RACK CONVEYOR DISHWASHERS



BESPOKE & ADAPTABLE.



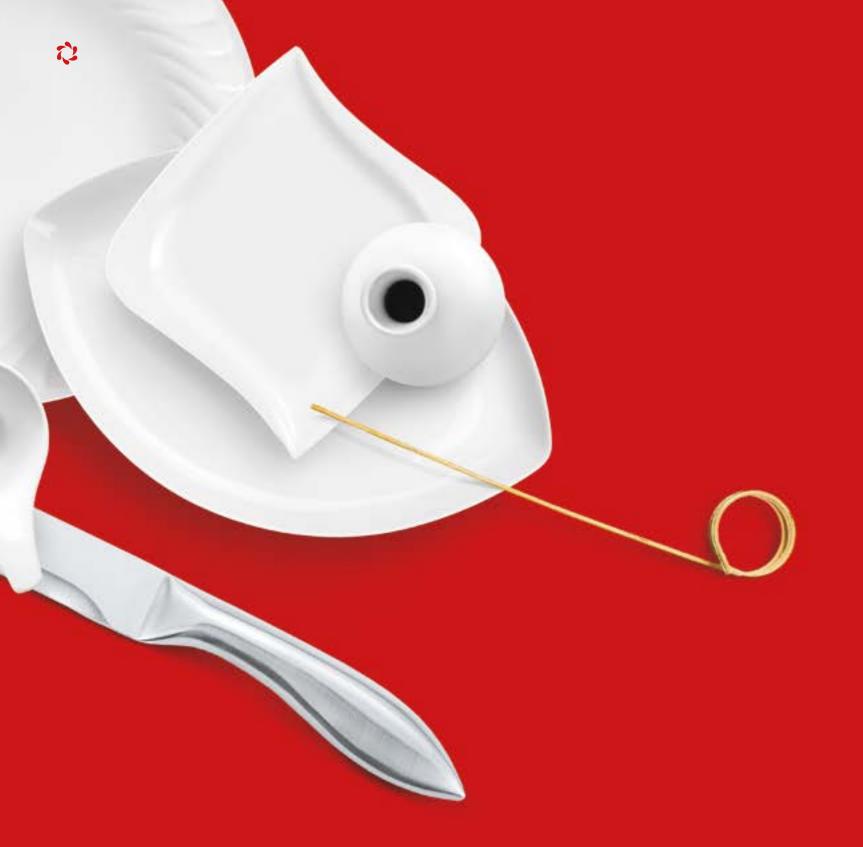
AC2E NEXT

The watchword of the AC2E Next series is adaptability.

The new generation of Comenda rack-type dishwashers offers fully customisable solutions according to the actual needs of the client.

AC2E Next ensures exceptional performance - both at full capacity and at reduced speeds - as well as impeccable hygiene and consistency in washing results.





NEXT. SUSTAINABLE. ADAPTABLE. ESSENTIAL.

Flexible and modular machines which make even the heaviest workload a light task.

Close to the operator and to the environment.

NEXT: the bespoke solution to assist and support both operators and managers in their daily warewashing challages.





AC2E NEXT RACK CONVEYOR DISHWASHER

DETAILS



Stainless steel central pawl bar system. The rack is perfectly centred between the side guides for the most efficient and fluid operations.



Stainless steel washing manifolds with reverse-moulded drip-stop jets and inspection caps.



Whole tank stainless steel filters and safety pump suction filter.



Integral hooks in the slide guides mean the door is securely fastened, guaranteeing fluid operation at all times.



Double skin insulated doors, minimising the loss of energy and the noise level. Door Wipe Seal -The special shape of the seal allows the door to be cleaned automatically when opening and closing.



The inspection doors with integral balancing springs guarantee maximum hygiene.



Hinged doors (optional) for those applications with limited floor-to-ceiling distance.



THE WASHING PROCESS



LOADING:

adjustable feet.

adjusted to 920 mm thanks to



PRE-WASH: 40/45°C

In preparation for an efficient washing, food particles are removed from the dishware with the force of the upper and lower water jets at a low temperature.



