

#### General specifications

<b>Nominal capacity</b>	30 kg/h per Perfector tube
<b>Max. product pressure</b>	80 bar
<b>Cooling surface per tube</b>	0.056 m <sup>2</sup>
<b>Chilling tube diameter/length</b>	Ø57 mm/Ø430 mm
<b>Product volume per tube</b>	0.42 ltr.
<b>Annular space</b>	6.5 mm
<b>Knife rotor rpm</b>	190 - 1,000
<b>Motors</b>	Up to 4 of 4.0 kW incl. of separate fan and thermo sensor
<b>Cooling requirements</b>	NH <sub>3</sub> capacity at -20°C 3.5 kW per tube

## Perfector Pilot Plant

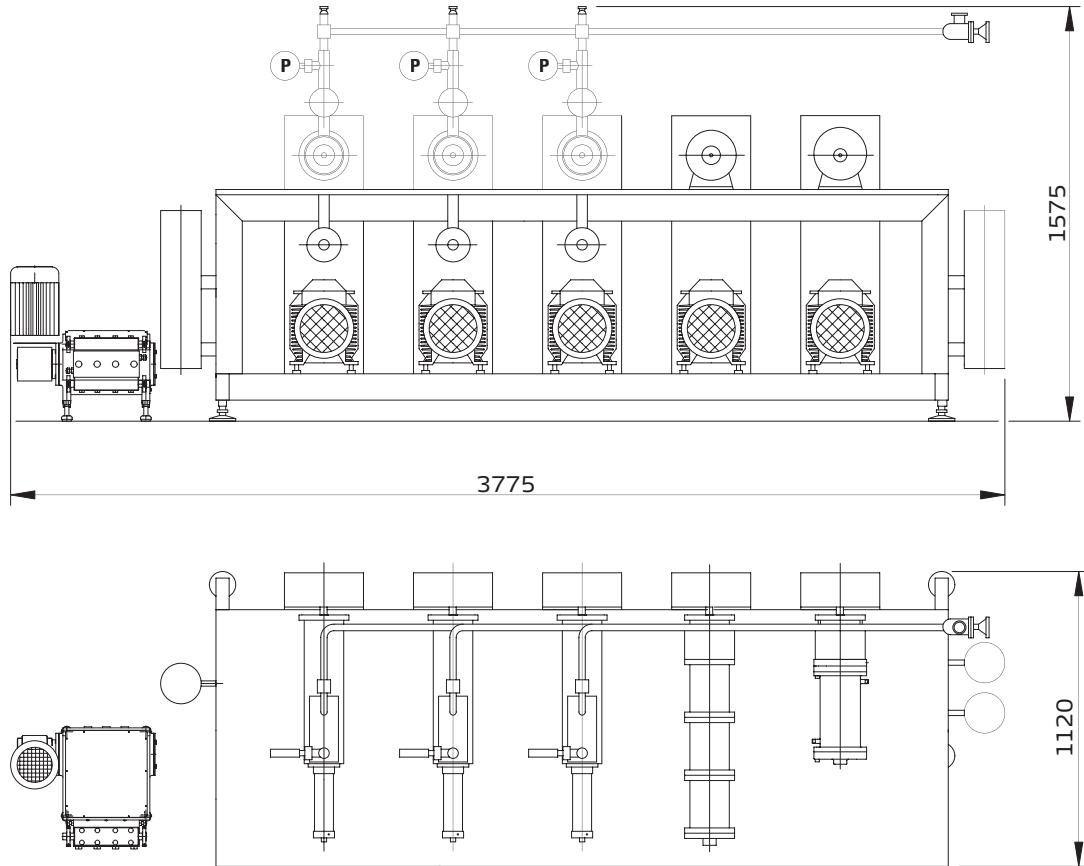
**The GS Perfector pilot plant is ideal for crystallisation of all kinds of fat products. This highly flexible unit makes product development activities efficient and cost effective.**

**Flexibility.** The Perfector pilot plant provides everything you need for optimal, small-scale production. This modular unit features a high-pressure pump, Perfector chilling tubes, various kneading units and resting tubes.

The flexible connection pipes which combine the various units are easy to mount and dismount. It facilitates fast set-up alterations according to processing or application changes. The Perfector chilling tubes offer a wide capacity due to individual cooling systems, as they can be used either separately or in a combination.

**Easy Scale-Up.** The Perfector pilot plant gives you the opportunity to process small-scale samples under exactly the same conditions as those generated in large-scale production facilities.

**Significant Cost Savings.** Since pilot plant trials demand much smaller batch sizes than large-scale production units, the costs are correspondingly lower. Furthermore, no halts are required in your normal production schedule.



## High pressure pump P-3-15/35

Motor kW	1.1 - 1.5*
Max. capacity ltr/h	350**
Max. pressure bar	120

\*depending on product type. \*\*depending on motor.

Perfector type	Units on skid	Motor (kW)	I/C (ltr)	Resting tube (ltr)
1 x 57	2	1 x 4	1 x 0.7	(1 x 0.7), (1 x 2.5)
(1+1) x 57	3	2 x 4	2 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)
(1+1) x 57	4	2 x 4	2 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)
(1+1+1) x 57	4	3 x 4	3 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)
(1+1+1) x 57	5	3 x 4	3 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)
(1+1+1) x 57	6	3 x 4	3 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)
(1+1+1+1) x 57	6	4 x 4	4 x 0.7	(1 x 0.7), (1 x 2.5), (1 x 8.5)

Frequency inverter(s) and a water heater are included. Typically, the pin rotor machine is mounted on the Perfector skid, thus the extra unit.

Pin rotor machine type	Motor (kW)
2 x 1 ltr.	1 x 1.5
3 x 1 ltr.	1 x 2.2

A frequency inverter and a water heater are included. For mounting on a Perfector skid. Also available as an individual unit.

Inverter type P2	Motor (kW)
	1 x 4.0

A frequency inverter is included. For mounting on a Perfector skid. Also available as an individual unit.

BGS	Motor (kW)
	1 x 2.2

A frequency inverter is included. For mounting on a Perfector skid. Also available as an individual unit.