# Undercounter dishwashers

Technology and harmony

Useful Innovation

# The Benefits

## Productivity

Anyone purchasing an industrial dishwasher has a specific purpose: TO WASH LARGE QUANTITIES OF DISHES IN THE SHORTEST POSSIBLE TIME. When you choose a machine and consult the sales brochures of various manufacturers, you will see that the figure most often quoted is the

**Theoretical productivity**

**This value does not reflect the real-life use of the machine as it only takes into account the shortest wash cycle**; for example, a dishwasher with a 60" cycle will have a theoretical productivity of 60 racks (1080 dishes) per hour. However, in reality, a cycle can never be shorter than the recovery time determined by the thermostop, i.e. the time taken by the boiler to bring the water up to the correct temperature for rinsing. The recovery time for any type of dishwasher can be calculated using a simple formula from the following parameters: rinse temperature, water supply temperature, boiler power and water consumption per cycle.

For example, given a rinse temperature of 80°C, a water supply temperature of 15°C and 6 kW boiler, the recovery time will vary as follows according to the water consumption per cycle: 136" for 3 litres, 113" for 2.5 litres, 91" for 2 litres. So the machine you bought thinking it was capable of washing **1080 plates per hour** will in reality only be able to wash between **468 and 702, which is 57% to 35% LESS.**

Sales brochures often contain phrases of the type "Important: the Thermostop may reduce productivity if the water supply temperature is less than 50 °C", which may serve to justify this shortfall, but fail to give an idea of what sort of productivity the user might reasonably expect to achieve.

**Practical productivity**

This figure takes into account the recovery time required to unload and load the machine between cycles **and is an indication of the maximum productivity that can be obtained in the best real-life operating conditions when several cycles are performed in succession.** Colged provides this information based on a water supply temperature of 15°C (as the majority of installations run on cold water) and an average load/unload time of 12".

**Colged productivity**

he new generation of Colged dishwashers is designed to offer the highest real-life productivity thanks to the application of technologies to shorten the recovery time, particularly by reducing water consumption. Shorter wash cycles mean higher temperatures are needed to obtain good results, and for this reason our new dishwashers use an electrical power division system, with total consumption always below 16 amp, and an effective tank temperature that is 10 °C higher than previous generation machines in the case of repeated washes. We are therefore now able to offer dishwashers with a practical productivity ranging from 45 to 32 racks/hour, depending on the model. These are absolutely the highest values on the market for the respective product classes.

Furthermore, to reduce the time needed to prepare the machine at the start of the work shift, our machines offer **QuickReady**, technology, which utilises all the available electrical power to heat the tank water.

**Maximum theoretical productivity with a rinse temperature of 80°C and water supply temperature of 15°C (racks/hour)**

*Boiler heating element power in kW*

| *Water consumption in litres per cycle* | 3,0 | 3,5 | 4,0 | 4,5 | 5,0 | 5,5 | 6,0 | 6,5 | 7,0 | 7,5 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,6 | 24 | 28 | 33 | 37 | 41 | 45 | 49 | 53 | 57 | 62 |
| 1,8 | 22 | 25 | 29 | 33 | 36 | 40 | 44 | 47 | 51 | 55 |
| 2,0 | 19 | 23 | 26 | 29 | 33 | 36 | 39 | 43 | 46 | 49 |
| 2,2 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 |
| 2,4 | 16 | 19 | 22 | 24 | 27 | 30 | 33 | 35 | 38 | 41 |
| 2,7 | 14 | 17 | 19 | 22 | 24 | 26 | 29 | 31 | 34 | 36 |
| 3,0 | 13 | 15 | 17 | 19 | 22 | 24 | 26 | 28 | 30 | 33 |
| 3,5 | 11 | 13 | 15 | 17 | 18 | 20 | 22 | 24 | 26 | 28 |

Water supply temp. 15°C - Rinse temp. 80°C.

## Lower operating costs

Reduced costs for water, electrical power and chemicals are an immediate benefit for users of Colged dishwashers. The cost of washing 1800 plates (100 standard racks) ranges from 5.30 to 6.70 €, according to the model; the lowest costs in their product category.

The operating cost depends greatly on the water consumption, of which the greater part occurs during the rinse cycle. Colged has conducted its own research into the reduction of water consumption: even 10 years ago our **TopTech** dishwashers had a water consumption of just 1.9 litres cycle, when the majority of our competitors could do no better than 2.5 litres.

