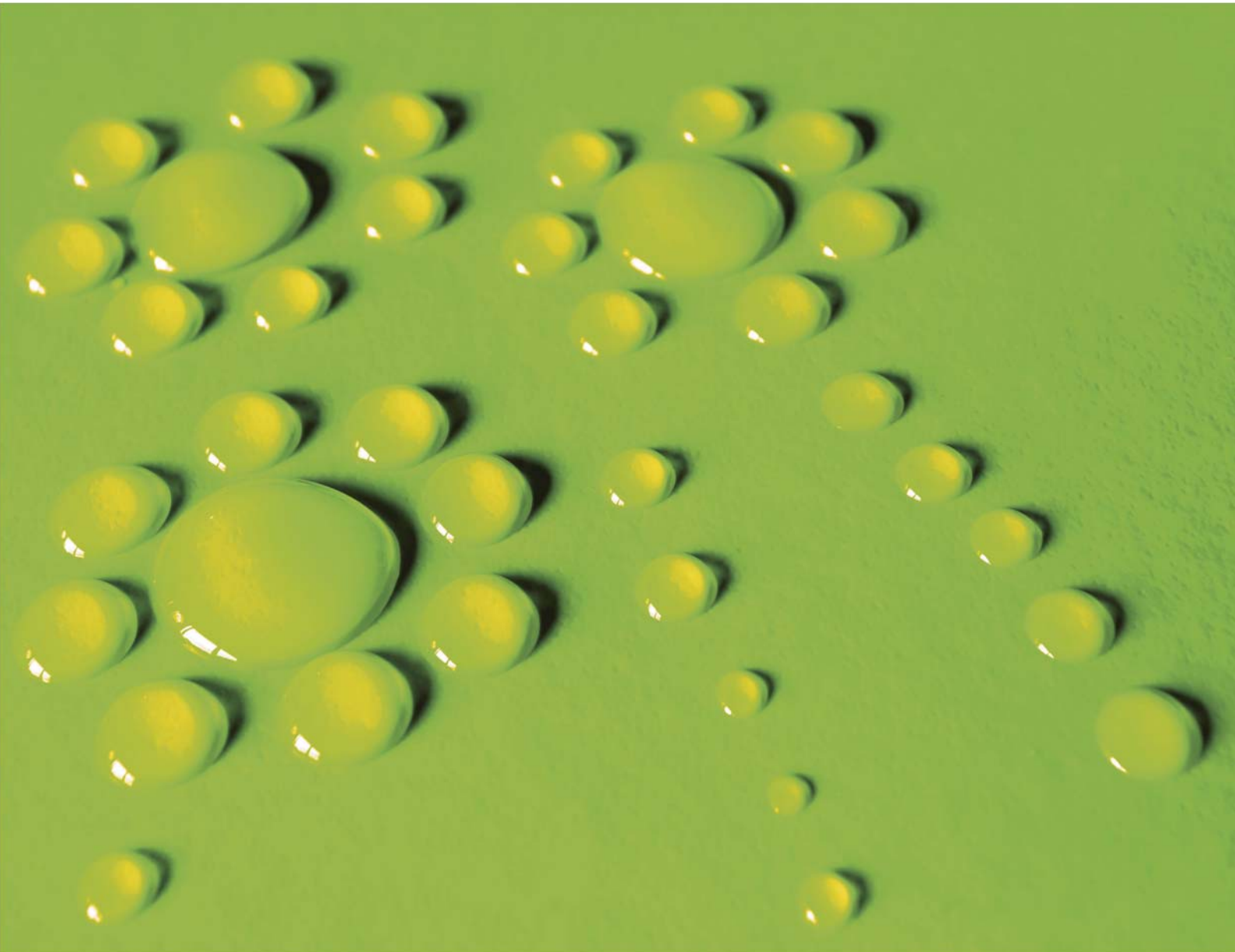




Choose environmentally  
**friendly technology**



**COMENDA**  
designed for hygiene

# “Environmental friendliness and affordability for high performing solutions”

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## **Comenda wins the energy saving challenge**

The need for protecting the environment, reducing the use of energy and achieving savings are hot topics today, but they are not new to Comenda that has been supporting the concepts of affordability and environmental friendliness since 1992. For the company these are not simply a trend to follow, but true values and long-term investments.