WASHING: 55/60°C

The upper and lower jets reach even the most difficult points and remove all dirt residues.



RINSING: 85°C

The final rinse water is filtered and The different types of drying recicled in 2 separate areas of the tunnels - in straight and corner Multirinse module, removing the detergent from the dishware.



DRYING: 85°C

configuration - optimise the hot, humid air flow inside the machine, re-using it to dry the dishware.



UNLOADING:

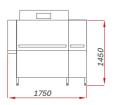
The unloading tables fitted with a limit switch automatically stop the rack advancing when needed and avoid jamming.



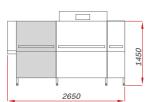
THE RANGE

The AC2E NEXT series is available in 10 linear or corner configurations to make the most of every centimetre in your washing area without compromising on high productivity. A comprehensive range of accessories is available for you to configure each model based on your actual requirements!

DIMENSIONS

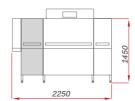


AC2E NEXT



AC2EP9 NEXT

• 900 mm prewash section



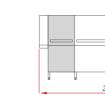
AC2EP5 NEXT

500 mm prewash section



AC2EP6 NEXT

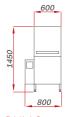
600 mm prewash section



AC2E2LP6 NEXT

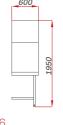
- 600 mm prewash section
- 1100 mm additional wash section

ACCESSORIES*



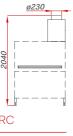
DHM 2+

Additional Prescrapper unit with integrated RED automatic soil removal



AS6 600 mm

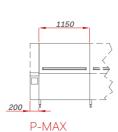
dryer unit



Automatic soil

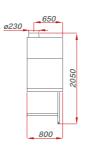
removal

RC Heat recovery unit



1150 mm prewash section with integrated DHM and RED



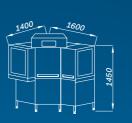


Dryer with integrated heat recovery unit

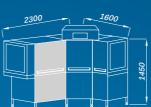


*Available on all linear and corner models.

THE SOLUTION ... IS JUST AROUND THE CORNER!

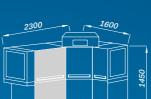


AC2AE NEXT

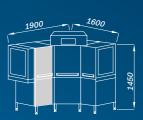


AC2AEP9 NEXT

Dryer section on 90° curve

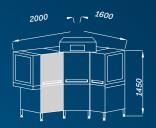


• 900 mm prewash module



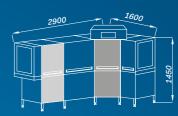
AC2AEP5 NEXT

• 500 mm prewash module



AC2AEP6 NEXT

• 600 mm prewash module



AC2AE2LP6 NEXT

- 600 mm prewash module









WHY AC2E NEXT?

We put people at the core of our bespoke solutions.

The new AC2E NEXT range is designed to allow you to lay out a flexible and modular washing solution which takes into account your commercial requirements, operating limits and the space available without compromising on efficiency and hygiene.



PRODUCTIVITY



With the AC2E Next range, you can wash by up to **255 racks and 4590** dishes per hour!

SAVINGS



The technology used in the AC2E Next series allows you to save up to **55%** water and detergent.

HYGIENE



AC2E Next is designed to make the daily operations easier with deep drawn tanks, easy to remove filters and manifolds, self draining wash pumps. Optional advanced **sanitising systems** for the washing chambers and the wash pumps available.

ERGONOMICS



The AC2E Next series is **simple to use** and service. The intuitive operation of the machine is operator-friendly.

RELIABILITY



Comenda is **ISO 9001** (International standard of quality management systems) and **ISO 14001** (International standard for environmental management systems) certified.

AUTOMATION



With AC2E Next the entire washing process is automatically controlled by the machine. This means you can better organize your staff work, always counting on impeccable washing results while minimizing your operating costs.





Sorting and preparing the dishware to be loaded into the machine is a crucial operation and must be performed properly. It is also a repetitive and heavy operation for the staff.

The operator must be properly trained on correct and responsible operations, avoiding unnecessary waste of resources (water) and time.



An effective prewashing action means you can count on cleaner water in the wash tank, a higher level of hygiene inside the washing chamber and, therefore, a more effective wash.