Thanks to the use of new technologies, such as the **HiTech** spray arm and **UltraRinse$_3$** geometry, our dishwashers can now offer a water consumption of just 1.6 litres per cycle (TopTech 36-23), a reduction of over 15%. For the other models in our range, water consumption is between 1.8. and 2.0 litres per cycle, equivalent to a reduction of between 22 and 25%. By way of example, the table below shows the comparative costs for washing 1800 plates (100 standard racks) for various levels of water consumption, with a water supply temperature of 15 °C*.

| litres / cycle | € | litres / cycle | € |
|---|---|---|---|
| 1,6 | 5,45 | 2,4 | 8,10 |
| 1,8 | 6,12 | 2,7 | 9,10 |
| 2,0 | 6,78 | 3,0 | 10,09 |
| 2,2 | 7,44 | 3,5 | 11,75 |

Some models feature the **EnergySaving** function, which decreases electrical power consumption during stand-by periods by reducing the boiler temperature to the lowest possible value that allows a return to the preset temperature for the selected programme before rinsing.

* Costs used: water 2.0 € / m$^3$, energy 0.17 C / kWh, detergent 3.75 C / kg, rinse aid 4.5 C / kg.

# Operational flexibility

Space is a valuable resource in any kitchen, and this is why Colged has created truly multifunctional dishwashers that are able to fulfil a variety of very different functions as the need arises.
All our undercounter machines have three standard programmes for dishes, up to three programmes for self-cleaning and tank water changing and up to seven specialised programmes.

**Standard programmes**

Differ not only for their contact time (cycle duration), but also for their wash and rinse temperatures and water consumption. Each programme is designed for a specific purpose: **ProSpeed**: for fresh, light soiling; **ProFessional**: for general use; **ProTemp**: high temperature wash for heavy soiling.

**Specialised programmes**

Transform a plate washer into a glass washer, into versatile small utensil washer, into a cutlery washer and even into a machine for sanitization to current European standards. **ProGlass**: for glass and crystal; **ProWater**: specially for osmosis water; **ProActive**: with prewash automatic for heavily soiled pans and dishes; **ProSteel**: for steel cutlery; **ProSan**: sanitization to EN ISO 15883-1/3; **ProEco**: low temperature for blood and starch; **ProLong**: continuous wash for dried-on dirt.

**Self-clean programmes**

These programmes simplify and speed-up end-of-shift operations and allow rapid changeover of all the water contained in the wash tank.
Depending on the model and the version, the machine may offer up to three programmes of this type.
**ProSelf**: self-clean cycle for machines with gravity draining; **ProNew**: total water change; **ProClean**: self-clean cycle with high-pressure jets for machines with **EvoLution** draining; **ProDrain**: automatic tank draining.

**Door opening**

Operational flexibility is enhanced by the ample opening width of 36.5 cm for the **SteelTech** and **IsyTech** models, and 38.5 cm for the **TopTech** model, which is wide enough to accommodate Gastronorm and Euronorm trays as well as miscellaneous utensils and smaller pans.

| PROGRAMME | MAIN USE | Duration min. sec. | Washing °C * | Rinsing °C * | Consump min. lt/cycle* |
|---|---|---|---|---|---|
| **ProSpeed** | Light, fresh soiling | 60 | 55 | 80 | 1,6 - 1,8 - 2,0 |
| **ProFessional** | General use | 90 | 60 | 82 | 1,8 - 2,0 |
| **ProTemp** | Heavy soiling - high temperature cycle | 180 | 60 - 65 | 85 - 88 | 2,5 |
| **ProGlass** | Glass and crystal | 90 | 60 | 67 | 2,0 |
| **ProWater** | Glass and crystal with osmosis-treated water | 120 | 65 | 70 | 2,0 |
| **ProLong** | Heavy soiling - continuous wash | 600 | 60 | 82 | 2,5 |
| **ProEco** | Blood and starch - low temperature cycle | 150 | 45 | 80 | 2,5 |
| **ProActive** | Pans and utensils - with automatic prewash | 300 | 70 | 82 | 3,9 |
| **ProNew** | Rapid water changeover | 540 | n.a. | 60 | 17,0 |
| **ProSteel** | Cutlery | 360 | 72 | 88 | 2,5 |
| **ProSan** | Sanitization to EN-ISO 15883-1/3 | automatica | 70 | 85 | 2,5 |
| **ProSelf** | Self-cleaning | 120 | n.a. | n.a. | 3,5 |
| **ProClean** | Self-cleaning and automatic draining | 300 | n.a. | n.a. | 12,0 - 15,0 |
| **ProDrain** | Automatic draining | 90 - 120 | n.a. | n.a. | n.a. |

* Depending on model and version

# Easy cleaning

Colged dishwashers are constructed in accordance with the **TotalClean** design philosophy to make end-of-shift cleaning operations as quick and easy as possible. This entails a number of important design features:

**Construction**

No pipes inside the wash chambers, deep-drawn rack guides with no blind spots where dirt can accumulate, unblockable integral surface strainers, with 2.5 mm diameter mesh and dished to trap dirt during emptying.

