Linea ACRS
rack conveyor dishwashers
designed for hygiene
service on your doorstep

Continuous contact between production and service engineers is the key to effective support whenever maintenance is required: certainly, this is one of the distinguishing characteristics of Comenda’s technical assistance. An extensive network of highly skilled service engineers provides full territorial coverage. Rapid turnaround on service calls and immediate availability of spare parts complete the Comenda offer and ensure excellent quality of service.

Comenda: a history of technological innovation

The founder company of the Ali group, Comenda has been synonymous with the best in professional dishwashing equipment for over 40 years. One of the industry’s top players both in Europe and worldwide, Comenda manufactures and markets more than 200 dishwashing solutions, from the smallest glasswashers for bars through to large automated continuous flow systems for restaurants, hotels, hospitals, canteens and in-flight catering. Comenda also designs and installs customized solutions for individual space and workload specifications.

ergonomics and functionality

For Comenda, ergonomics means “easy to use”. Operating simplicity improves work procedures and guarantees personnel safety. Machine electronic control that manages each process phase and lateral wash arms that guarantee exceptional results are just some of the benefits of the Linea ACRS, reflecting the attention that Comenda devotes to its users.
designed for hygiene

Hygiene design takes quality beyond the dimension of product form. At Comenda, designed for hygiene means form plus technology plus functionality. Comenda’s strength is its attention to every last detail, to provide superior washing solutions that comply with the severe hygiene standards required in public catering.

design expertise at the user’s service

A perfect blend of advanced research, design expertise and technical know-how, the Comenda product range combines superior performance with eye-pleasing form, to deliver quality down to the smallest construction details. Maximum reliability goes hand in hand with minimum maintenance. Components are located for easy access and replacement: at Comenda, an efficient after-sales service begins with product design.

products to cover every requirement

For Comenda, the needs of the customer are paramount in the design of customized solutions for hygiene of the highest quality. Every product installed at the customer site must satisfy stringent requirements for productivity, ease of use, cost-effective operation and safety. Absolute reliability in washing glasses, plates, trays, pots and pans of every shape and size. Front loaders, hood models, rack conveyors and flight machines equipped with a complete set of accessories make Comenda the ideal partner for every catering professional.

respect for the environment

With the ECO2 Economy + Ecology project Comenda has made significant progress in limiting consumption, with a focus on sustainability that translates into respect for the environment and respect for people. Comenda systems keep running costs down by using less water and detergent during the wash cycle and cutting energy consumption, without sacrificing hygiene efficiency. Silent machine operation and lower heat dispersion ensure pleasant conditions in the workplace.
The Linea ACRS is the ideal solution when a large number of dishes need to be quickly washed at reduced running costs. Available with different hourly production capacities, all models feature high automation levels. Linea ACRS offers all Comenda safety features: durable and resistant materials and components, safety devices for all the electrical and mechanical equipment; stringent controls for each machine and all its parts. Just push the racks into the tunnel. The machine does the rest. Dishes exit the other side clean and dry, ready to be used. “High” speed to accelerate washing time and save energy whenever possible; “low” speed to deep clean tougher soil (according to DIN 10510 standards).
Linea ACRS’s high flexibility permits customised washing systems to satisfy any room situation. The robust support frame (3 mm thick) and body are made entirely of 18/10 AISI 304 stainless steel. All construction materials have been carefully selected to stand up to the most aggressive detergents and high temperatures.

SAVINGS
- Heat pump: heats water to the best washing temperature and improves working environment
- Pre-Wash Plus: additional pre-wash
- Mid-Wash Plus: additional intermediate wash

HYGIENE
- Deep-drawn tank with rounded corners: prevents soil accumulation
- Flux Control: controls rinse water flow
- Machine self-cleaning at the end of the day
- Hygiene Plus System

EFFICIENCY
- Adjustable side washing arms equipped with clog-proof nozzles
- “Detrempe” module with removable filter: prevents food residue accumulation in the pre-wash area
- Osmosis rinse that automatically recognises glass and cutlery racks

SAFETY AND FLEXIBILITY
- RCD Rinse Control Device: prevents backflow and keeps rinse water pressure constant
- Separate wash and rinse doors: improve accessibility
- Possibility of excluding pre-wash and dryer

Not only top to bottom but even from the sides: water directly hits dishes to ensure perfect cleaning in the shortest amount of time and to fight tougher soil even in less accessible areas. The corner washing tunnels let Linea ACRS models be installed in even “difficult” rooms. The same machine body can be installed in a straight angle or “U” configuration.
With the ECO2 project Comenda has made significant progress in limiting consumption in three important areas – water, energy and detergent – by implementing a series of advanced technologies.

**PRS**

Proportional Rinse System

It’s a new and patented Comenda system. PRS allows to save up to 30% of water, energy, detergent and rinse aid. PRS regulates correct rinse water quantity according to conveyor speed.

**energy savings**

**heat recovery unit**

This system lets the machine run with cold water, pre-heating it to 45-50 °C. It exploits the heat and steam that would otherwise be dispersed in the air with significant energy savings (from 9 to 17 kW/hour according to the model). It is available with an exhaust conduit that runs along the entire machine length.

