

Wave 6000 Range

NC Hyperbaric, designs and manufactures all the components of its equipment (chambers, yokes, intensifiers) in its factory located in Burgos, Spain, and has established the standard in High Pressure Processing equipment for the food industry:

- Horizontal design of the chamber.
- Easy installation.
- Easy automation.
- Reliability.
- Optimal traceability.
- Productivity with the best energy efficiency.

Our range, the widest in the World, is made up of 4 different sized chambers in order to respond the needs of our customers, from small companies with niche markets to the biggest production of international groups. Every unit equipment provides one or more pressure intensifiers depending on its size and the configuration. Maintenance tasks on the intensifiers do not involve stopping the machine as, by simply closing the manual valve corresponding to the intensifier which has been stopped, the others will continue pressurizing.



Wave 6000/55

WAVE 6000/55

The **Wave 6000/55** is a ruggedly designed industrial machine. It is equipped with an integrated single intensifier that makes it very compact and easy to install. It is an ideal equipment to little productions (niche markets), to develop products and to make market tests. (for instance: an equipment installed in a pilot plant of a R & D department).

WAVE 6000/135

The **Wave 6000/135** is production scale equipment with a 135 l net useful volume chamber. It has a diameter of 300 mm that allows processing of large products (whole hams...). The standard version includes 2 pressure intensifiers.

WAVE 6000/300

The **Wave 6000/300** is the classic production line machine. The best selling unit in our range due to its volume and its chamber diameter (300 l and 300 mm). The standard machine has 4 pressure intensifiers.

Wave 6000/420



WAVE 6000/300 Tandem

For higher volume production, NC Hyperbaric has developed Tandem configuration. The dual 300 L machines share their intensifiers getting an improvement of the productivity of 15-20% due to the decrease in the needed time to raise the pressure.

WAVE 6000/420

The **Wave 6000/420** is the largest and most productive machine in our range. The great innovation of this equipment is its volume of 420 l. Its diameter of 380 mm with its 8 intensifiers makes it the most productive machine in the market.



Wave 6000/300 Tandem

Wave 6000 Range Characteristics

The **Wave 6000** range allows High Pressure Processing of food up to a maximum pressure of 6000 bar / 600 MPa / 87.000 psi in a range of temperature from +5°C up to +30°C (+41°F up to +86°F). Every equipment provides:

- Automated loading & unloading conveyor.
- SCADA system.
- Internet connection for remote maintenance.
- 2 pressure transducers with auto checking system.

NC Hyperbaric equipment has the 97/23/CE Directive relating to member state legislation regarding pressure equipment. Furthermore, is one of the few companies in the world that has the U3 stamp of the ASME code. (American Society of Mechanical Engineers) a marking which guarantees compliance with the "ASME Boiler and Pressure Vessel Code Section VIII division 3" that allows installation of its equipment in USA and other countries in the world under the Asme code.



DIMENSIONS

Machine	Ø inside mm. (inch)	Capacity litres (US liq. gallons)	Chamber length mm. (inch)	Total machine length mm. (inch)	Machine width mm. (inch)	Machine height mm. (inch)
Wave 6000/55	200 (7.9")	55 (14.5)	2,000 (78.7)	8,020 (315.7)	2,190 (86.22)	2,220 (87.4)
Wave 6000/135	300 (11.8")	135 (36.7)	2,200 (86.6)	9,600 (378)	2,950 (116.1)	2,600 (102.4)
Wave 6000/300	300 (11.8")	300 (79.3)	4,500 (177.2)	16,200 (637.8)	2,950 (116.1)	2,600 (102.4)
Wave 6000/420	380 (15")	420 (111)	4,000 (157.5)	16,300 (641.7)	3,650 (143.7)	2,760 (108.7)
Wave 6000/300-T	300 (11.8")	600 (158.5)	2x4,500 (177.2)	16,500 (649.6)	8,300 (326.8)	2,600 (102.4)

CYCLE TIMES AND OUTPUTS

Machines	N° of intensifiers	Power kW		Total cycle time (minutes)*		Vessel filling ratio	Output** Kg/hour (pounds/hour)	
		50 Hz	60 Hz	50 Hz	60 Hz		50 Hz	60 Hz
Wave 6000/55	1	47	52	7.6	7.1	45%	193 (425)	209 (461)
Wave 6000/135	2	84	94	8.6	7.9	50%	467 (1030)	510 (1124)
	4	158	178	6.5	6.2	50%	618 (1362)	654 (1442)
Wave 6000/300	2	84	94	13.8	12.2	50%	651 (1435)	736 (1623)
	4	158	178	9.1	8.3	50%	985 (2172)	1080 (2381)
	6	232	262	7.7	7.2	50%	1161 (2560)	1252 (2760)
Wave 6000/300-T	8	316	356	7.3	6.9	50%	2445 (5390)	2623 (5783)
Wave 6000/420	4	158	178	11.3	10.2	60%	1338 (2950)	1486 (3276)
	6	232	262	9.1	8.3	60%	1661 (3662)	1809 (3988)
	8	306	346	8.0	7.4	60%	1888 (4162)	2030 (4475)

* Total cycle time: cycle time for vacuum-packed products including loading and unloading, raising of pressure, 3 minutes holding time at 590 MPa, release of pressure and the necessary time for machine movements and operations.

** Output: for vacuum-packed products processed at 590 MPa / 5,900 bar / 85,500 psi during 3 minutes.

Natural Safety