



ferrum

ECO LINE PUSHER CENTRIFUGES
BEST IN CLASS



SUCCESS NEEDS TARGETS OPTIMIZING PRODUCTION AND REDUCING COSTS

Centrifuges for solid-liquid separation are designed for a wide range of applications. However, the economic objective behind the processing procedure is the same everywhere: To keep production high without any loss of quality and to do so at low cost in the long term.



INCREASING PRODUCTION

Increasing production not only leads to higher production volumes, but often also to increased efficiency. This requires production facilities that provide a solid foundation for increasing production. The Ferrum pusher centrifuge plays a crucial role here, as it helps to optimize production facilities and thus increase efficiency and output.



REDUCING COSTS IN THE LONG TERM

Sustainable investments are not only future-proof, but also save costs in the long term. The secret lies in making an investment that not only creates value in the short term, but also lasts for years to come. This is where the Ferrum centrifuge becomes important. Our innovative solutions not only offer immediate benefits, but are also designed to deliver long-term cost savings. With proven efficiency and reliability, Ferrum centrifuges help keep operating costs low over the lifetime of your investment.



OPTIMIZING PROCESSES

The key to a successful production process is to maximize the performance of all components. In this respect, optimization plays a crucial role by ensuring that every element in the chain is working to its full potential. This is exactly where Ferrum pusher centrifuges come into play. Thanks to their proven efficiency and reliability, they help to boost performance in your production chain.



MAINTAINING QUALITY

Increasing production, optimizing processes and reducing downtime? By all means, but this should not be at the expense of quality. After all, maintaining quality also means securing sales in the long term.

SPECIFICALLY IMPLEMENTING WHAT YOU NEED



ECO LINE BRINGS “FERRUM QUALITY” TO THE WHOLE WORLD

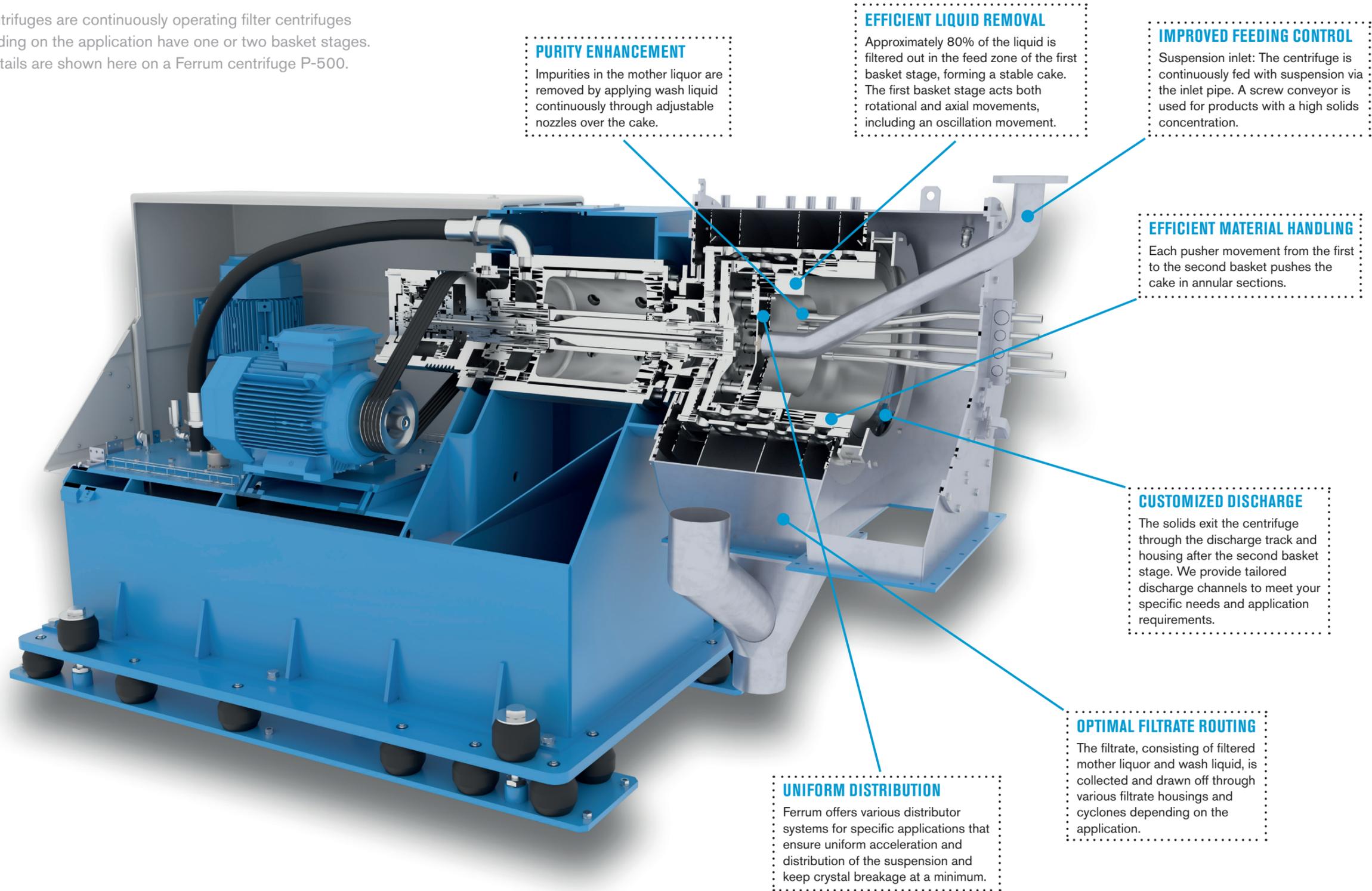
Ferrum machines are known worldwide for their reliability. Over 100 years of experience go into every machine. And you can see that in our machinery: Top quality at all levels and standard designs lead to needs-based and sustainable solutions. That is why many of the world's largest companies put their trust in our centrifuges. They all also appreciate our global service and fast spare parts delivery.

