



## Alfa Laval Clara 250

Multi-purpose centrifuge module for food and beverage industries



Alfa Laval Clara 250 separation unit.

The Alfa Laval Clara 250 is a complete “plug & play” separation system, based on the PX 810 centrifuge, which is mounted on a flexible and cost efficient module. It is designed for the food and beverage industries but can also be used for general purpose duties.

The Alfa Laval PX 810 separator, which is the core component of the Clara 200 system, is a bottom fed separator with Alfa Laval's unique fully hermetic design, which provides very gentle product treatment and zero oxidation as well as minimized energy consumption. The bowl is of steep angle design with all product wetted parts in stainless steel and o-rings and gaskets are food grade. It has variable discharge volume and is suitable for clarification duties with a wide range of solids content.

### Standard design

The Clara 250 system includes:

- Valves and components for product and utility handling.
- Inductive flow meter with volumetric totalizer.
- Sight glass in product outlet.
- Regulating valve for back pressure control.
- Pressure sensor with alarm for operating water supply.
- Flushing of the bowl exterior surface.
- Electrical cabinet, including PLC type EPC 60.
- Possibility to communicate with external system by Modbus TCP.

**Technical specification**

Hydraulic capacity (max)	25 m <sup>3</sup> /h
Solids space clarifier	5 lit
Discharge volume	3-10 lit
Power consumption max	16 kW
Motor power	18.5 kW
Weight complete module incl. separator	2200 kg
Weight separator, total	1370 kg
Weight bowl	310 kg
Weight motor	170 kg

**Connection details Clara 250 HF Clarifier**

Connection no	Description	Type / Size / Std.
201.1	Product inlet	Union DN 50 / DIN 11851
220.1	Product outlet	Union DN 50 / DIN 11851
222	Solids outlet	Clamp DN 100 / ISO2852
222.2	Solids pump outlet	Flange DN 65 / PV 16
301	Flushing water inlet	Hose Nipple / DN 15
340	Std-by liquid inlet	Hose Nipple / DN 25
375.1	Operating water inlet	Hose Nipple / DN 15
409.1	Oil/frame cooling water inlet	Hose Nipple / DN 15
470	Separator drain	Hose Nipple / DN 15
635.1	Seal cooling water inlet	Hose Nipple / DN 15

## Operating principles

The process liquid is continuously fed into the unit (Fig. 2) through the connection 201 and then into the centrifuge bowl through the hollow drive spindle. The solids are collected in the periphery of the rotating bowl and are discharged at preset intervals. The solids are discharged from the separator via a cyclone and leaves the module from connection 222, alternatively via an integrated solids pump (see options). The clarified liquid is pumped out of the bowl by means of an built-in impeller and the clarified liquid leaves the module through connection 220.