In the prewash section dirt and food residues are "mechanically" removed from the dishware by the combined action of the upper and lower water jets at a low temperature.



THE ADVANTAGES OF THE PREWASH

ERGONOMICS:

more comfort to the operator, preventing MSDs and other discomfort caused by repeated movements, prolonged work in standing and by fumes of hot, dirty water laden with chemicals and odors in the wash up area.

AUTOMATION:

controlled mechanical action for more efficient and thorough clenaing.

TIME-SAVING:

speeds up loading operations and guarantees smooth operations.

WATER-SAVING:

controlled water consumption, optimizing the resources available.

TO CLEAN. WITH CARE.:

Cleaner water in the wash tank. Flawless results and reduced detergent consumption.

STANDARD

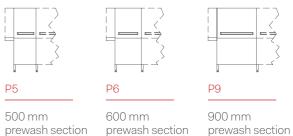
AUTOTIMER

Available as a standard feature in the AC2E Next series, this energy saving device automatically puts the unit in stanby mode when no racks are detected in the tunnel.



Not all operations are alike.

That's why at Comenda we've designed **different prewash modules** to suite different needs. All AC2E Next units can be fitted with additional technologies such as the **RED** system (Automatic Soil Removal), the **DHM2+** module and the **P-MAX** prewash technology.



OPTIONAL

RED* AUTOMATIC SOIL REMOVAL

Innovative and entirely in AISI 304 stainless steel, the external filtration filter accumulates the soil coming from the prewash module keeping the system clean. The external filter can be removed and cleaned even while the machine is running.



OPTIONAL

DHM2+

600 MM AUTOMATIC PRESCRAP MODULE WITH INTEGRATED RED SYSTEM

The three upper arms with different jet patterns, combined with the lower 6-nozzle- washing arm replicate the action of manual pre-washing by performing an energetic removal of dirt.

The DHM2 + module de facto eliminates the need for manual prewash and **guarantees a controlled water consumption and dramatic water savings.**

* RED Automatic Soil Removal can be integrated into AC2E Next models with a minimum prewash module length of 600 mm.

OPTIONAL

P-MAX

1150 MM AUTOMATIC PREWASH MODULE WITH INTEGRATED DHM2+

The 8 upper and lower arms with different jet patterns and different projection angles, attack food residues through three different actions: Hydration - Detachment - Elimination. The 4 PWS arms completely remove dirt from the dishes, preparing them for the degreasing action of the wash. The residues are then conveyed outside the machine and collected into the RED filter. The P-MAX module guarantees a controlled water consumption (60 I / h speed II DIN 10534) eliminating the need of the prerinse sink (estimated consumption 780 I / h).



Key: O DHM arms

Prewash arms with different jet patterns and projection angles

O PWS arms







STANDARD

WASH

The AC2E Next series wash section offers a powerful wash removing dirt residues thanks to the power of the pump together with the cross action of 8 upper and lower wash arms with 48 jets and the right detergent quantity.



The double skin door is provided with integrated safety springs.





RINSE

STANDARD

ECO2RINSE®

ECO2RINSE double rinse system with APRS® for an intelligent reduction of the water consumption by up to 55%. Economical and ecological at the same time.

Rinse water is not only filtered and reused in this 400mm module. Despite being able to operate at different speeds, conventional rack conveyor dishwashers always use the same amount of rinse water, which causes an enormous amount of waste. The AC2E NEXT ECO2RINSE system bring the rinse water consumption down to only 1,36 liters/rack, independently of the speed or program selected. Proven efficiency with the water odometer on the new backlit user interface.

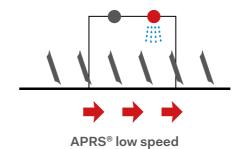


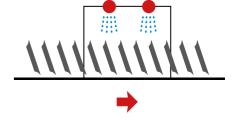




APRS® (AUTOMATIC PROPORTIONAL RINSE SYSTEM)

Patented APRS® (Automatic Proportional Rinse System) allows the amount of water to be gauged accurately for the load placed in the machine by the rack transport speed selected, thus tremendously reducing water, energy and chemical product consumption.