FERRUM PROCESS SYSTEMS – CENTRIFUGE TECHNOLOGY AT ITS BEST

We are one of the world's leading manufacturers of industrial centrifuges for solid-liquid separation. Our many customers from different industries vouch for the quality and variety of our solutions for dynamic separation processes. If you work with us to perfectly integrate a Ferrum centrifuge into your process, you'll receive a promise that pays dividends: A worthwhile investment in the long term that does not neglect quality, even when under high pressure.

DETAILS THAT MAKE A DIFFERENCE

Pusher centrifuges are continuously operating filter centrifuges and depending on the application have one or two basket stages. Product details are shown here on a Ferrum centrifuge P-500.

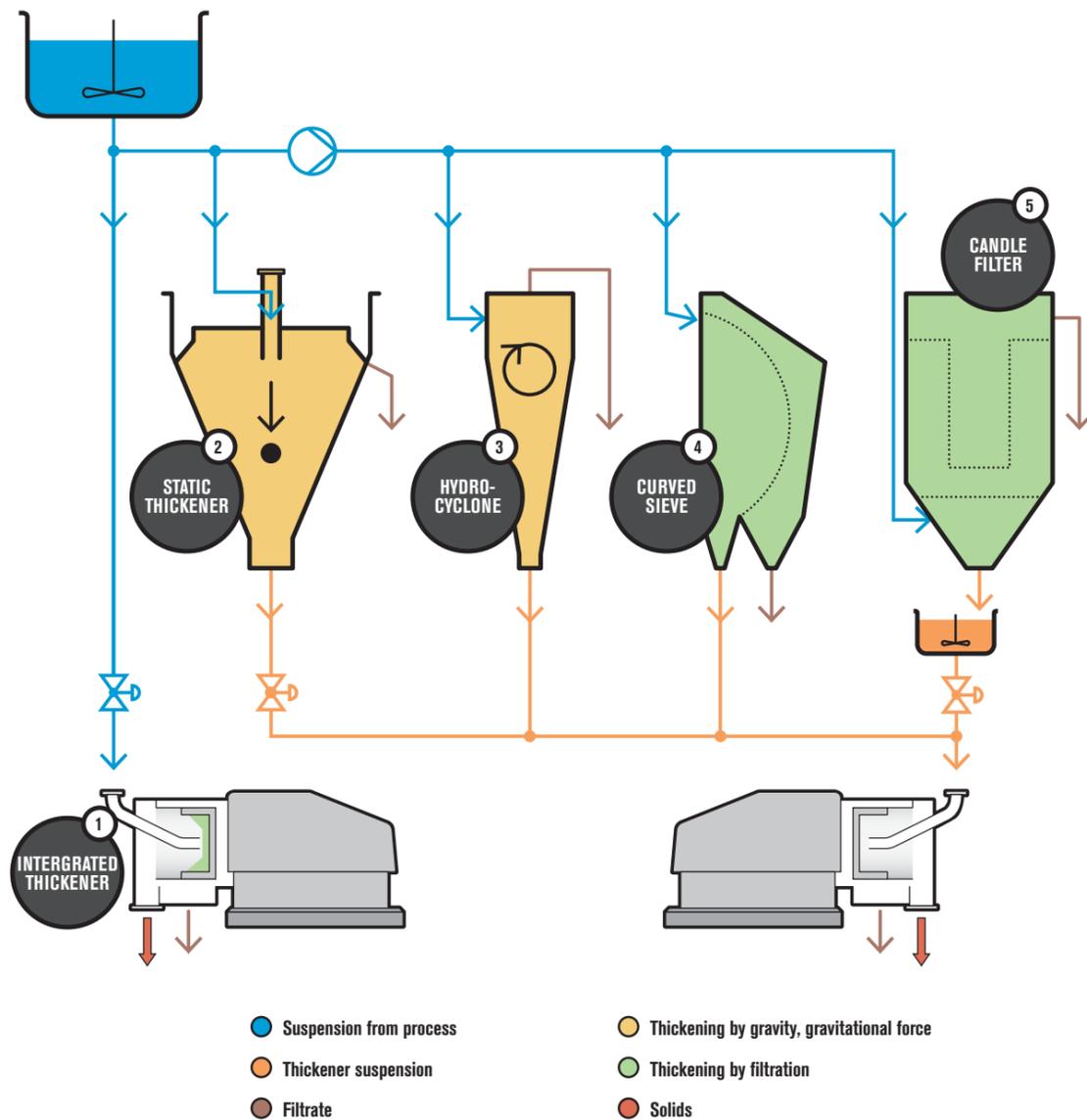


PRE-THICKENING AN IMPORTANT WORKSTEP

As a continuously operating machine, the pusher centrifuge requires process conditions and solids concentrations as constant as possible to ensure optimum operation and consistent product quality.

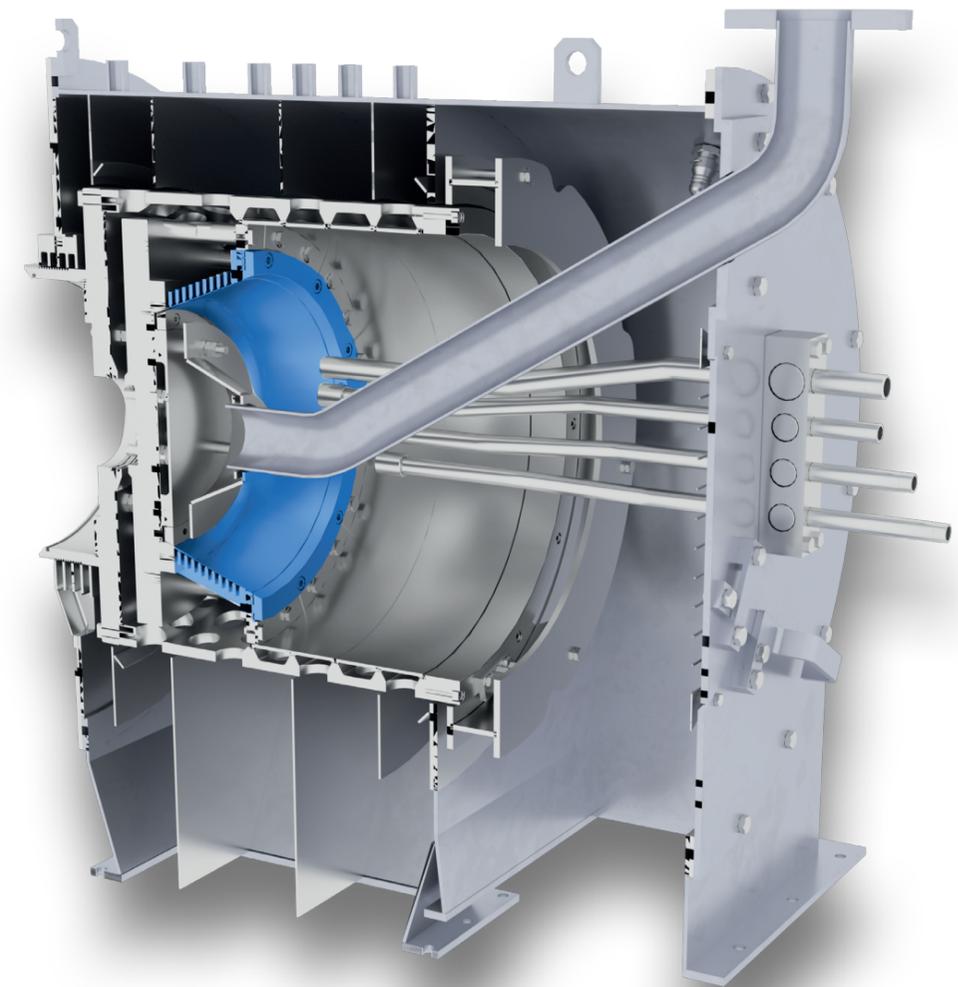
For the process and plant-related reasons, the necessary feed conditions are often not achieved. As a solution for this problem, Ferrum therefore offers various pre-thickening systems and dosing devices.