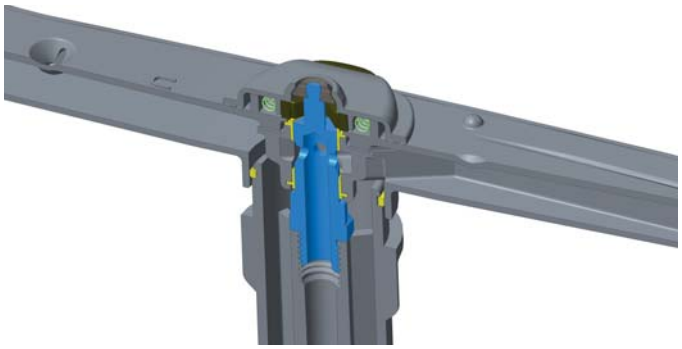
**Functionality**

Progressive triple-stage filtration of the tank water with elimination of particles down to a diameter of 0.8 mm; programme for self-cleaning of the wash chamber; wash arms with the **EasyHandling** system, which means they can be removed simply by pressing a button and then clicked back into place.

# The Technologies

## Water distribution system

The main component is the **HiTech** arm made from a composite material called **ProComposit** (30% fibreglass, 30% talcum microparticles, 40% organic resin). During rinsing, patented **UltraRinse$_3$** geometry ensures that the water is used more effectively and efficiently, thereby helping to minimise consumption.
The washing nozzles are on the same level as the rinse nozzles; this means that the spray is not obstructed, as is the case with the normal arrangement of separate wash and rinse arms. The arm rotates on 3 graphite bearings which reduce friction to virtually zero; this means the full force of the water from the pump is applied to wash the dishes rather than to rotate the arm via the reaction holes.
The **HiTech** arm features a snap-fit attachment system, which makes it easy to install and remove for cleaning, even with just one hand. Its mechanical strength, elasticity, resistance to chemical attack and simplicity of cleaning make this component particularly effective.

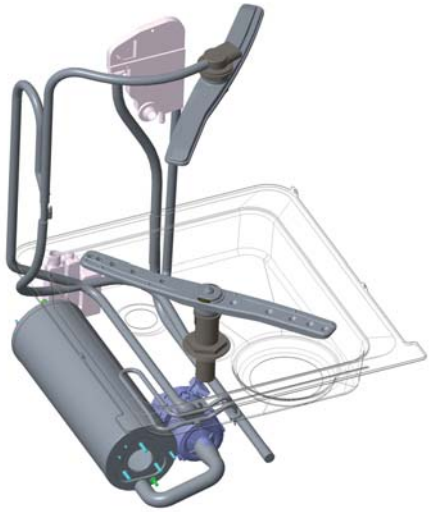


## Washing system

The heart of the system is the powerful pump with patented **DuoFlo** technology. Thanks to the pump's two outlets, with one outlet connected directly to the upper arm and the other to the lower arm, this system eliminates the loss of pressure caused by dividing the flow; in this way all the energy absorbed is transferred to the water, thereby achieving an effect equivalent to a conventional 600W pump from a 470 W pump. This means the same performance is achieved as competitors' products but with an energy saving of 25%.
A shorter wash cycle, with lower water and detergent consumption, is possible only with a higher wash temperature. Unfortunately, the majority of products on the market have tank and boiler heating elements that function alternately, with priority given to the boiler for reasons of hygiene. This means that, with repeated cycles, the tank is not heated sufficiently and its temperature falls rapidly, thereby compromising washing results. On the new Colged dishwashers, the **HotWash** system instead shares the electrical power between two independent heating elements so as to allow numerous repeated wash cycles and constant heating of the tank. The result, compared with a machine with interlocked heating elements, is that the temperature is around 10 degrees higher during repeated wash cycles: this allows a shorter wash time and a shorter drying time as the plates get hotter, lower detergent consumption and consequently lower costs.
With the **ProDose**, system, detergent products are dosed by an electronically-controlled peristaltic pump, which can be easily adjusted from the control panel, and which ensures constant, precise dosing of detergent and rinse aid without any wastage. On request, the machine may be equipped special level sensors that signal via a message on the display when the detergent tanks need to be changed, thereby avoiding the risk of the dosing units being damaged by running empty.

