



Glasswashers

niagara

351

341

 **ELETTROBAR**

The Benefit Makers

# ELETTROBAR

## the benefit makers



## niagara

During more than 40 years of business, we have produced more than a million industrial dishwashers at our two Italian plants, numbers that reflect our unrivalled experience in this particular sector. Building on this experience, we have continued to develop competitively-priced innovative products for leading players in the catering industry, furnishing these with effective, consistent benefits for their business. Elettrobar can, therefore, claim to be more than just a dishwasher manufacturer: we are benefit makers.

Our company is fully aware of the increasing importance of environmental protection issues and has taken major steps in this direction, developing and patenting innovative technologies able to reduce water, energy and detergent consumption without impairing performance. We adopt extremely stringent ISO 9001:2008 certified quality control procedures to propose products built to withstand even the harshest operating conditions. Our dishwashers are manufactured at forefront facilities both as regards workplace safety and protection and environmental impact, as confirmed by ISO 14001:2004 certification.

With the aim of delivering increasingly energy and water efficient products, we have examined each single phase of the wash cycle (washing, rinsing and drainage), pioneering and adopting technologies and methods that promote a considerable reduction in consumption while guaranteeing performance on a par with or exceeding that of conventional systems:

**EWT** (Elettrobar Wash Technology) is our way of using 35% less energy to power the wash pump.

**EDS** (Elettrobar Drain System) is our way of reducing detergent concentration by a further 10%. In this way, compared with conventional models, a Niagara dishwasher can consume up to 15% less detergent.

**EVI** (Elettrobar Visual Interface) is our way of assuring simple control and operation of the dishwasher with a communication protocol based on colours, letters and numbers.



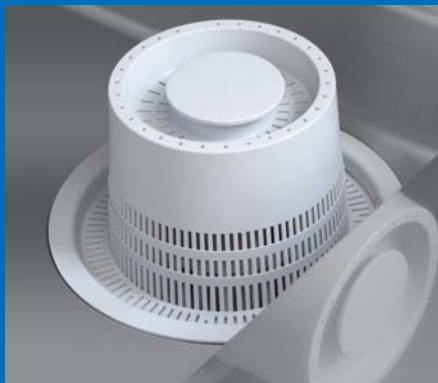
# technology creators



## EWT

Most losses of power occur in the deviator that separates the water directed towards the upper arm from that routed to the lower arm. Elettrobar's EWT simple, genial patented solution eliminates the deviator and has prompted development of the exclusive dual flow, double outlet pump connected directly to the arms. Power loss is eliminated, with a consequent reduction in pump power, i.e. consumption with the same washing force.

The light, strong composite material high-tech arm requires less energy for rotation and guarantees optimal distribution of water.



## EDS

Conventional drainage systems use a gravity waste to drain excess water during rising. As the clean water is lighter than the dirty water in the tank, it floats on top of this and around 35% is discharged directly into the drain and not in the tank. EDS exploits the principle of Archimedes using the clean intake water to exert a "piston" effect that pushes the dirty water from the bottom of the tank to the gravity waste. In this way, only 17% of the clean water is drained directly, the detergent solution in the tank is cleaner and a lower concentration of detergent can be used.



## EVI

A new user-friendly interface based on a four character LED screen that displays essential information: program selected, wash and rinse temperatures, number of cycles performed, user alerts, error messages. A visual check control changes colour, from green to yellow to red, to indicate machine status. A second bar shows progress of the cycle.

# benefits



## First benefit:

### performance

Elektrobar's dual flow pump technology and high-tech arm effectively reduce losses of power and of water pressure at the outlet of the pump until the water reaches the object to be washed; wash temperature is 60°C compared with a conventional 50°C. This generates three concurrent positive effects: more powerful soil removal, maximum effectiveness of the detergent promoted by high temperature and a reduction in cycle times while delivering the same results.

## Second benefit:

### green economy

Water is a precious element, detergents are pollutants, generating electric energy disperses CO<sub>2</sub> in the atmosphere. With a water consumption of less than 3 litres per rack and dual flow pumps, Niagara delivers impeccable washing in less time, also absorbing less power, while the EDS patented drainage system promotes a 10% reduction in detergent concentration compared with a machine with conventional gravity drain.