APRS® high speed

DETERGENT

DID YOU KNOW THAT...?



The detergent is essential to remove dirt and reduce the bacterial load from the dishes. It helps detach dirt from dish surface and keeps dirt particles in suspension, preventing them from falling back onto the dishes. It is paramount to choose professional products suitable for the type of items to be washed and to use detergent dosing units that guarantee maximum reliability!

OPTIONAL

RAH RINSE AID **HOMOGENIZER**

The RAH system, optional in the AC2E Next series, reduces the rinse aid consumption up to 70%! Rinse water and rinse aid are uniformly mixed, improving the drying process of the dishware.



DRYER AND HEAT RECOVERY SYSTEMS

OPTIONAL

DRYING TUNNEL

600-800 mm blower drying modules are available in straight (AS6 - AS8) and corner (TC90 - TC180) configurations. The air inside the machine is heated in a battery with heaters and blown on the dishware by means of an upper jet which is adjustable to optimize the result.

Part of the warm air of the dryer is recycled through a suction system within the module and mixed with clean air to decrease humidity, considerably reducing energy consumption.





WP - HEAT PUMP

The Comenda fourth-generation heat pump* is the innovation payoff. It saves up to **50% of the energy** normally used to heat water.

This device helps to reduce steam, creating a healthier working environment. It absorbs the heat produced by the machine reducing latent heat and cooling the air that is released into the premises.



^{*} The quantity of R314a refrigerant used in the new WP range guarantees less than 5 tons of CO2, thus making it easier to manage the appliance.

Furthermore, registration in the national register for systems containing fluorinated greenhouse gases is not required (see local regulations in force).



RC - HEAT RECOVERY SYSTEM

Fitted on the rinse section, enables the machine to be connected to cold water at 15°C, which is heated up to 50°C and transferred to the rinse booster. It promotes consistent energy savings.

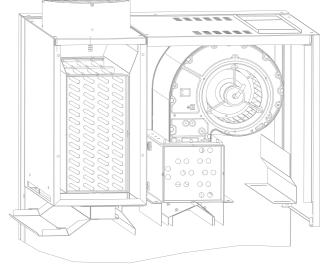
- -40% ENERGY required to heat rinse water
- up to 20% reduction in TOTAL INSTALLED LOAD
- Single point air extraction: drastic reduction in the volume of steam released in the work environment by your machine



OPTIONAL

ARC - DRYING TUNNEL

ARC optimises the hot and humid air flow produced inside the machine and re-uses it for drying. It guarantees an excellent result and helps to create a more comfortable working environment.









CONTROL PANEL

STANDARD

EVERYTHING UNDER CONTROL. ALWAYS.

Simple and intuitive with an elegant design, the AC2E series backlit control panel allows for an easy monitoring of the machine functions and access a vast amount of information.

Emergency OverRide System by Comenda (EOR):

Electro-mechanical control with key activation.

Temperature display:

The visualization of the temperatures is extremely quick and easy. Just select the zone with your fingertip.







Speed selection:

3 programs to be selected based on your operations and specific requirements.

Proven efficiency:

An instant-display to keep the consumption of water under control. It also allows for the visualization of total and partial operating hours of the machine, and plan your scheduled maintenance work.

You can check both the total and partial kW consumed as well!

OPTIONAL

C-SMART USER INTERFACE WITH CONNECTIVITY

The new Comenda C-Smart interface features an advanced electronic control and monitoring system and, at the same time, an auxiliary system -EOR, Emergency OverRide -, granting uncompromising washing results with the lowest possible running costs. The C Smart Console is located on the top side of the machine. Simple and intuitive, the IP65 rated touch screen display with its graphic interface communicates instantly through icons and colors.

The remote connection allows you to interact with the machine and monitor the main machine parameters, in compliance with the HACCP protocols.

You can monitor water and energy consumptions, control the functioning of all the components and plan the maintenance based on the real machine use, limit downtime by managing anomalies in real time. C-Smart updates remotely with ease and allows you to keep track of all maintenance interventions.



The integrated EOR (Emergency OverRide System) is activated by means of a key switch located con the control console.