## Rinsing systems

Colged dishwashers employ a number of different rinsing systems, with different levels of complexity and performance, each of which however is capable of ensuring that certain parameters remain constant:
**Timed rinse:** uses **ThermoStop** to ensure a constant temperature at the start of the rinse cycle; the duration of the cycle is fixed, while the water consumption level depends greatly on the pressure of the mains water supply. It is used on the models 36-00 -10 -20.
The minimum water consumption is 2 litres/cycle.
**Volumetric rinse:** uses **ThermoStop** to ensure a constant temperature at the start of the rinse cycle; the duration of the cycle is variable and depends greatly on the pressure of the mains water supply; the average water consumption is constant and independent of the supply pressure. It is used on the models 36-01 -11 -21.
The minimum water consumption is 2 litres/cycle.
**ProRinse**: ensures that the initial and average rinse temperatures, the flow rate, the pressure and the duration all remain constant. All the physical parameters that determine optimal rinsing are controlled and managed, and this why it is possible to get consumption down as low as 1.6 litres/cycle and achieve constant results, regardless of the characteristics of the water supply. The water is supplied via a beak tank, which conforms to WRAS anti-pollution standards, a non-pressurized boiler and a rinse water suction pump. It is used on the models 36-02 -03 -12 -13 -22 -23.



# Filtration systems

Colged dishwashers are equipped with two systems for filtration and drainage of the wash waster with different degrees of complexity:
**ArchiMedes** – A patented system that exploits the principle of communicating vessels to ensure that the dirtiest water at the bottom of the tank is the first to be drained under the pressure of the cleaner water above. This simple but effective device raises the efficiency of the water changeover from the 66% generally obtained with a conventional overflow drain, to 83%; the result is cleaner water in the tank, with the possibility to reduce the amount of water used in the rinse cycle and the concentration of detergent used.
It is used on the models 36-00 -02 -10 -12 -20 -22.

**EvoLution$_3$** – A complete and effective system which uses 3-stage water filtration with progressively decreasing mesh size down to 0.8 mm. The water is drained from the bottom of the tank by a specific pump and drainage takes place after washing and before the start of the rinse cycle. This makes for a 100% efficient water changeover and maximum cleanliness of the water in the tank. It is used on the models 36-01 -03 -11 -13 -21 -23.
In both systems surface filters are used (either in steel or composite material depending on the model) that extend the full width of the tank and are therefore virtually unblockable. We can therefore do without the filter presence sensors or clogging sensors used on many of our competitors' models as they serve no purpose.



# Water treatment systems

Depending on the model, the dishwashers may be equipped with a conventional built-in water softener or with the **CareFree** continuous water softener. With the former type, the user has to stop work and manually start resin regeneration after certain number of wash cycles, which depends on the characteristic of the water supply. The continuous water softener instead automatically performs regeneration during every wash cycle; the only action required of the operator is to top up the salt when requested by a message displayed on the screen of the user interface.
In addition to built-in systems, Colged also offers large-capacity external water softeners, in both manual and automatic versions, decarbonation systems and reverse osmosis filtration system to obtain water that is perfectly purified; osmosis water is especially recommended for washing crystal glasses and cutlery, but has no advantages for washing dishes.

# The TopTech range

The top models in the Colged range are extremely technically advanced, with an excellent build quality and feature innovative technologies to offer the very best in terms of productivity, low consumption figures and easy operation. Operational flexibility is also of the highest level, thanks to a wide range of programmes, with, depending on the version, up to three standard programmes and eight specialised programmes, all of which can be easily selected from the direct access menu.

**Construction**

Full double-skin construction with counterbalanced and thermally insulated full double-skin door. The tank is entirely press-moulded and equipped with a full-width integral surface filter, which, thanks to its large intake size, is virtually unblockable. The wash chamber is free of internal pipes and sharp corners.

**User interface**

Easy to use, reliable and complete, with four soft touch keys and a large backlit polychromatic LCD display. Unlike other dishwashers on the market, it is not just a button; the entire screen changes colour according to the operating status of the machine and the current stage of the wash cycle; this makes the screen easy to read and interpret even from a distance. In addition to the operating parameters, such as the temperature of the tank and boiler or the number of cycles completed, the indications provided by the automatic diagnosis system are also displayed. Information is provided in the form of clear text and icons. It is possible to adjust the tank and boiler temperatures, the dosing of detergent and rinse aid, while our specialised technicians can modify all the operating parameters of the machine.

