewatering efficiency. A well-prepared polymer solution helps condition sludge so that water can be more easily separated during mechanical dewatering processes such as centrifugation and filtration. This results in a drier sludge cake, reduced disposal volumes and lower handling and transportation costs. Proper polymer activation is therefore essential for optimising the performance and cost-effectiveness of sludge management operations.



## Industrial Processes

Polymers are indispensable in supporting solid-liquid separation and improving production efficiency. In the paper industry, they enhance fibre retention, drainage and sheet formation. In chemical and petrochemical plants, they contribute to clearer process water and more efficient recovery of valuable by-products. In mineral processing, they aid the settling of fine particles, improving the quality of recovered minerals. In the food and canning industries, polymers help clarify process water and manage wastewater, ensuring compliance with hygiene and environmental standards.



## Construction characteristics

The following are the key elements used in the construction of the PolyCendos range.

- An automatic water supply system comprising a shut-off valve, filter, safety pressure switch, pressure gauge, pressure reducer valve, solenoid valve, water meter with pulses, control valve, flow meter (with flow switch for minimum level flow rate) and special dispensing nozzle (for units that work with powder polymers).
- Tanks made entirely in PPH, with inspection covers and emptying valves for each chamber.
- Customised mixers, optimised to ensure a homogeneous mixture, are made of stainless steel.
- Batching screw made entirely of stainless steel, with batching adjustment managed using a precise speed regulator.
- Electrical protection and control panel, with built-in buttons and controls or touchscreen panel, designed for manual/automatic operation and equipped with emergency stop and wiring to all system components.
- Conductivity level probes for high, low and very low levels with emergency light warning.
- Separate safety level switch for overflow levels (general fault alarm warning).



Electrical control panel

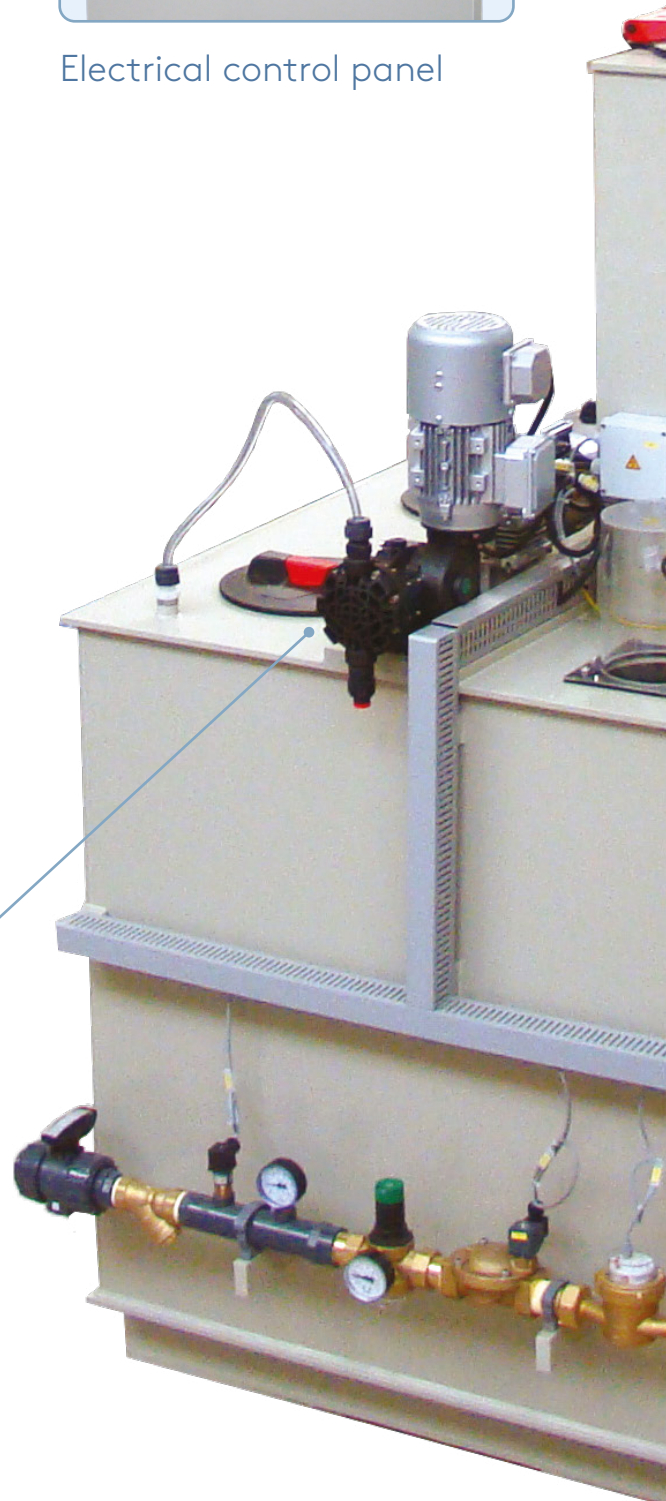
## Optional equipment

The following are the key elements used in the construction of the PolyCendos range.

