

Mould Dryers RPA Series



▣ [English](#)

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Customers. The core of our innovation



RPA Mould Dryers

for maximum system productivity

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Measurable benefits

- > **Higher productivity**; conditioning the mould area, the cycle time is minimised.
- > **Optimised and constant cycle all year round**, with no need to adjust the working parameters according to climate conditions and humidity percentage.
- > Improved quality standards with **substantial cost savings**. No production of imperfect and discarded pieces due to moisture infiltration.
- > **Maximum energy efficiency**, with an average consumption < 0.0075 kWh per one m^3/h of dried air.
- > **Extension of the life of the mould**, eliminating the risk of corrosion and infiltration and the consequent necessity for maintenance.



The RPA dryers are provided with a **high efficiency desiccant wheel**, which entraps the moisture and ensures constant dry airflow. Regeneration carries out continuously.



RPA 1800 unit, internal view

Heating and regeneration process under control

The unit is equipped with a **microprocessor control** with PID algorithm; it precisely regulates the functioning of the mould dryer and permits a consistent dew point and regeneration air temperature monitoring.

An extra control panel for process air temperature is available on request.



RPA mould dryers ensure maximum performance and reliability under **all operational conditions**, including tropical climates. They are designed for ambient temperature up to **45°C** and operate with high humidity degree (up to 90%).

Start-up times and the risk of wrong-start errors are reduced to zero; all the RPA dryers are completely ready for operation and require **no setting or adjustment**.



RPA 400 mould dryer with closed circuit



RPA 1800 model

Both open and closed loop circuit versions are available. The closed loop alternative is particularly suited for tropical and critical climate situations.

Mould Dryers RPA Series



Versatility

Piovan mould dryers excel for extremely low maintenance requirements. The process filters are easily accessible, and filter cleaning is simple and quick.

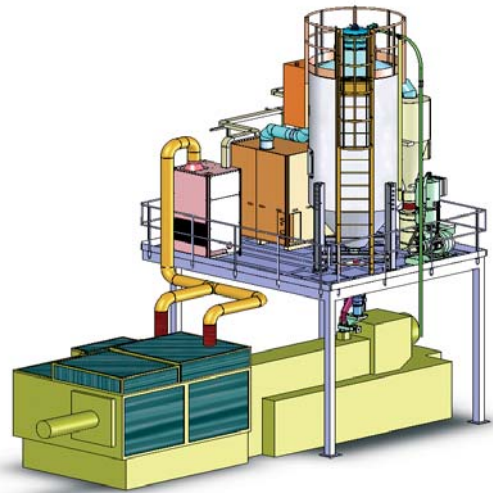
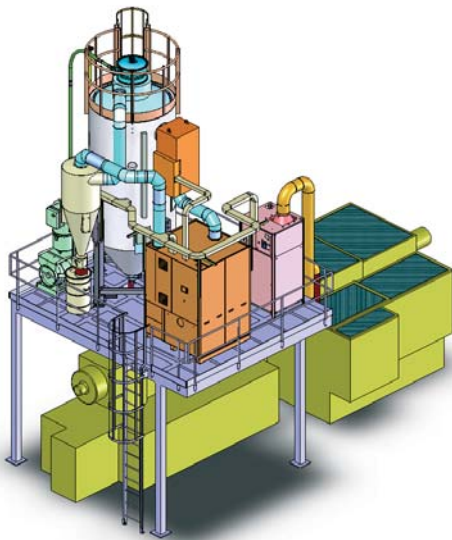
Thanks to their compact dimensions, the RPA units can be easily integrated with existing machines and optimise plant utilisation.



An extensive range of applications

The RPA mould dryers provide dehumidified air to small, medium and large moulds. They are ideally suited for:

- > mould enclosures of fast-cycle IMM's
- > mould enclosures of blow moulding machines
- > mould enclosures and robot area of PET IMM's.



The unit can operate with one or more processing machines, and be positioned on the floor or on a mezzanine, simply by orienting the connection piping. On request, Piovan offers a complete mould dehumidifying package including RPA unit, mould enclosure and interconnecting piping.



Technical data

PERFORMANCES		RPA 400	RPA 800	RPA 1200	RPA 1800	RPA 2400
Process airflow	m ³ /h	400	800	1200	1800	2500
Min. Dew Point	°C	-15				
Average process air temperature	°C	33				
Average process air temperature*	°C	16				
Process static pressure	Pa (N/m ²)	300	200	300	200	200

DATA		RPA 400	RPA 800	RPA 1200	RPA 1800	RPA 2400
Installed power	kW	4.3	7.8	10.8	16.8	23.6
Average energy consumption	kWh	3.3	6.1	9.8	14.3	19.8
Water thermal load**	kW	10	20	30	45	60
Water flow	dm ³ /h	1800	3600	5400	8100	10000
Process pipe diameter	mm	150	200	250	250	355
Regeneration pipe diameter	mm	89	102	150	150	150
Water connection		1"	1"	1-1/4"	1-1/4"	1-1/4"
Noise level	dB(A)	<80				
Dimension L	mm	600	600	900	900	900
Dimension W	mm	600	750	1000	1000	1000
Dimension H	mm	1500	1500	2000	2000	2200
Dimension H'	mm	100/360**	100/380**	170**	170**	50**
Weight	kg	190	210	425	430	510

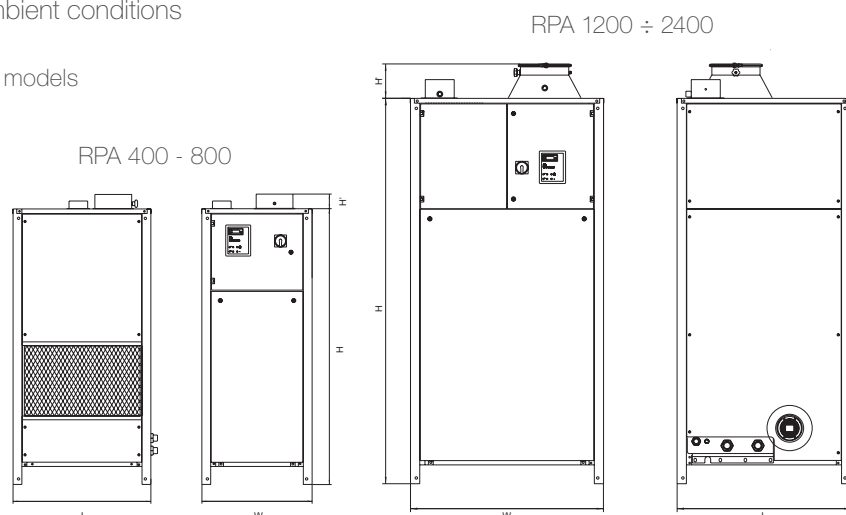
*with post-cooler

**35°C, 60% humidity

Options

- > Mould discharge pump (RPA 400-800)***
- > Post-cooler, recommended for PET IMM's
- > Closed loop version, ideal for particularly warm conditions
- > Process temperature control
- > Mould enclosure, to control the mould ambient conditions

*** standard application for the RPA 1200÷2400 models



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