Depending on requirements, Ferrum supplies the design, production and automation of the related system.



INTEGRATED THICKENER A FERRUM INNOVATION

The integrated thickening cone for pusher centrifuges was developed and patented by Ferrum. Depending on the application separate external pre-thickening is not required. Fluctuating feed concentrations are compensated, cake formation is improved and the product is accelerated more gently. Today for certain applications the integrated thickening cone is our standard.



MECHANICAL DESIGN

PM-230

Based on the very successful design, Ferrum has consistently developed this pusher centrifuge further, always in accordance with the latest requirements and guidelines. The PM-230 guarantees best solid-liquid separation with high and constant product quality.



PM-230

- + **Pusher centrifuge**
 - Mechanical push drive, without a hydraulic system
 - Application-specific optimization possibilities: Inlet and outlet section, screen segments, solid discharge, product washing, etc.

APPLICATIONS

- + **Basic Products**
 - Calcium tartrate
 - Sodium carbonate
 - Sodium chloride
 - Proteins
 - Sodium bicarbonate
 - Calcium phosphate
 - Rock salt (NaCl), Sea salt
 - Adipic acid
 - Bisphenol A
 - To mention the most frequently used

AVAILABLE SIZES

- + **Pusher Centrifuge**
 - PM-230

HYDRAULIC DESIGN

P-360 – P-1000

Our centrifuges for the petrochemical industry meet the highest safety standards. Thanks to their robust and reliable design, Ferrum centrifuges guarantee long and trouble-free operation. This enables cost-effective production and increases the efficiency of your plant, not least thanks to the proven Ferrum technology.



P-360 – P-1000

- + **Pusher centrifuge**
 - Hydraulic push drive for high pushing forces.
 - Application-specific optimization possibilities: Inlet and outlet section, screen segments, solid discharge, product washing, etc.
 - Low oil pressures and a robust design enable Ferrum pusher centrifuges to provide long-lasting, reliable performance even in the harshest conditions.

APPLICATIONS

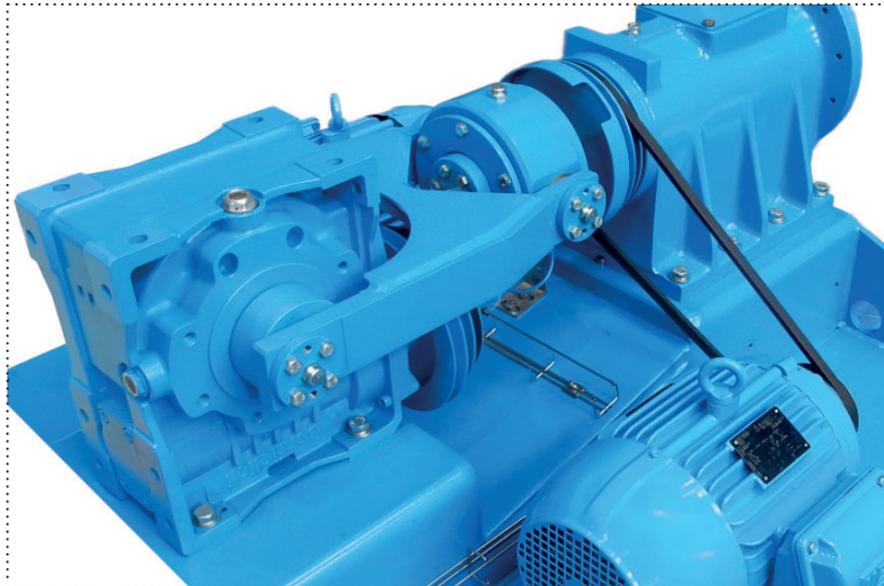
- + **Basic Products**
 - Sodium chloride
 - Sodium sulphate
 - Ammonium sulphate
 - Ammonium nitrate
 - Potassium sulphate
 - Potassium nitrate
 - Nickel sulphate
 - Potassium chloride
 - Urea
 - To mention the most frequently used