## Third benefit:

### higher profits

Reducing consumption also means cutting running costs and, therefore, boosts profits while guaranteeing perfect hygiene and bright, clean dishes.

niagara



#### **Fourth benefit:** **ease of use**

With the EVI interface, you can choose one of the three programs available (fresh soil, standard, very dirty plates), display machine functioning status and also the point of the cycle reached, manage the software-regulated rinse aid and (optional) detergent dispensers, display error messages, operating temperatures and number of cycles performed in a completely user-friendly manner, without the need for long staff training.

#### **Fifth benefit:** **fast cleaning**

End-of-shift cleaning operations are certainly the most fatiguing and stressing for operators. Niagara dishwashers are designed and constructed according to very simple, efficient principle: as all points where food soil may be trapped have been eliminated, this does not accumulate and need not be removed. Other factors include fully moulded tanks, integral tank filters, wash chambers without internal hoses. All Niagara hood models also feature a high temperature self-clean program for even faster cleaning.

#### **Sixth benefit:** **delicacy**

Niagara glasswashers are designed to wash even the most delicate glasses; therefore, the pump of the 351 model is equipped with a patented electronic soft start system that permits gradual, balanced increase of pressure on the glasses, with wash and rinse temperature (always freely adjustable by the user) of 60°C and 65°C respectively. This avoids thermal shock on the glass (also above 30°C on conventional machines) that may cause breakage and also reduces drying times.

# niagara 351



Undercounter version with 50x50 cm rack able to wash up to 1,000 wine glasses/hour. Useful height of 29 cm permits washing of up to 25.5 cm high glasses and also of up to 720 x ø 24 cm standard plates/hour. External dimensions of 60x60 cm with height limited to 72 cm permit seamless integration to replace old machines with 40x40 cm rack.

The Niagara 351 is the ideal solution for small-medium bars that serve fast food and therefore require a multi-functional, high productivity machine.

## Versions available

### Basic

**S:** with water softener.

**DP:** with electronic detergent dispenser and drain pump.



## Technical data

Dimensions (wxdxh)	cm	60 x 60 x 72
Useful height	cm	29
Tank capacity	lt	15
Water consumption/cycle	lt	2,8
Tank element	W	2.100
Boiler element	W	4.900
Max. power consumption	W	5.400
Power supply	V/Hz/f	400/50/3
Fuse	amp	16
Convertible to single-phase with power consumption	W	3.500
Duration basic cycles	sec	90 - 120 - 150
Self-clean cycle		ProSelf

Standard equipment:  
2 x 50x50 cm glasses racks  
1 x cutlery basket

# niagara 341



Undercounter version with 40x40 cm rack able to wash up to 500 wine glasses/hour.

Useful height of 30 cm permits washing of up to 27 cm high glasses and also of up to 360 x ø 24 cm standard plates/hour with the specific optional support.

The Niagara 341 is a versatile, efficient machine that performs well both as glasswasher and dishwasher and is the ideal solution for medium-small operations with limited operating space.

Specific version available for use with round racks and also after-sales adaptor kit.

## Versions available

### Basic

**S:** with water softener.

**DP:** with electronic detergent dispenser and drain pump.

**R:** with round rack.



## Technical data

Dimensions (wxdxh)	cm	45 x 55 x 71
Useful height	cm	30
Tank capacity	lt	8
Water consumption/cycle	lt	1,9
Tank element	W	600
Boiler element	W	2.600
Max. power consumption	W	3.400
Power supply	V/Hz/f	230/50/1
Fuse	amp	16
Duration basic cycles	sec	90 - 120
Self-clean cycle		ProSelf

Standard equipment:  
2 x 40x40 cm glasses racks  
1 x cutlery basket



**Warning:** The consumption and performance data indicated refer to machines installed and operating in ideal conditions and may vary according to installation conditions.  
The technical data furnished in this catalogue are for guidance purposes only and may be modified in accordance with the continuous technological development of our products.