- Minimum level probe in the powder hopper
- Stirrer in the batching tank
- Vibrator for hopper
- Prefabricated post-dilution systems



Diaphragm dosing pumps, mixers and stirrers

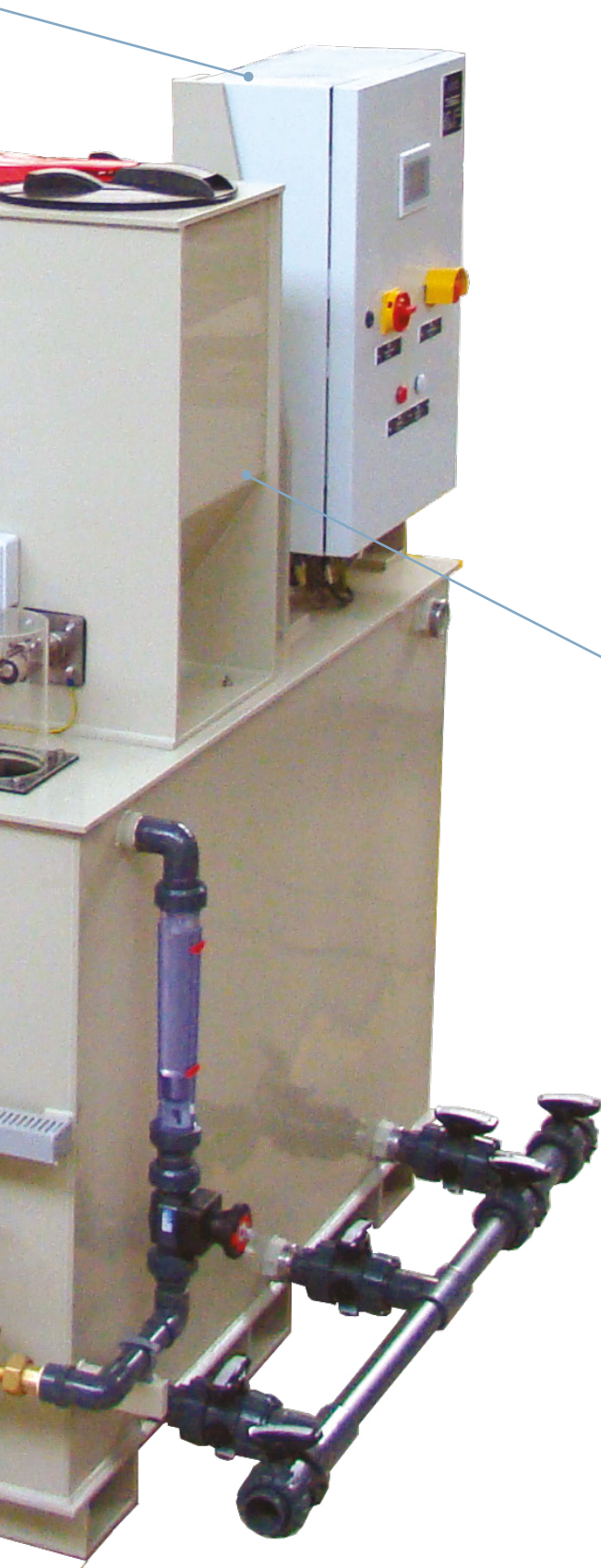




## Continuous flow system

PolyCendos's triple continuous flow system is designed as a batch flocculation aid for the preparation of polymer solutions, featuring a storage tank subdivided into three chambers. Choose from four models to fit any application need.

- Processing of liquid polymer (0.05–1.0 %) and powdered polymers (0.05–0.5 %)
- Minimal product carry-over
- Polymer solution extraction and drainage of chambers via the front of the storage tank
- User-guided input of the solvent concentration as well as calibration of the powder metering unit and liquid concentrate pump
- PLC Programmable logic
- Version with terminal box available on request
- Extraction rate up to 4,000 l/h