**The versions**

Versions with four different equipment levels are available, with and without water softener. The entire range and the various options can be seen in the table on the next page. Furthermore two models, **TopTech 37-20 D** and **TopTech 37-23 D**, have larger dimensions to provide a loading surface at the ergonomic height of 760 mm.

All versions are equipped as standard with electronically-controlled peristaltic dosing units for both detergent and rinse aid.

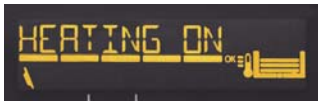
**Standard equipment**

The dishwashers are equipped plate rack and a flat rack, a cutlery container, approved filler hose and drain hose.

| PROGRAMME SELECTION | 36-20 D | 36-21 D | 36-22 D | 36-23 D | 36-23 TD | 37-20 D | 37-23 D |
|---|---|---|---|---|---|---|---|
| **ProSpeed** programme | • | • | • | • | • | • | • |
| **ProFessional** programme | • | • | • | • | • | • | • |
| **ProTemp** programme | • | • | • | • | • | • | • |
| **ProGlass** programme | • | • | • | • | • | • | • |
| **ProWater** programme | • | • | • | • | • | • | • |
| **ProLong** programme | • | • | • | • | • | • | • |
| **ProEco** programme | • | • | • | • | • | • | • |
| **ProActive** programme | | • | | • | • | | • |
| **ProNew** programme | | • | | • | • | | • |
| **ProSteel** programme | | | | • | • | | • |
| **ProSan** programme | | | | • | • | | • |
| **ProSelf** self-clean programme | • | | • | | | • | |
| **ProClean** self-clean programme and automatic drain | | • | | • | • | | • |
| **ProDrain** automatic drain | | • | | • | • | | • |

| TECHNOLOGIES | | 36-20 D | 36-21 D | 36-22 D | 36-23 D | 36-23 TD | 37-20 D | 37-23 D |
|---|---|---|---|---|---|---|---|---|
| **DuoFlow** pump | | • | • | • | • | • | • | • |
| **UltraRinse**$_3$ rinse arm | | • | • | • | • | • | • | • |
| **HiTech** wash arms | | • | • | • | • | • | • | • |
| **EnergySaving** system | | • | • | • | • | • | • | • |
| **SmartClean** construction | | • | • | • | • | • | • | • |
| **QuickReady** rapid tank heating system | | | | • | • | • | | • |
| **HotWash** heating system | | • | • | • | • | • | • | • |
| **ThermoStop** rinse control | | • | • | • | • | • | • | • |
| **ProRinse** system | | | | • | • | • | | • |
| **SmartScreen** user interface | | • | • | • | • | • | • | • |
| **ArchiMedes** drain system | | • | | • | | | • | |
| **EvoLution**$_3$ drain system | | | • | | • | • | | • |
| **CareFree** automatic water softener | | | | | | • | | |
| **ProDose** detergent control system | | • | • | • | • | • | • | • |
| **ProGressive** triple-stage filtration system | | | • | | • | • | | • |
| **ProSoft** door closing system | | • | • | • | • | • | • | • |
| CHARACTERISTICS | | | | | | | | |
| Full double-skin construction | | • | • | • | • | • | • | • |
| Deep-drawn rack guides | | • | • | • | • | • | • | • |
| Tank with press-moulded bottom | | • | • | • | • | • | • | • |
| Counterbalanced and insulated double-skin door | | • | • | • | • | • | • | • |
| Timed rinse | | • | | | | | • | |
| Volumetric rinse | | | • | | | | | |
| Atmospheric boiler with break tank and rinse pump | | | | • | • | • | | • |
| Electronically-controlled drain pump | | | • | | • | • | | • |
| Stainless steel integral tank filter | | • | • | • | • | • | • | • |
| Pump safety filter | | • | • | • | • | • | • | • |
| Electronically controlled rinse-aid dosing unit | | • | • | • | • | • | • | • |
| Electronically controlled detergent dosing unit | | • | • | • | • | • | • | • |
| TECHNICAL DATA | | | | | | | | |
| Maximum real productivity* | racks/hour | 39 | 39 | 39 | 44 | 44 | 39 | 44 |
| Maximum theoretical productivity | racks/hour | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Dimensions W x D x H | cm | 60x60x82 | 60x60x82 | 60x60x82 | 60x60x82 | 60x60x82 | 60x60x125 | 60x60x125 |
| Door/hood opening | cm | 38,5 | 38,5 | 38,5 | 38,5 | 38,5 | 38,5 | 38,5 |
| Tank capacity | litres | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Boiler capacity | litres | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Tank heating element | W | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 |
| Boiler heating element | W | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 |
| Wash pump - power | W | 470 | 470 | 470 | 470 | 470 | 470 | 470 |
| Total power consumption | W | 7.900 | 7.900 | 7.900 | 7.900 | 7.900 | 7.900 | 7.900 |
| Power supply voltage - Phases | V | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N |
| Max. current | amp | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Min-max water supply pressure | bar | 2-4 | 2-4 | 1-4 | 1-4 | 1-4 | 2-4 | 1-4 |
| Min-max water supply temperature | °C | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 |