The “green” approach of the company is confirmed by the following data: for each kWh of energy produced, 0.48 kg\*\* of CO<sub>2</sub> are released into the atmosphere, which means that every gram of water that is not used for washing triples the savings in terms of energy required to produce it and heat it and also the amount of chemicals used. The new Comenda dishwashers offer energy savings up to 40%, in addition to generating low amounts of carbon dioxide and offering maximum biocompatibility thanks to the use of components and packaging materials that are 98% recyclable.

Other important factors to take into account are the Kyoto Protocol and the heavy sanctions imposed to the signing members for each ton of carbon dioxide produced, which have led several countries, including Italy, to introduce financial incentives to promote the purchase of environmentally friendly products. The solutions developed by Comenda are fully aligned with this global strategy because they are designed to guarantee top performance and feature innovative options that ensure maximum efficiency, simplify maintenance and improve the working conditions of operators.

\*\* Italian CO<sub>2</sub> emission for every kWh produced.





**5 good reasons  
to choose  
ECO2**

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# 1 Less water consumed

Water is a precious resource that must be used carefully and sparingly. ECO2 by Comenda significantly reduces the amount of water used during dishwashing.

# 2 More energy efficiency

As 0.48 kg of CO<sub>2</sub> are released into the atmosphere for every kWh of energy produced, limiting the use of energy offers the opportunity of truly safeguarding the environment.

# 3 Less chemicals used

Chemicals must be used appropriately in order not to affect the delicate environmental balance: ECO2 optimizes the use of detergents, thus limiting the dispersion of contaminants.

# 4 Lower operating costs

The products developed by Comenda offer such a level of saving that the actual investment can be recovered with fast payback.

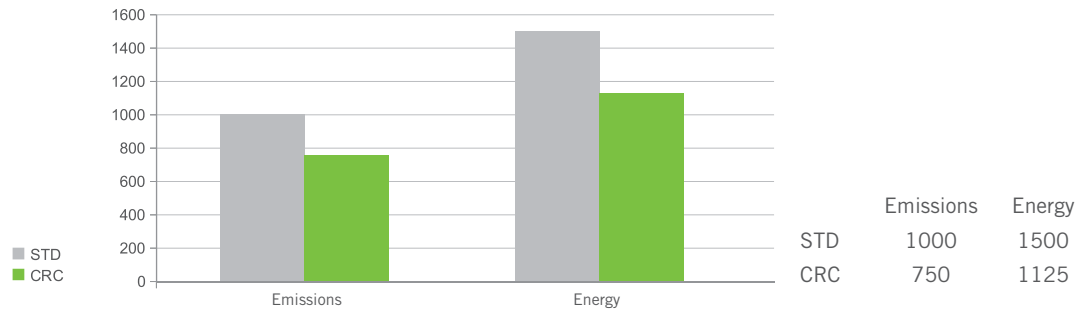
# 5 Access to financial incentives

An increasing number of states, regions and local authorities, that are more aware of the need of protecting the ecosystem, offer financial incentives to consumers who decide to purchase equipment with a low environmental impact.



# Efficiency, comfort and **energy saving**

**CRC**



The heat produced by dishwasher fitted with a CRC system is lower because this heat, normally dispersed, is used to preheat the incoming cold water. Consequently using less energy.



## **“Green” innovation and zero maintenance**

CRC is a vapour condenser and heat recovery system that offers extraordinary energy savings. It condenses the vapours expelled when the dishwasher is opened and cools them, maintaining the air ejected from the machine at an optimum temperature and increasing the comfort of the working environment.

This heat recovery system also enables to cut energy costs, because the heat produced by the machine is recovered and transferred back to the cold water used for washing, resulting in savings up to 25%.