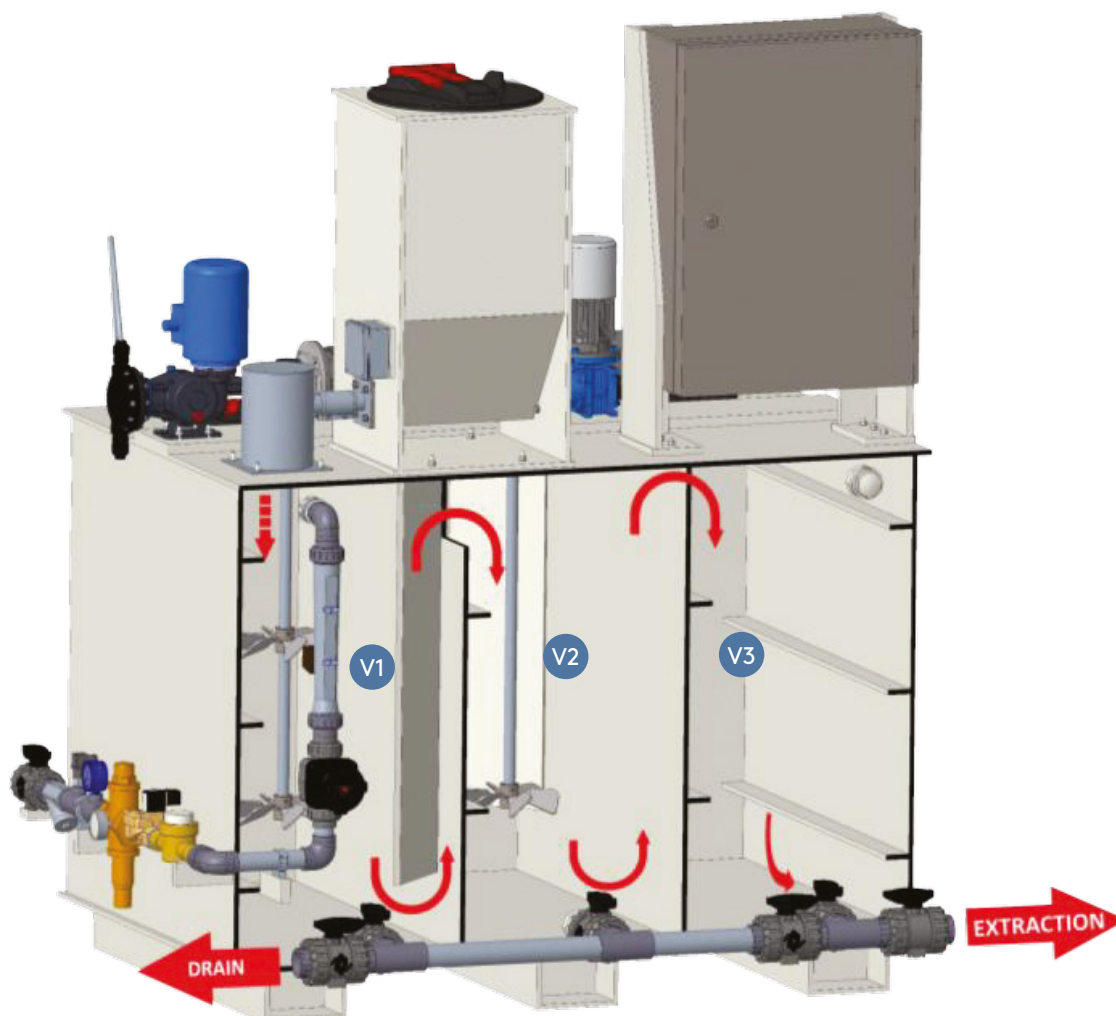


Powder feeder



## PolyCendos operation

The polymer preparation tank is divided into three chambers: **dissolving (V1)**, **maturing (V2)** and **storage (V3)**, interconnected by siphons that form a perfect flow between the sections, which is necessary for the formation of high-quality solutions.



The dosed polyelectrolyte comes into contact with water. The water/polyelectrolyte mixture then drops into the tank below where the dissolving phase begins. In this first chamber **V1**, a slow agitator keeps the contents of the tank moving ensuring thorough homogenisation of the solution. The siphon transfers the solution to the maturing chamber, **V2**, where another slow agitator keeps the solution uniform until maturing is complete. Then the solution is transferred to storage chamber **V3** from where it can be transferred for use.

The level switches installed in this final chamber control the automatic functions:

- **Max and normal level:** when the solution reaches the maximum level, this switch stops the powder

dosing unit/liquid polymer dosing pump and closes the water inlet solenoid valve. Whilst level is normal, the switch enables the dosing unit to function and opens the water solenoid valve.

- **Minimum level:** when the solution falls to minimum levels and below, this switch stops the dosing pump and sets off an alarm indicator on the electrical control panel.
- **Overflow level:** when the solution reaches the overflow point, this switch stops the powder dosing unit/liquid polymer dosing pump and closes the water inlet solenoid valve, preventing delivery of mixed polymer solution to the drain.

# World Leaders in Dosing Equipment

Since 1976, SEKO has delivered unmatched chemical dosing precision, consistency, and reliability to the water-treatment and cleaning and hygiene industries. Our next-generation pump solutions revolutionise process management, enabling operators to achieve superior performance, efficiency and sustainability.



World leader  
in pump production



Water & Industry  
division



Cleaning & Hygiene  
division



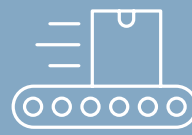
1,400+ employees



23 fully-owned  
companies



Operating in  
125 countries



1,750,000+ pieces  
produced annually



2,500+ in-house moulds



Pioneering IoT  
remote technology



25 active patents  
across 40 countries



15 new project  
developments in 2024



5 new product  
launches in 2024



Manufacturing plants in  
IT, RO, CN, USA & BR



ISO 9001, ISO 14001 &  
ISO 45001 certified



100% of products tested  
before shipment

**seko**

Globally Present,  
Locally Active

# Globally Present, Locally Active



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