



# PAPX 307 Plus - Stronger than ever before!

## Palm Oil Purifier

Since the early days, Alfa Laval's goal has been to give our customers in the palm oil industry maximum mileage on their equipment at minimum costs. The introduction of the PAPX 307 Plus version of our leading palm oil purifier is the next step in this process.

### Application

The PAPX 307 Plus is used to purify the oil that overflows from the top of the mill's main settling tank. It removes impurities and insoluble water from the crude palm oil. Its operation is fully automated.

### Stronger than ever before!

The PAPX 307 Plus comes with further improved wear protection. In this version of our purifier, all frame parts that are exposed to wear are coming in stainless steel (frame hood, frame ring, frame top part and the outlet bend). This material change will not only have a positive impact on your yearly maintenance bill, but it will also substantially increase the lifetime of these parts adding to the overall lifetime of your equipment.

### Minimal oil losses

The partial discharge design makes sure that oil losses are kept to the absolute minimum. Short bowl opening times of less than 1 second allow only for separated sludge to be discharged.

### Reduced maintenance costs

Being a belt driven separator, there are no worms and worm wheels to worry about. The main bearings are limited to two identical pieces that are mounted on the bowl spindle shaft. Hence, maintenance costs are substantially reduced.

### Increased production time

With the partial discharge system the bowl does not need to be completely emptied at every discharge sequence. Shorter discharge cycles (32 seconds only) have a positive impact on the separator's effective production time.

### No water carryover

The sealing water is introduced directly into the sludge space. There is no chance of water carrying over with the purified oil once the feed is reintroduced after the discharge cycle.



PAPX 307 Plus purifier

### Comes with a proven track record

Buying the PAPX 307 Plus means acquiring equipment with a proven track record. With approximately 600 PAPX 307 purifiers having been installed since 1993 in South East Asia, Papua New Guinea, Africa, Central and South America, the PAPX 307 has become the most popular purifier in the palm oil industry. Building on the experience from these references, we have continuously developed our purifier to meet the needs of the industry.

### Service is never far way

Based in all the major palm oil centres in the world, Alfa Laval is more than just an equipment supplier. Our strategically placed resources, most of them with a palm oil background, will help you generate cost savings through the efficient management of your maintenance. Our customers can make use of our worldwide network of service workshops and distribution centres. Fast guaranteed service, expert advice, supply of genuine spare parts or customized total service contracts are just some of the services we have to offer.

### Operating principle

This purifier is a solids ejecting disc stack centrifuge. It's rotating bowl is driven by an electric drive motor via a flat belt and friction clutch. During the discharge sequence, the feed is shut and the bowl is filled with water to reduce the volume of oil in the bowl. High-pressure water is then fed into the bowl's discharge mechanism to induce a discharge. The discharge mechanism works by varying the hydraulic pressure via an array of water channels and drain nozzles. The volume of discharged sludge is always the same regardless of the external supply of high-pressure water. As the discharge is partial, only part of the bowl's volume is ejected, i.e. the separated sludge and some water. After the discharge sequence, water will be added back into the bowl to establish an oil-water seal before oil is reintroduced. Oil and high pressure water is fed to the purifier by external pumps.

### More information

More detailed information on technical features, references and standard scope of supply is available upon request.

### Capacity

On crude palm oil	8 m <sup>3</sup> /h
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### Motor

7.5kW (2 pole)
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Power consumption	start-up <11kW running <6kW
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Start-up time	4.0 to 6.0 min
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Stopping time	6.5 to 9.0 min
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### Bowl

Speed	approx. 8400 rpm
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### Operating Water

Pressure	150-600 kPa
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Total hardness	max 10 dH
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pH	>6
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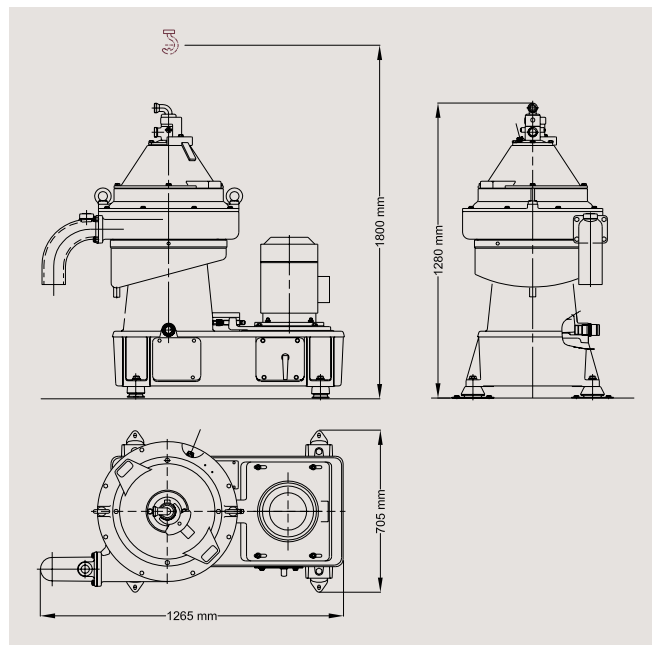
Salinity	max 100 ppm NaCl
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### Weights

Net weight	950 kg
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Gross weight	1,050 kg
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Volume	2.6 m <sup>3</sup>
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### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information direct.