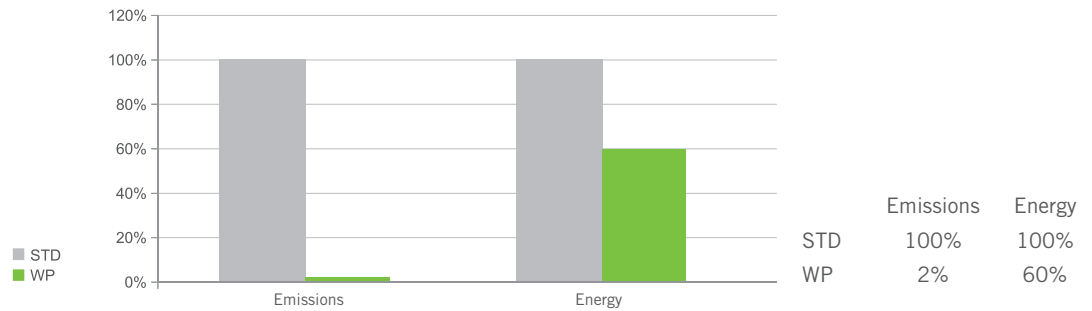
In addition to this, the CRC system is not fitted with filters and does not therefore require any maintenance.





# Eliminates heat and humidity in dishroom environments

WP



As compared to standard machines, dishwashers with a heat pump enable to achieve energy savings up to 40% reducing heat emission to a minimum.



## Maximum results with less energy

Heat pumps, which are designed to be used with rack and flight type dishwashers, reduce the amount of energy generally required to heat the water by up to 40%.

The capacity of the system of absorbing the heat dispersed in the environment by the machine also significantly reduces thermal irradiation.

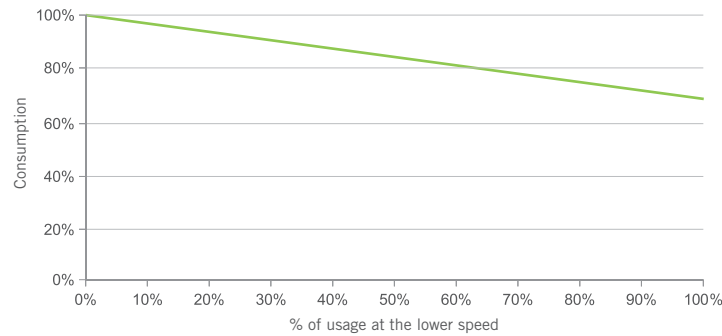
The extracted, cooled and dehumidified air is re-circulated in the room, thus maintaining comfortable environmental conditions and a constant temperature of approximately 22°C in the washing area.

If the air exchange in the environment is respected, it is not generally necessary to install dedicated ventilation systems.



# Rinse water adjusted to **machine speed**

**PRS**



Time of usage at the lower speed	Consumption
0%	100%
100%	67%



The consumption of water is proportional to the feeding speed: if the low speed is selected, there will be less empty spaces inside the machine during the dishwashing and thus a lower amount of water will be used.



## **33% savings in water**

The latest products presented by Comenda, which are the result of advanced research, are the exclusive PRS (Proportional Rinse System) and its upgraded version, A-PRS (Automatic Proportional Rinse System), which guarantee savings up to 33% in terms of water and chemicals used during the dishwashing.

Though programmable with different processing speeds, conventional flight and rack conveyor dishwashers always use the same amount of water regardless of the washing speed and thus consume enormous amounts of water.