* Water supply temp. 15°C, Rack loading and unloading time 12"






# The IsyTech range

This product family is characterised by its double-skin construction, technical solutions and advanced functions, with operational flexibility ensured by three standard programmes and four special programmes organised into two direct access menus.

**Construction**

Full double-skin construction with stratified double-skin construction for the sides of the wash chamber. Full double-skin construction for the door. The tank has press-moulded bottom and is equipped with a full-width integral surface filter, which, thanks to its large intake size, is virtually unblockable. The wash chamber is free of internal pipes and sharp corners.

**User interface**

Easy to use, reliable and complete, with four soft touch keys and a 4-character LED display with two lateral indicator bars. Carefully chosen combinations of colours and graphic symbols provide a clear indication of the dishwasher status and wash cycle progress at a glance. In addition to the operating parameters, such as the temperature of the tank and boiler or the number of cycles completed, the indications provided by the automatic diagnosis system are also displayed. The information is provided in the form of codes, text, or graphic indicators and colours.

It is possible to adjust the tank and boiler temperatures, the dosing of detergent and rinse aid, while our specialised technicians can modify all the operating parameters of the machine.

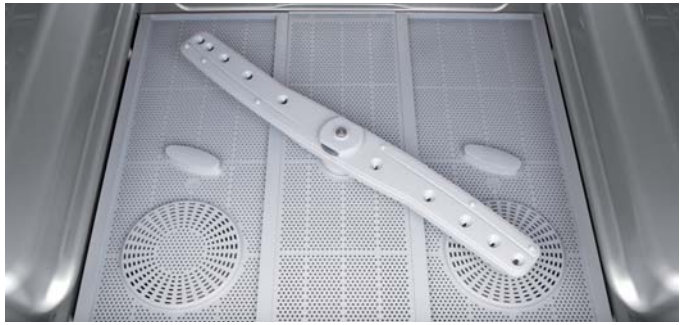
**The versions**

Versions with four different equipment levels are available, with and without water softener. The entire range and the various options can be seen in the table on the next page. All models are equipped as standard with electronically-controlled peristaltic dosing units for both detergent and rinse aid.

**Standard equipment**

The dishwashers are equipped plate rack and a flat rack, a cutlery container, approved filler hose and drain hose.

| PROGRAMME SELECTION | 36-10 M | 36-10 MD | 36-11 MD | 36-10 D | 36-10 SD | 36-11 D | 36-12 D | 36-12 TD | 36-13 D |
|---|---|---|---|---|---|---|---|---|---|
| **ProSpeed** programme | • | • | • | • | • | • | • | • | • |
| **ProFessional** programme | • | • | • | • | • | • | • | • | • |
| **ProTemp** programme | • | • | • | • | • | • | • | • | • |
| **ProGlass** programme | • | • | • | • | • | • | • | • | • |
| **ProWater** programme | • | • | • | • | • | • | • | • | • |
| **ProLong** programme | • | • | • | • | • | • | • | • | • |
| **ProEco** programme | • | • | • | • | • | • | • | • | • |
| **ProSelf** self-clean programme | • | • | | • | • | | • | • | |
| **ProClean** self-clean programme and automatic drain | | | • | | | • | | | • |
| **ProDrain** automatic drain | | | • | | | • | | | • |