It allows even unskilled staff to operate the unit in a basic but efficient mode and cope with unexpected PCB failures during operations granting consistency in washing with no downtime.

DID YOU KNOW THAT...?



You can monitor remotely machine parameters and the list of alarms by simply connecting to the "Comenda Connect" portal and entering your reserved area. You can select records, save and export them to different formats.



COMENDA MEANS HYGIENE

The AC2E NEXT series guarantees perfect disinfection and sanitisation of the crockery, removing food residue and microbes in compliance with current regulations.

The RCD system, available on all AC2E NEXT models as an option, maintains constant water pressure and temperature throughout operations.

The highest levels of hygiene and sanitisation are achieved through high washing and rinsing temperatures along with contact times in line with the DIN 10534 standards.



55°C - 65°C



80°C - 90°C



OPTIONAL

THERMO LABEL TEST*

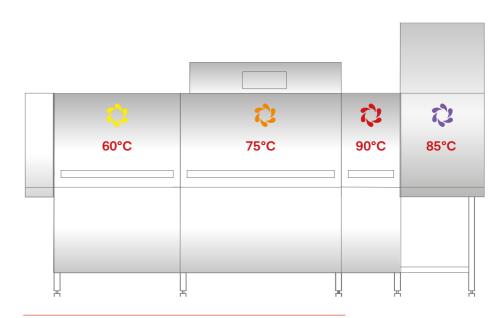
The special Thermo Label Test (TLT) execution allows to reach the temperature of 71 °C on the plate surface.

HOW IS IT MEASURED?



* This specific execution may impact on the machine configuration and total installed load.





The configuration is given by way of example. Thermolabel test execution currently available on models with pre-wash.



THE SPECIAL IS OUR STANDARD

Our priority is to assist our customers and offer bespoke solutions that respond to their specific needs and comply with the most stringent hygiene standards.







CLOSE TO PEOPLE

We, at Comenda, know what it means to cope with shifts at a fast pace, to work in a humid work environment and in contact with high temperatures, the struggle with daily machine cleaning operations.

We know thanks to an ongoing open dialogue with our customers for over tifty years.

This daily confrontation helps us to always keep our feet on the ground, reminding us that each of our solutions must serve to **improve and simplify people's work.**

At Comenda we are proud to say that our dishwashers are of the present time, designed to be NEXT level to solve the concrete and daily problems of today's people.

Self-cleaning cycle

Designed to facilitate daily cleaning operations and ease machine maintenance, it not only improves overall hygiene conditions but - at the same time - helps preventing obstructions and downtimes, extending the life of your dishwasher.

COLOUR CODING

The Comenda AC2E Next series has been designed to prevent the build-up of food residue inside the machine, thus guaranteeing a spotlessly hygienic wash result at all times and facilitate daily cleaning operations.

Every module of our tunnel machine - and its internal components- is identified with a colour, for the ease of the staff in cleaning operations and in the process of preparing the machines, avoiding incorrect combinations resulting in malfunctions.

SPLASH SHIELD

■ DHM

Billy

PREWASH MODULE

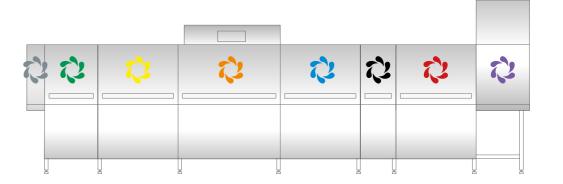
1st WASH SECTION

2nd WASH SECTION

NEUTRAL ZONE

MULTIRINSE SECTION

DRYER MODULE







WHY TREAT THE WATER? THE REASON IS ... CLEAR!



A good dishwasher allows the water pressure and temperature to be controlled but not its quality. Which is why we recommend combining the machine with a Comenda water softener and a Comenda reverse osmosis unit.