AVAILABLE SIZES

- + **Pusher Centrifuges**
 - P-360
 - P-500
 - P-630
 - P-1000

MECHANICAL DESIGN

PM-230



DIMENSIONS

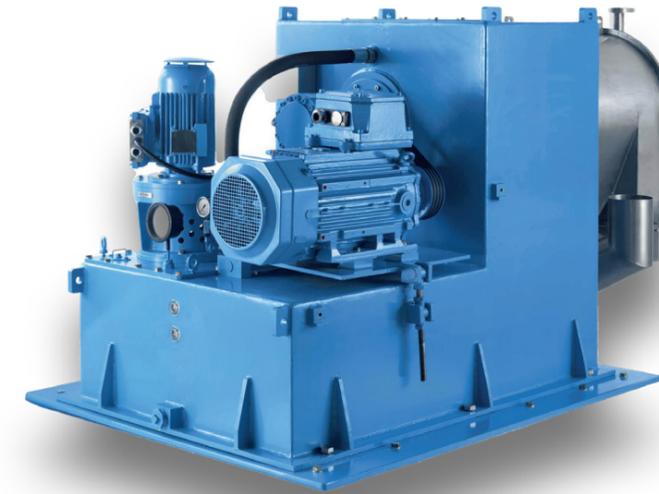
Pusher Centrifuges	PM-230	Unit
L	1'700	(mm)
W	1'200	(mm)
H	800	(mm)

TECHNICAL DATA

Pusher Centrifuges	PM-230	Unit
Basket diameter	230	(mm)
Number of stages	1-2	-
Max. Rotor speed	3'200	(min-1)
Max number of strokes	100	(min-1)
Max. G-force	1'316	(g)
El. power installed with NaCl rotor / stroke	4/3	(kW)
Weight	800	(kg)
Max. NaCl throughput / dependent on feed conditions)	1.5	(t/h)

HYDRAULIC DESIGN

P-360 – P-1000



DIMENSIONS

Pusher Centrifuges	P-360	P-500	P-630	P-1000	Unit
L	2'700	3'550	3'630	3'600	(mm)
W	1'400	1'420	2'000	2'000	(mm)
H	1'250	1'640	1'770	1'770	(mm)
Height vibration isolation without counterweight	1'400	1'800	1'970	2'425	(mm)

TECHNICAL DATA

Pusher Centrifuges	P-360	P-500	P-630	P-1000	Unit
Basket diameter	360	500	630	1'000	(mm)
Number of stages	1 - 2	1 - 2	2	2	-
Max. Rotor speed	3'000	2'200	1'500	1'200	(min-1)
Max number of strokes	100	85	85	76	(min-1)
Max. G-force	1'810	1'352	792	559	(g)
El. power installed with NaCl rotor / stroke	11/75	22/15	45/22	37/110	(kW)
Weight	3'500	5'300	7'000	9'400	(kg)
Maximum NaCl throughput / dependent on feed conditions)	7	13	25	60	(t/h)

AFTERSALES SERVICE FAST AND RELIABLE

Our experienced consultation teams are there for you worldwide: Highly qualified and with a personal touch custom-tailored to your specific needs. Contact us and we will be more than happy to put you in touch with the right contact person.

SERVICE

A large team of experienced service specialists as well as various service centres are available to our customers worldwide. This ensures we can provide a fast and uncomplicated service.

- + **Prompt and uncomplicated support from our customer service team**
- + **Worldwide service centres**
- + **Maintenance, inspections, maintenance contracts**
- + **Modifications, upgrades and integration of new drive and control systems**
- + **Customer-specific training**

REMOTE SERVICE

Count on quick and competent support in any situation with Ferrum Remote Service. Our experts will help you ensure quality and safety all day, every day so you achieve your process goals.

- + **Fast, safe commissioning**
- + **Experienced troubleshooting**
- + **Expert process and systems control**

SPARE PARTS

You can count on high availability and short delivery times through an extensive and careful stock management of spare parts on our various sites worldwide.

- + **Reliable service worldwide**
- + **Competitive prices**
- + **Top manufacturer quality**
- + **Original parts only**



FERRUM PROCESS SYSTEMS ALWAYS WITHIN REACH



- **LOCATIONS**
- **REPRESENTATIVES**
- **SERVICE PARTNER**

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FURTHER INFORMATION ONE CLICK AWAY



LEARN MORE ABOUT FERRUM CENTRIFUGES

Everything you need to know about your application with our centrifuges.

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SERVICE AND ACCESSORIES



▶ ferrum.net/centrifuge-service

CONTACT NEW MACHINES



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