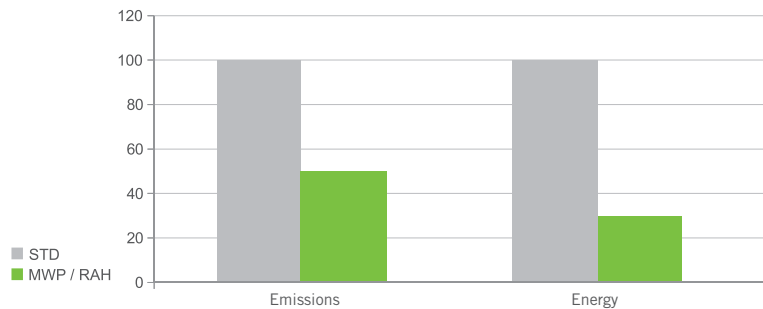
The PRS system, patented by Comenda, sets new standards because it is able to adjust the amount of rinse water supplied according to the washing speed and consequently also reducing the use of energy and chemicals up to 33%.

A machine with a conventional rinse system consumes 360 l/h both at high and low speeds. When the PRS system is activated, the consumption in slow speed is 240 l/h.



# Patented solutions and **certified savings**

**MWP**  
**RAH**



	Detergent	Rinse aid
STD	100	100
MWP/RAH	50	30

These systems enable to drastically reduce the amount of chemicals used.



## **MWP (Midwash Plus) - Maximum hygiene with half the amount of detergent**

As compared to conventional dishwashers, in models fitted with a MWP system, only half of the fresh rinse water is conveyed back to the washing tanks, because the remaining part is used directly for the pre-wash. This means that the water in this area is regenerated faster and that the dishwasher is able to perform an additional prewash with clean water. The concentration of detergent in the washing tank is 50% less, which consequently means that less detergent is required and used.

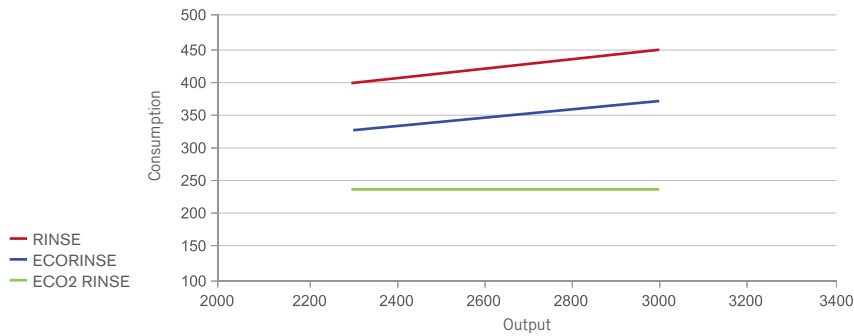
## **RAH (Rinse Aid Homogeniser) - 70% less rinse aid**

This patented system enables to mix two liquids with different densities. The rinse aid that is generally used to simplify the drying of crockery is generally inserted in the rinse booster. However, having a higher density than water, it does not mix consistently and it is generally therefore necessary to increase the amount of product in order to achieve optimum results. When the RAH system is used, the rinse aid is injected at the outlet of the booster and thus quickly mixed and emulsified as the water flows, which reduces the amount required by up to 70%.



# A smart system that optimises resources

## ECO2 RINSE



OUTPUT	RINSE	ECORINSE
2300	400	320
3000	450	360

The amount of rinse water used is generally proportional to the amount of dishes that have to be washed. ECO2RINSE maintains the amount of water constant used regardless of the output per hour.



### Double water savings

In COMENDA dishwashers, the rinse is carried out only when dishware enters the rinse zone, which can result in incredible savings when the machine is not completely full. The ECORINSE system collects the clean rinse water in a tank and, by means of a pump, reuses it to perform a pre-rinse with clean water, thus reducing by 20% the amount of water required for the final rinse. When the dishware reaches the ECORINSE area, it is wet with detergent residue.

This water is obviously removed during the pre-rinse and final rinse, which causes the contamination of the clean water present in the ECORINSE tank and requires a supply of fresh water from the rinse in order to dilute the detergent residuals present in the ECORINSE tank. The ECO2RINSE system features a neutral module, between the wash and rinse modules, which allows the water and detergent to drain off the dishware before entering the rinse zone, this reduces the amount of fresh water required for rinsing guaranteeing savings by up to 20%.



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