Here the selection for the AC2E Next units

Softener

Model: C12

Dimensions: 245 x 440 x 580 mm Weight: 12 Kg Volume of water treated:

- 1200 liters 440 ppm
- 1800 liters 250 ppm



Reverse osmosis unit

Model: AQUA + HB

Dimensions: 492 x 465 x 750 mm Weight: 50 Kg Volume of water treated:

> SOFTENED WATER Water softening partially

removes calcium and magnesium ions from

• 420 l/h

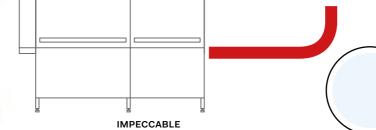


UNTREATED WATER Inlet water from the main supply contains impurities and mineral salts.



REVERSE OSMOSIS Water is forced at high

pressure to pass through a semipermeable membrane This captures impurities, mineral salts and other microscopic debris.



SHINE

SOFTENER

PURE WATER

Water treated with a reverse osmosis unit is chemically pure residues when it

IS THERE A PERFECT RACK? YES, INDEED!

Every item has its own washing requirements.

Our extensive selection of racks and special inserts helps you to complete your washing configuration with a bespoke solution for your needs.

Items can be safely and easily positioned in our racks, leaving plenty of space for the water to pass and reducing the breakage rate.

DID YOU KNOW THAT...?



Cutlery rack and inserts

The special 8 compartment insert allows the cutlery to be inserted in a flat rack guaranteeing uniform cleanliness.



Compartment glass racks

Glasses can be positioned with the bottom facing upwards. The design in compartments prevents the glasses from touching one another when the machine is running, avoiding the risk of breakages.



Plate rack

Ideal for both types of plates; the correct separation of flat plates and soup plates allows sufficient space to be left between them, thus avoiding concealed areas.



Tray rack

This rack allows trays to be correctly spaced out, so the spray arms can reach the most critical points.



TAILOR-MADE SOLUTIONS

There are no two businesses alike. Each one has its own characteristics and requirements. Our goal is to help you provide an excellent and reliable service.



Hospitals and care homes

Three meals a day, tight time frames and high expectations. A hospital never shuts down. The requests are constant and absolute hygiene must be guaranteed. The AC2E Next range helps you to manage a large number of meals efficiently and reliably.



HO.RE.CA

A well-presented table, down to the very last detail, is essential for ensuring a memorable occasion. Spotless dishes, sparkling glasses and perfect cutlery are essential to enjoy each course to the full.

Our AC2E Next rack conveyor dishwashers guarantee excellent results with a quick turnaround, thus reducing staff numbers.



Banqueting & events

Events, corporate parties, weddings and celebrations. Tight deadlines, a huge variety of crockery and high number of courses. Spotless tableware, meticulous care of guests, speed and efficiency. What about the results? Impeccable, of course. Our range of rack conveyor dishwashers is designed to tackle the most difficult washing challenges and guarantee a huge number of impeccably clean dishes in a short space of time, ready for the next event.



Schools, universities, canteens and barracks

How can high footfalls be managed at peak times? Simple, with a dishwasher that lets you rapidly serve large numbers of people in a short time. The AC2E NEXT range allows you to wash large quantities of crockery and efficiently manage waste while saving on costs.



Central kitchens

Two keywords: speed and organisation. From the preparation to the delivery of meals, as well as cleaning at the end of the service, catering centres work to a strict set of rules.

This is the only way that they can provide hospitals, schools and other large organisations with the very best service. Our AC2E Next rack conveyor dishwashers are designed to cope with huge amounts of crockery and containers.



TAILOR MADE SOLUTIONS

1. WE LISTEN TO YOU

We analyze your business in every detail to understand how to best organize your washing area. We take into consideration the space available, the number of operators involved, the organization of the work, the mealset, the amount of items to be washed and the time available for the service.