| TECHNOLOGIES | 36-10 M | 36-10 MD | 36-11 MD | 36-10 D | 36-10 SD | 36-11 D | 36-12 D | 36-12 TD | 36-13 D |
|---|---|---|---|---|---|---|---|---|---|
| **DuoFlow** pump | • | • | • | • | • | • | • | • | • |
| **UltraRinse**$_3$ rinse arm | • | • | • | • | • | • | • | • | • |
| **HiTech** wash arms | • | • | • | • | • | • | • | • | • |
| **EnergySaving** system | • | • | • | • | • | • | • | • | • |
| **SmartClean** construction | • | • | • | • | • | • | • | • | • |
| **QuickReady** rapid tank heating system | | | | | | | • | • | • |
| **HotWash** heating system | | | | • | • | • | • | • | • |
| **ThermoStop** rinse control | • | • | • | • | • | • | • | • | • |
| **ProRinse** system | | | | | | | • | • | • |
| **ProScreen** user interface | • | • | • | • | • | • | • | • | • |
| **ArchiMedes** drain system | • | • | | • | • | | • | • | |
| **EvoLution**$_3$ drain system | | | • | | | • | | | • |
| **CareFree** automatic water softener | | | | | | | | • | |
| **ProDose** detergent control system | • | • | • | • | • | • | • | • | • |
| **ProGressive** triple-stage filtration system | | | • | | | • | | | • |

| CHARACTERISTICS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Full stratified double-skin construction | • | • | • | • | • | • | • | • | • |
| Deep-drawn rack guides | • | • | • | • | • | • | • | • | • |
| Tank with press-moulded bottom | • | • | • | • | • | • | • | • | • |
| Double-skin door | • | • | • | • | • | • | • | • | • |
| Timed rinse | • | • | | • | • | | | | |
| Volumetric rinse | | | • | | | • | | | |
| Atmospheric boiler with break tank and rinse pump | | | | | | | • | • | • |
| Electronically-controlled drain pump | | | • | | | • | | | • |
| Integral tank filter in composite material | • | • | • | • | • | • | • | • | • |
| Pump safety filter | • | • | • | • | • | • | • | • | • |
| Electronically controlled rinse-aid dosing unit | • | • | • | • | • | • | • | • | • |
| Electronically controlled detergent dosing unit | | • | • | • | • | • | • | • | • |

| TECHNICAL DATA | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum real productivity* | racks/hour | 20 | 20 | 20 | 32 | 32 | 33 | 33 | 33 | 33 |
| Maximum theoretical productivity | racks/hour | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Dimensions W x D x H | cm | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 |
| Door/hood opening | cm | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 |
| Tank capacity | litres | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Boiler capacity | litres | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Tank heating element | W | 2.100 | 2.100 | 2.100 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 |
| Boiler heating element | W | 3.000 | 3.000 | 3.000 | 4.900 | 4.900 | 4.900 | 4.900 | 4.900 | 4.900 |
| Wash pump - power | W | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 |
| Total power consumption | W | 3.500 | 3.500 | 3.500 | 6.800 | 6.800 | 6.800 | 6.800 | 6.800 | 6.800 |
| Power supply voltage - Phases | V | 230/50/1N | 230/50/1N | 230/50/1N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N |
| Max. current | amp | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Min-max water supply pressure | bar | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 1-4 | 1-4 | 1-4 |
| Min-max water supply temperature | °C | 50-60 | 50-60 | 50-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 |

* Water supply temp. 15°C, Rack loading and unloading time 12"

TECH STEEL

# The SteelTech range

This product family is characterised by its extreme simplicity of use, while still offering a wide choice of wash programmes and additional functions.

**Construction**

Full double-skin construction with partial double-skin construction for the sides of the wash chamber. Full double-skin construction for the door. The tank has press-moulded bottom and is equipped with a full-width integral surface filter, which, thanks to its large intake size, is virtually unblockable. The wash chamber is free of internal pipes and sharp corners.

**User interface**

Comprised of four sturdy function keys and a LED display which shows the wash and rinse temperatures. There are four wash programmes to choose from, including one specifically for glasses. The tank and boiler temperatures can be adjusted, as can the peristaltic dosing units for rinse aid and detergent (if present).

**The versions**

Three-phase and single-phase versions are available with four different equipment levels are available, with and without water softener. Furthermore, the **SteelTech 37-00** model has larger dimensions to provide a loading surface at the ergonomic height of 760 mm and a larger door opening of 385 mm. The entire range and the various options can be seen in the table on the next page.

