

FJELL SCREW COOKERS



Fjell Technology Group delivers a full range of rigid energy-efficient screw cookers for coagulation of marine raw materials. Cookers can be delivered for throughputs of 1 – 50 tonnes per hour. Raw material can be frozen, sea water chilled or pre-heated. In particular, the slow rotational speed of the steam heated screw and the large internal volume give a specific retention time for material in the cooker of up to 30 minutes, therefore the screw cookers are particularly useful when documentation of specific retention time above a certain temperature is required.

The screw cookers are modernised versions of the classic Screw Cookers patented by Stord Bartz in the 50ies., and are straightforward, heavy-duty units in which the steam-heated screw rotor and flights mounted on it distribute heat evenly while the rotor gently moves the material through the steam heated cooker shell. This only involves a minimum of mechanical agitation, which provides better quality outputs, using as little energy as possible. Standard screw cookers are made in carbon steel, but stainless steel in contact with material can be delivered for extra cleanliness.

Data for standard cookers

Cooker	SS50-5	SS60-6	SS80-8	SS90-10	SS100-12	SS130-12	SS160-12
¹ Capacity (MT/hr)	3	5	10	15	20	25	40
Shell inner diameter (cm)	50	60	80	100	100	130	190
Stator length (m)	5	6	8	10	12	12	12
² Flight pitch (mm)	200	200	250	250	250	250	250
Flight number	24	29	31	39	46	46	46
Total heat surface (m ²)	13	22	44	65	90	120	190
Steam flow (MT/hr)	0,4	0,8	1,5	2,2	3	4	6
³ Steam pressure (bar g)	0 - 4	0 - 4	0 - 4	0 - 4	0 - 4	0 - 4	0 - 4
⁴ Motor Power (kW)	4	5,5	7,5	9,0	11	15	18
Approx. weight (MT)	3	4	10	15	18	26	34

¹Capacity is estimated for heating of raw material from 5°C to 95°C with steam pressure max. 2 bar g.

²Other pitch or variable pitch can be made if required due to raw material properties. Number of flights and heat surface will change accordingly.

³Design and approval according to PED, ASME, JIS or other codes and standards are possible.

⁴For rotational speed in range 1 – 6 rpm by variable frequency drive.