2. WE ANALYZE

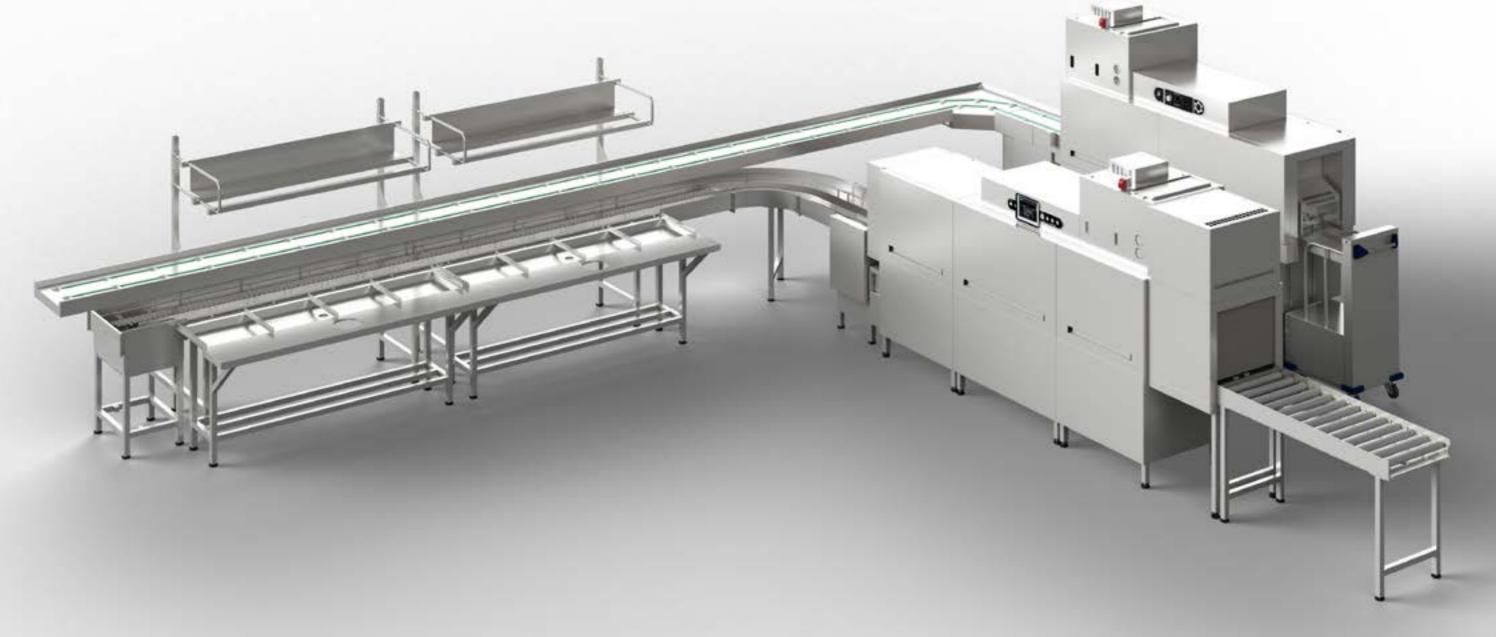
Teamwork is the key to fully understand your needs and design a perfect solution for your needs through a constant and mutual exchange of ideas and know-how.

3. WE DESIGN

We propose the most suitable solution to optimize your investment, guaranteeing efficiency, ergonomics and a good organization of work.

4. WE TEST

Every single Comenda unit undergoes specific testing procedures to guarantee the highest quality standards.





REAL TIME SERVICE

READY TO RESPOND

There's no time for downtime in your operation. That's why our products are designed to facilitate quick turnarounds and replacements.

By easing access to spare parts through our Comenda App, Comenda ensures rapid response and complete client service. For support, count on our extensive network of distributors and service providers who are ready to assist when you need us.



01

Simply scan the QR code

that features on all our machinery to gain 24/7 access to our service platform.



X2000000916 Serial number



02

Tap into user manuals as well as detailed electrical and hydraulic schematics, and exploded views.







03

Original spare parts can be easily ordered by clicking on the exploded view.

Machine spec sheets and CAD drawings are available online in the Comenda Library section at www.comenda.eu

COMPANY

COLLABORATIVELY COMENDA

Just as you are in the business of serving people, we're in the profession of serving you.

Our development since 1963 as a company has always championed exceptional performance, cost containment and highly energy efficient design. Close, active consultation also ensures that we generate the perfect solution for our clients. That involves understanding the challenges our clients face on a daily basis and helping them to meet their objectives.

That's the Comenda difference and it carries on through our commitment to ongoing service and support.

We may be just one component of your overall success, but we always aim to be at the heart of your operation.