**Standard equipment**

The dishwashers are equipped plate rack and a flat rack, a cutlery container, approved filler hose and drain hose.

| PROGRAMME SELECTION | 36-00 M | 36-00 MD | 36-00 MS | 36-01 MD | 36-00 | 36-00 S | 36-01 D | 36-02 | 36-03 D | 37-00 |
|---|---|---|---|---|---|---|---|---|---|---|
| **ProSpeed** programme | • | • | • | • | • | • | • | • | • | • |
| **ProFessional** programme | • | • | • | • | • | • | • | • | • | • |
| **ProTemp** programme | • | • | • | • | • | • | • | • | • | • |
| **ProGlass** programme | • | • | • | • | • | • | • | • | • | • |
| **ProSelf** self-clean programme | • | • | • | | • | • | • | • | | • |
| **ProSelf** self-clean programme and automatic drainage | | | | • | | | • | | • | |

| TECHNOLOGIES | 36-00 M | 36-00 MD | 36-00 MS | 36-01 MD | 36-00 | 36-00 S | 36-01 D | 36-02 | 36-03 D | 37-00 |
|---|---|---|---|---|---|---|---|---|---|---|
| **DuoFlow** pump | • | • | • | • | • | • | • | • | • | • |
| **UltraRinse**$_3$ rinse arm | • | • | • | • | • | • | • | • | • | • |
| **HiTech** wash arms | • | • | • | • | • | • | • | • | • | • |
| **EnergySaving** system | • | • | • | • | • | • | • | • | • | • |
| **SmartClean** construction | • | • | • | • | • | • | • | • | • | • |
| **QuickReady** rapid tank heating system | | | | | | | | • | • | • |
| **HotWash** heating system | | | | | • | • | • | • | • | • |
| **ThermoStop** rinse control | • | • | • | • | • | • | • | • | • | • |
| **ProRinse** system | | | | | | | | • | • | |
| **ArchiMedes** drain system | • | • | • | | • | • | | • | | • |
| **EvoLution**$_3$ drain system | | | | • | | | • | | • | |
| **ProDose** detergent control system | | | | • | | | • | | • | |

| CHARACTERISTICS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Partial double-skin construction | • | • | • | • | • | • | • | • | • | • |
| Deep-drawn rack guides | • | • | • | • | • | • | • | • | • | • |
| Tank with press-moulded bottom | • | • | • | • | • | • | • | • | • | • |
| Double-skin door | • | • | • | • | • | • | • | • | • | • |
| Tank thermometer and boiler with digital display | • | • | • | • | • | • | • | • | • | • |
| Timed rinse | • | • | • | | • | • | | | | • |
| Volumetric rinse | | | | • | | | • | | | |
| Atmospheric boiler with break tank and rinse pump | | | | | | | | • | • | |
| Electronically-controlled drain pump | | | | • | | | • | | • | |
| Integral tank filter in composite material | • | • | • | • | • | • | • | • | • | • |
| Pump safety filter | • | • | • | • | • | • | • | • | • | • |
| Manually controlled water softener | | | • | | | • | | | | |
| Electronically controlled rinse-aid dosing unit | • | • | • | • | • | • | • | • | • | • |
| Electronically controlled detergent dosing unit | | • | | • | | | • | | • | |

| TECHNICAL DATA | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum real productivity* | cesti/ora | 20 | 20 | 20 | 20 | 32 | 32 | 32 | 33 | 33 | 39 |
| Maximum theoretical productivity | cesti/ora | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Dimensions W x D x H | cm | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 57.5x60.5x82 | 60x60x125 |
| Door/hood opening | cm | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 | 36,5 |
| Tank capacity | lt | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 15 |
| Boiler capacity | lt | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Tank heating element | W | 2.100 | 2.100 | 2.100 | 2.100 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 | 1.400 |
| Boiler heating element | W | 3.000 | 3.000 | 3.000 | 3.000 | 4.900 | 4.900 | 4.900 | 4.900 | 4.900 | 6.000 |
| Wash pump - power | W | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 |
| Total power consumption | W | 3.500 | 3.500 | 3.500 | 3.500 | 6.800 | 6.800 | 6.800 | 6.800 | 6.800 | 7.900 |
| Power supply voltage - Phases | V | 230/50/1N | 230/50/1N | 230/50/1N | 230/50/1N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N | 400/50/3N |
| Max. current | amp | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Min-max water supply pressure | bar | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 1-4 | 1-4 | 2-4 |
| Min-max water supply temperature | °C | 50-60 | 50-60 | 50-60 | 50-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 | 15-60 |

* Water supply temp. 15°C (50°C for single-phase versions), Rack loading/unloading time 12"

design: Studio Rindi adv _ photo: Roberto Giunchiglia



**Non-binding technical data**

**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.

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ITW FOOD EQUIPMENT GROUP

**EUROTEC s.r.l - divisione COLGED**
Via Provinciale Romana, 6 - 55010 Badia Pozzeveri, LUCCA
Tel. +39 0583 2783 - Fax +39 0583 276506 - **www.colged.eurotecgroup.com** - **info_colged@itweurotec.it**

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