

**Major advantages**

- Low peeling losses
- Optimum steam distribution
- Rugged, simple machine with few moving parts
- Easy to operate via touch-panel
- Proven, hygienic design
- High safety standard
- Minimum maintenance
- No angles or edges inside pressure vessel
- High capacity due to large diameter inlet door and fast product discharge
- Condensate discharge
- Modular design, capacity increase possible

**Application**

The BMA steam peeler has been used for many years in potato processing factories, e.g. for French fries, potato flakes and potato granules. Also potato chips producers are among our customers.

**Operation principle**

Product inside a pressure vessel is briefly (set time) exposed to high pressure steam. Upon contact, the steam condensates in the outer layer (skin) of the product.

When the pressure is released, the water in the potato skin starts to boil. When the boiling water flashes out into steam it is expanding enormously. The potato skin contains less water than the potato itself, and forms a kind of coat around the potato. Because the expanding steam cannot penetrate through this coat, it rips the coat off the potato.

The following must be observed to reach a superior peeling result:

- Uniform exposure of product to steam;
- Fast and high steam pressure, for a specific, brief period of time.
- Instantaneous decompression.



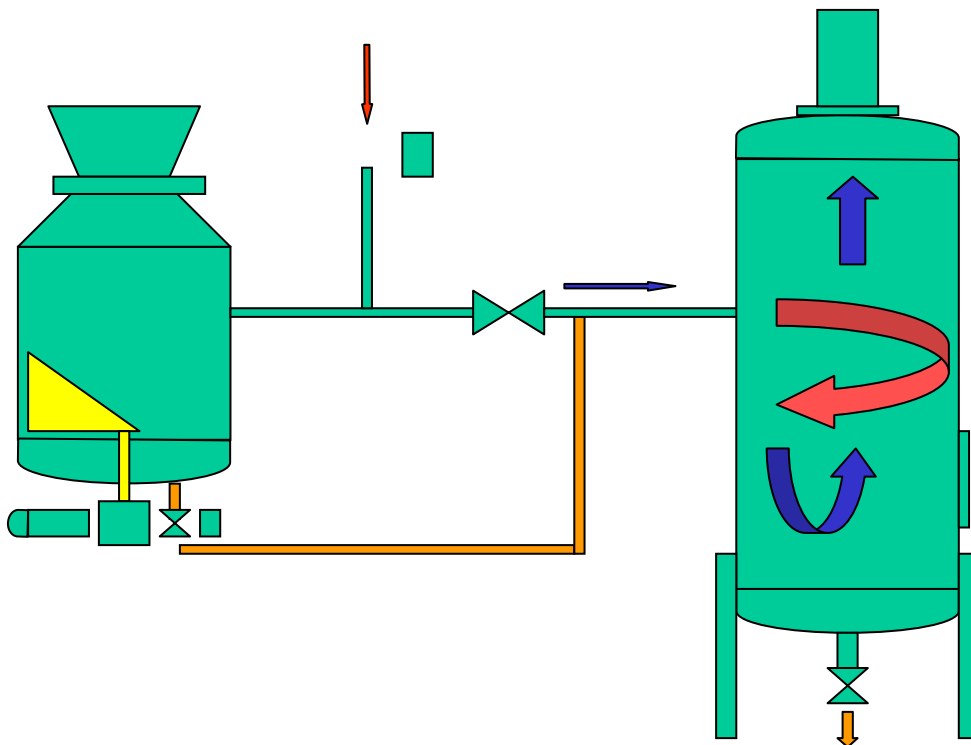
**Operation**

The product is weighed with a weighing belt or weighing hopper. The vessel is filled with the preset weight of raw product via the inlet door mounted on top of the vessel. The pneumatically operated door opens to the inside of the vessel. This ensures that the door closes correctly against the seal and that the vessel is hermetically sealed during steaming.

Once the door is closed, high pressure steam is injected into the pressure vessel from the side. The pressure vessel starts to rotate to ensure uniform contact between product and steam. After a preset steam time, the outlet valve opens so that the vessel is decompressed in a very short time and the product inlet door can be opened.

The pressure vessel now rotates to its unloading position so that it can be emptied. The vessel then rotates back to the filling position and the next cycle can commence. The whole operation of the steam peeler is carried out automatically, controlled by a PLC.

For smaller capacities the steam peeling process is followed by brushing off the potato skin with a brushing machine, for larger capacities we recommend the BMA Centrifugal Dry Deskiner type ODC.



### Design

The standard scope of supply comprises:

- Pressure vessel from mild steel (standard) or Duplex stainless steel with pneumatically operated inlet/outlet door and steam basket
- Steam valve, pneumatically operated
- Support structure with large maintenance doors that provide good access to the vessel
- Drive with geared motor and chain drive
- Control cubicle with PLC
- Operator interface with touch-screen monitor mounted on support structure
- Expansion vessel

### Options

- Weighing hopper for fast filling in equal batches
- Internal mixing gear for products, such as small carrots
- Integration into existing production line

### Advantages and features

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### Range of models

Steam time (sec)	Cycle time (sec)	Charge per hour	SSC Load-kg	Equal frame		Equal frame		Equal frame				Equal frame	
				220	330	550	700	900	1100	1250	1400	1600	2000
				86	129	215	273	351	429	488	546	624	780
16	54	67		5720	8580	14300	18200	23400	28600	32500	36400	41600	52000
20	58	62		5326	7988	13314	16945	21786	26628	30259	33890	38731	48414
<b>22</b>	<b>60</b>	<b>60</b>		<b>5148</b>	<b>7722</b>	<b>12870</b>	<b>16380</b>	<b>21060</b>	<b>25740</b>	<b>29250</b>	<b>32760</b>	<b>37440</b>	<b>46800</b>
24	62	58		4982	7473	12455	15852	20381	24910	28306	31703	36323	45290
26	64	56		4826	7239	12066	15356	19744	24131	27422	30713	35100	43875
30	68	53		4542	6814	11356	14453	18582	22712	25809	28906	33035	41294
34	72	50		4290	6435	10725	13650	17550	21450	24375	27300	31200	39000
38	76	47		4064	6096	10161	12932	16626	20321	23092	25863	29558	36947
42	80	45		3861	5792	9653	12285	15795	19305	21938	24570	28080	35100
46	84	43		3677	5516	9193	11700	15043	18386	20893	23400	26743	33429
50	88	41		3510	5265	8775	11168	14359	17550	19943	22336	25527	31909
54	92	39		3357	5036	8393	10683	13735	16787	19076	21365	24417	30522
58	96	38		3218	4826	8044	10238	13163	16088	18281	20475	23400	29250
60	98	37		3152	4728	7880	10029	12894	15759	17908	20057	22922	28653

### Peeler dimensions (mm)

Peeler dimensions (mm)	SSC Load-kg	Equal frame		Equal frame		Equal frame				Equal frame	
		220	330	550	700	900	1100	1250	1400	1600	2000
		86	129	215	273	351	429	488	546	624	780
<b>X</b>		650	650	850	850	1050	1050	1050	1050	1400	1400
<b>Y</b>		630	750	700	950	710	950	1100	1300	700	850



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