RESEARCH & DEVELOPMENT

A CONTINUOUS CYCLE **OF IMPROVEMENT**

We have a responsibility to push ourselves to improve. Every detail of Comenda equipment undergoes ongoing scrutiny, testing and refinement.

Through our Research & Development team and certified onsite lab we uphold rigorous scientific principles to develop proven solutions. We draw on the expertise of multidisciplinary engineers and steel industry professionals along with an extensive network of sales managers and distributors who clearly understand client challenges to ensure our equipment performs to the highest calibre.



Teamed with our ongoing customer consultation we can directly address specific issues. That approach may exceed common expectations in this industry, but it demonstrates our commitment to providing superior client service and a stronger overall relationship.



COMENDA srl

management system and ISO14001:2015

TECHNICAL DATA

AC2E NEXT

Rack conveyor dishwashers

TECHNICAL DATA

TEGHNIGAE BAIA					
	AC2E AC2AE	AC2EP5 AC2AEP5	AC2EP6 AC2AEP6	AC2EP9 AC2AEP9	AC2E2LP6 AC2AE2LP6
MIN. CAPACITY - 1st speed - (racks/h)	95	121	123	144	167
CAPACITY DIN10534 - 2 nd speed - (racks/h)	105	135	140	160	185
MAX. CAPACITY - 3 rd speed - (racks/h)	140	195	205	220	255
RINSE WATER CONSUMPTION* (I/rack)	1,36	1,36	1,36	1,36	1,36
WASH TANKS VOLUME (liters)	94	139	139	174	214
TOTAL MACHINE LENGTH (mm)	1750 1400 x 1600	2250 1900 x 1600	2350 2000 x 1600	2650 2300 x 1600	3250 2900 x 1600
INSTALLED LOAD (Kw)	21,9	26,9	26,9	27,34	39,33
INSTALLED LOAD (WITH HEAT RECOVERY UNIT)	24,95	29,14	29,14	31,39	43,38
INSTALLED LOAD (WITH HEAT PUMP) (KW)	WP7.2 18	WP7.2 22,2	WP7.2 22,2	WP7.2 24,4	WP7.3 29,5

^{*} The data refer to the maximum machine capacity (3rd speed)

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All models available in electric or steam heating execution.

FEATURES

	STANDARD	OPTIONAL
Entry splash shield	•	
Upper back-lit TECH+ control panel and EOR	•	
Counterbalanced insulated doors	•	
Reinforced insulation		•
Section Eco2rinse®	•	
Autotimer	•	
APRS ® - Automatic proportional rinse system	•	
RAH - Rinse aid homogenise		•
RCD - Rinse Control Device		•
HPS Easy - HACCP system. Time, water and energy consumption counter		•
HPS Easy Plus - HACCP system. Data recording regarding consumptions, temperature and alarms		•
RED - Automatic Soil Removal		•
DHM2+ - Additional prescrap module with RED		•
P-MAX - Automatic prewash module with integrated DHM2+		•
AS6 - 600 mm Blower dryer - +6,42 Kw/9,42Kw		•
RC - Heat recovery unit		•
ARC8 - 800 mm Blower Dryer with Heat Recovery Unit - +6,53 Kw/9,53 Kw		•
TC90 - Blower Dryer on 90° 1000x1000 mm exit curve - +6,42 Kw/9,42 Kw		•
TC180 - Blower Dryer on 180° 1500x1000 mm exit curve - +6,54 Kw/9,54 Kw		•
WP7.1 - Heat pump for one tank heating		•
WP7.2 - Heat Pump for rinse water preheating and one tank heating		•
WP7.3 - Heat pump for rinse water preheating and two tanks heating		•
C-Smart - Control panel with touch screen and Wifi connection for remote control and EOR		•
ZN4/ZN6 - 400/600 mm neutral section		•
Cold water feed execution		•
Sanitising system		•
Liquid detergent/rinse aid/saniting agent dosing units		•
Phase Sequence and phase loss relay	•	
TLT - Thermo Label Test execution		•
Special execution for glass washing		•

Warm water connection (55°C)

Cold water connection (15°C)





CONTACTS

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