

# PSA Nitrogen Generator





Model	Specs At 1%, Res. O <sub>2</sub> (N <sub>2</sub> Sm <sup>3</sup> h <sup>-1</sup> )	Dimensions (L x W x H) (cm)	Weight (kg)	Connection (inch - mm)	Compressors						
					Make	Model	Capacity (m <sup>3</sup> min <sup>-1</sup> )	Operational pressures (bar)	Max excess pressures (bar)	Noise at 1 meter (dB)	Power consumption (kW)
Do7PSA007	8	50 x 60 x 150	115	¾ - 19	Kaeser	SM 9 T	0,80	7,5	8,0	64	5,5
Do7PSA015	16	50 x 60 x 150	145	¾ - 19	Kaeser	SM 9 T	0,80	7,5	8,0	64	5,5
Do7PSA025	24	50 x 60 x 200	200	¾ - 19	Kaeser	SM 12 T	1,20	7,5	8,0	64	7,5
Do7PSA035	38	70 x 70 x 186	250	¾ - 19	Kaeser	SK 21 T	1,80	7,5	8,0	64	11
Do7PSA050	54	70 x 70 x 221	370	1 - 25	Kaeser	ASK 27 T	2,60	7,5	8,0	66	15
Do7PSA075	73	90 x 75 x 230	500	1 - 25	Kaeser	ASK 35 T	3,50	10,0	11,0	70	22
Do7PSA115	117	110 x 75 x 231	700	1 - 25	Kaeser	ASD 57 T	5,51	10,0	11,0	68	30
Do7PSA145	145	130 x 90 x 230	1100	1½ - 38	Kaeser	BSD 72 T	7,00	10,0	11,0	68	37

Table 1. The PSA nitrogen generators are available in various capacities

VPSA	PSA
Both circulation and injection mode	Injection mode only
Low pressure output: 1-1.5 bar	High pressure output: 7.5-10 bar
Oil-free blower	Heavy duty compressor
Regeneration by vacuum pump	Regeneration by pressure release and addition of N <sub>2</sub>
Relatively lower maintenance costs	Relatively lower installation costs
Capacity up to 85 m <sup>3</sup>	Much higher capacities available
Less energy use ≤ 60 m <sup>3</sup>	Less energy use > 60 m <sup>3</sup>
Better preservation of active coal	Little lower purchase price

Table 2. Comparison VPSA and PSA technology

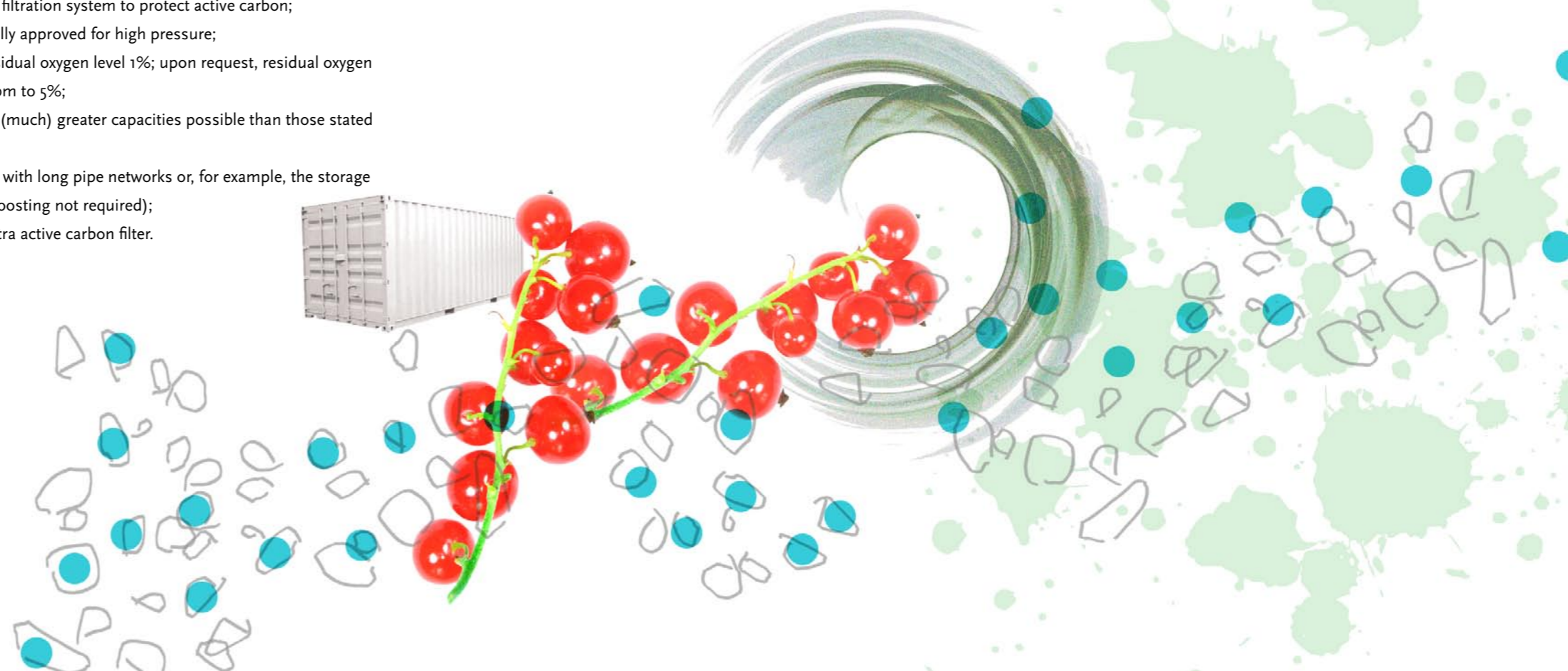
### The PSA N<sub>2</sub> generator: nitrogen under pressure

PSA stands for Pressure Swing Absorption. A PSA produces nitrogen from air by removing the oxygen from it. Outside air contains approximately 20.8% oxygen (O<sub>2</sub>); our PSAs produce nitrogen from this with a residual oxygen level of, as standard, 1%. But if required, levels of between 1 ppm and 5% are possible.

The PSA is extremely suitable for projects where significant amounts of nitrogen under high pressure have to be supplied. In fruit storage, the advantage of this system is that reinforced tubing can be installed instead of a PVC network. This simplifies the installation.

### Plus points

- Kaeser compressor, a reputable make on the market (alternative: Atlas Copco);
- Standard cool dryer in the compressor;
- High-quality filtration system to protect active carbon;
- Tanks specially approved for high pressure;
- Standard residual oxygen level 1%; upon request, residual oxygen levels of 1 ppm to 5%;
- Smaller and (much) greater capacities possible than those stated in table 1;
- Ideal for use with long pipe networks or, for example, the storage of berries (boosting not required);
- Optional: extra active carbon filter.



Your dealer