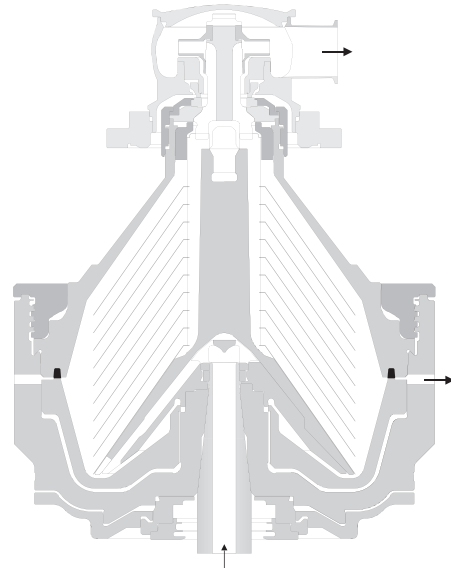
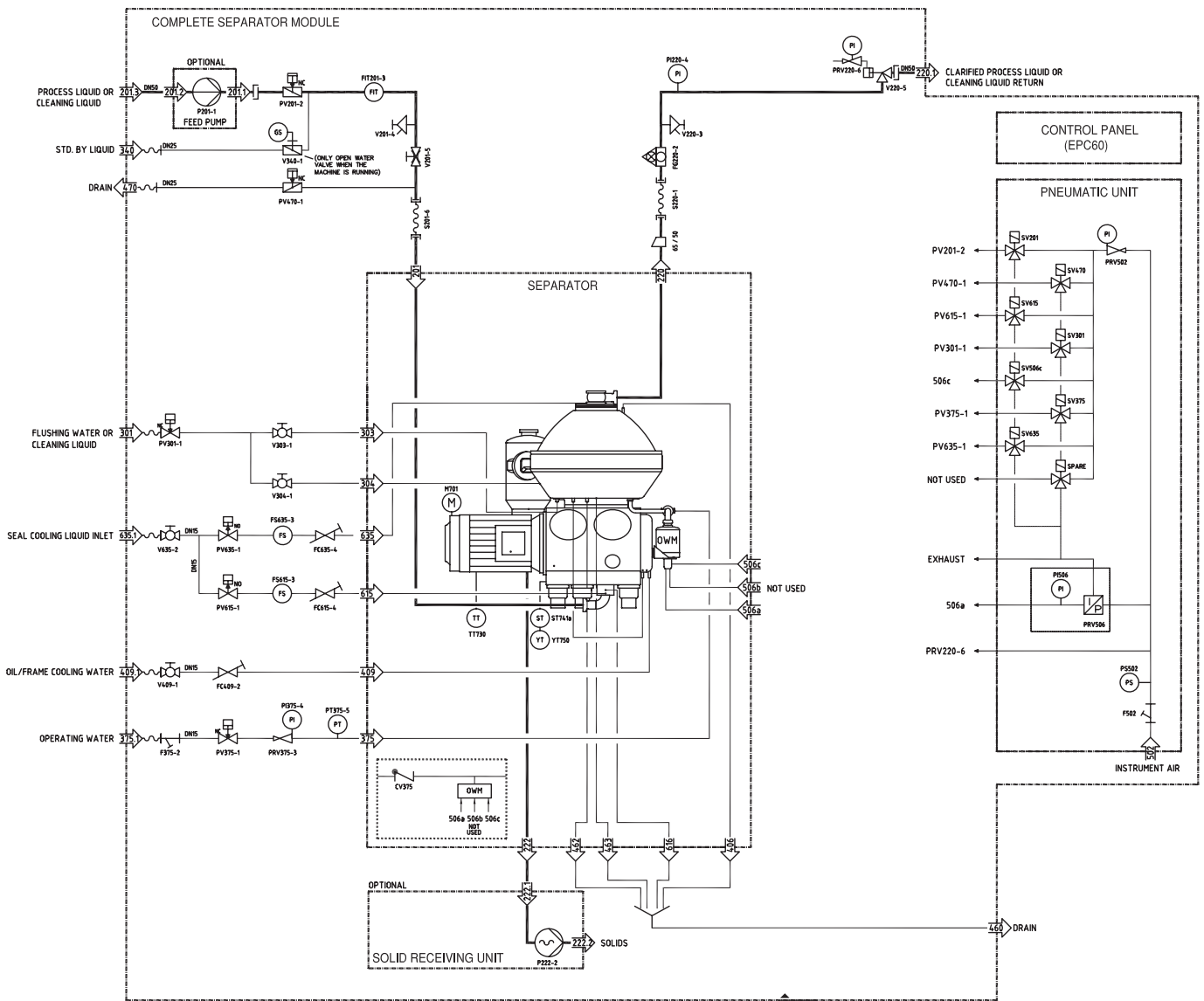
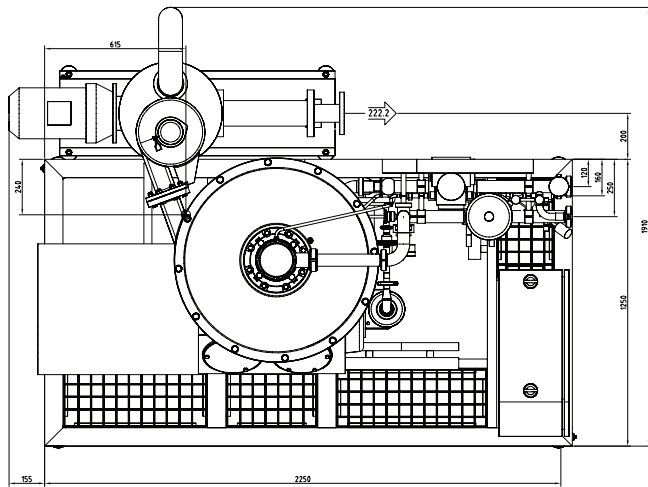
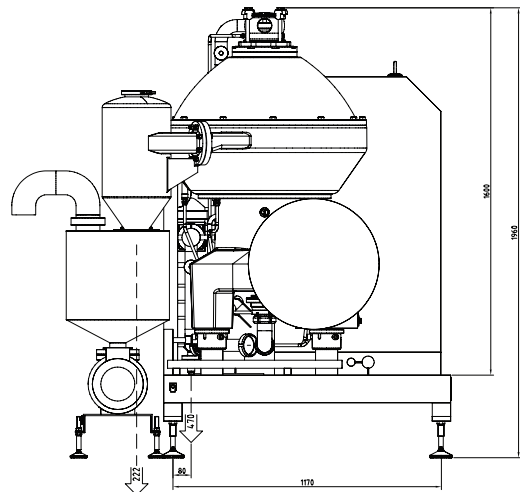
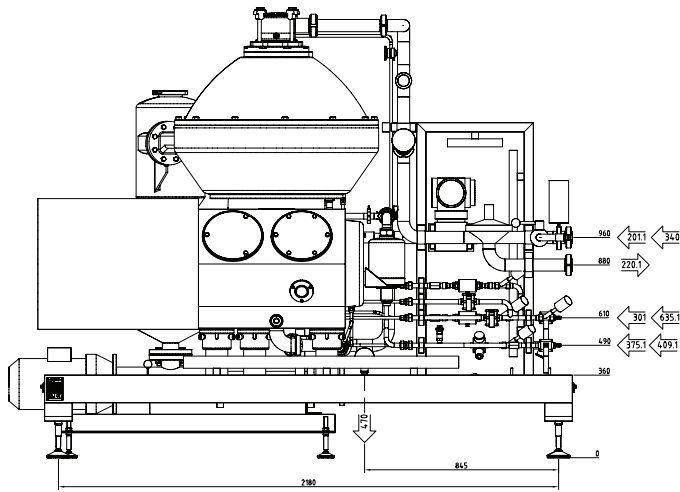


Fig 1. Typical bowl drawing for a bottom fed hermetic centrifuge in clarifier executing. Drawing details do not necessarily correspond to the centrifuge described.



Clara 250 - P&ID  
Fig 2.



### Clara 250 - Layout

Fig 3.

Alfa Laval reserves the right to change specifications without prior notification.

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)