**heat pump**

Exploits the heat produced during a refrigeration cycle to heat rinse water and in some models also the wash tank. This system lets the machine run with cold water affording significant energy savings (from 15 to 25 kW/hour according to the model). Emitted heat and steam are simultaneously cooled to further improve work room conditions.

**autotimer**

It reduces consumption by stopping the pumps when the system is idle automatically restarting when racks are loaded.

**Double skin execution**

To save energy and to reduce sound and heat dispersion in the room.

**chemical savings**

**midwash plus**

Using a part of ecorinse water for additional pre-wash reduces the quantity of water added in the wash area and consequently detergent consumption up to 50%.

**water savings**

**ecorinse**

With this system, final rinse water is reused for pre-rinse cycles not only providing significant water savings (from 20 to 30% litres/hour according to the model) but also energy and rinse-aid savings.

**economizer**

The rinse area is equipped with a water and energy savings device when the rinse area is on stand-by.

**Double skin execution**

To save energy and to reduce sound and heat dispersion in the room.
1 **pre-wash**

Efficient water filtering thanks to a wide and proficient stainless steel filtering surface covering the entire tank; easy to remove cartridge filters, deep drawn tank with rounded corners to prevent dirty water from stagnating and improve hygiene. High-capacity pump with a filter on the intake. Available in the 900 mm version for heavy duty pre-wash with stainless steel top and bottom wash systems completely removable for cleaning and equipped with deep drawn nozzles to achieve the best results. Upper and lower proportional pressure regulation system. Constant temperature control and automatic cooling over set limits.

2 **main wash**

Stainless steel top, bottom and side wash systems, completely removable for cleaning and equipped with deep drawn nozzles to achieve the best results, upper and lower proportional pressure regulation system. Constant water level and temperature control in the tank. Efficient water filtering thanks to a wide and proficient stainless steel filtering surface covering the entire tank and easy to remove cartridge filters. Deep-drawn tank with rounded corners. High-capacity pump equipped with intake filter.

3 **ecorinse: pre-rinse and final rinse**

Pre-rinse: tank with dual filter system and pump with stainless steel impeller reuse clean rinse water for a pre-rinse cycle, thus saving energy and water. Rinse: supply water is heated to 85 ºC to sanitise dishes. Equipped with an economizer system to reduce water and energy consumption. Easy to remove stainless steel arms and nozzles.
**4. Osmosis Rinse**
Rinse with demineralised water, especially indicated for cutlery and glasses. Two possible solutions:
- machine with complete demineralised water rinse
- machine with additional 400 mm osmosis rinse area and automatic rack recognition system

**5. Electronic Control Panel**
Provides settings and control of the various washing phases and signals any malfunctions. In this version it is mounted on the front of the drying unit.

**6. Dryer**
Available in various sizes, straight or fitted to 90° or 180° curves with different outputs.

**RCD Rinse Control Device**
Guarantees an excellent rinse even with low pressure water flow. RCD complies with severe backflow prevention specified by WRAS and DVGW.

**Steam Condenser**
System avoids that warm humid air exits the machine by condensing it with a cold water battery.

**Inlet and Exit Tables**
A wide range of corner or straight loading tables, under-shelves, sinks and showers are available to eliminate soil before the pre-wash cycle. Exit roller tables and 90° automatic unload systems are also available.
All structural and system components including pumps and washing columns in the Linea ACRS are installed outside the wash chamber, leaving only smooth surfaces inside preventing residue build-up. The wide filtering surfaces and deep-drawn tanks with rounded corners make inspection easy and keep wash tanks cleaned. Self-draining wash pumps are also programmable to be self-cleaning. This way clean water is used to completely wash the machine and remove all residue. Flux Control® makes sure that the quantity of rinse water provides excellent results and maximum hygiene. It also signals low water levels or waste during the rinse cycle.

The Sanitizing System® can also be included. In each wash and rinse area, powerful jets of water with the addition of specific detergents are aimed at the internal surfaces by adjustable nozzles to guarantee maximum hygiene at the end of each working day. The entire system is easily accessible.

The re-designed and easy to use Linea ACRS control panel ensures simple and immediate machine use. It provides the user with precise and timely information on machine functions. The scrollable four-row LCD display shows:

- machine status
- information messages
- machine data
- malfunctions

A large amount of significant machine data can be set and controlled to guarantee perfect cleaning and total hygiene. In particular, pre-wash, wash, rinse and drying temperatures are constantly monitored and any malfunction immediately detected. This monitoring system also includes the correct amount of clean water in the rinse area to ensure quality and hygiene. The confidence of having a system in perfect operating conditions is no less important; the system reminds the user to perform routine maintenance by displaying the hours remaining until the next operation. These are only some of the numerous benefits the electronic control system offers by communicating with the user in the language of the country where the machine is installed. The last-generation digital panel is also able to send HACCP procedure data to a printer or PC via the HPS (Hygiene Plus System) programme.
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Depth 800mm

*Heater interlocked

1<sup>st</sup> speed according to DIN 10510
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Technical variations reserved

Please note that some characteristics described in this brochure are optional