

## **WHY ECO 100?**

#### **EFFECTIVE**

Thanks to its "engine" (MC100 N or MC100 F) EC0100 degreases immediately, just turned on; it's equipped with a forced oxygenation system that preserves the stability of the liquid detergent even in strong or very strong presence of pollutants.

#### SAFE, COMFORTABLE, ERGONOMIC

ECO100 is free of sharp corners or edges, it doesn't get dented and it doesn't get rusty. Its design facilitates the correct position of the operator and the wide supporting surfaces avoid the overturning risks because of loads.

#### **SOLID AND LONG-LASTING**

The synthetic materials used in the construction are highly technological, without superficial micro-porosity so as to avoid the formation of unsightly patinas. They last in time, they are easily washable and keep their brilliance.

#### **EASY TO USE**

At ECO100 just plug a 220V socket to carry gradually the detergent temperature at 35°C and, thanks to its cavity structure, to keep it in the long term without wasting electricity.

#### **ECONOMIC**

With the use of ECO100 in combination with degreasers of the MC line, are clearly reduced:

- The disposal costs
- The use of spray cans.

#### **ECO-FRIENDLY**

the washing products of the MC line don't contain solvents (VOC=0). The MC line favors the budgetary calculations of VOCs, that all companies must carry out, replacing them to the root. It removes the risk of flammability and harmfulness, due to volatile solvents.



#### SIMPLE MAINTENANCE

ECO100 is made of materials that enable a fast and effective cleaning of the bodywork, either indoor and outdoor. It's easy to have a washing station at the maximum efficiency. Just keep it in order, clean the coarse filter, the  $600\mu$  and  $100\mu$  filter, substitute periodically the cartridge filter and skim superficially the pollutants present in the tub.

The standard version is equipped with 5 filtration phases suitable for any type of activity:

- 1 COARSE FILTRATION:
  blocks the coarse parts of dirt that can be detached from the pieces during the first degreasing phase;
- 2 600μ FILTRATION WITH METAL WASHABLE FILTER: blocks the parts of dirt with a larger or equal 600μ size;
- MAGNETIC FILTRATION:

  the liquid used for cleaning, before going down because of gravity in the tub, passes through a magnet capable of intercepting the ferrous particles that during the degreasing operations can be detached from the washed parts;
- 4 100μ FILTRATION WITH POLYESTER FILTER: blocks most of the pollutants that may be located on a piece that will be cleaned.;
- 5 50µ RISING FILTRATION WITH REPLACEABLE CARTRIDGE FILTER: blocks residual pollutants and cleans up the rising liquid keeping it at the maximum degreasing capacity levels.

#### **100% VERSATILE**

• The wide working surface and the use of the hose allow to degrease from the smallest to the biggest piece.

• Possibility to equip ECO100 of an immersible tub for the housing of pieces that need a pre-treatment, to soften the pollutants present.

• ECO100 also works cold with excellent performance.

 The ECO100 construction technique allows, in the event of malfunction, to replace immediately the mechatronics part, then to reduce at minimum the machine stoppage.

 Movable from one point to another simply with the help of a standard trans pallet (or forklift truck).

· ECO100 is also equipped of many optional.

**ECO100** 

THE DESIGN AND THE REALIZATION OF ECO100 ARE ENTIRELY ITALIAN

Alchemia has combined its experience in the formulation of chemical specialties, with the customer needs.

The ergonomic project of ECO100 is carried out by one of the best design Italian study. For the realization of this innovative tool have been selected the qualitatively better materials.

Projects, drawings and molds are exclusively owned by Alchemia.





## **USER-ADJUSTABLE** (logo, colors, needs & optional)

The effectiveness of the work tool (ECO100 + MC100), the increasing needs of reduction/eliminating the use of solvents as well as the need to increase performance with respect to microbiological products, make easier to propose ECO100. Furthermore the resale organized structures have the opportunity to customize both ECO100 and MC100 using their logo and brand.

For this opportunity, contact directly the Alchemia's sales department (Commercial Director: Luca Savoretti 324/0471144 email: luca.savoretti@alchemia.biz)

## CARE OF THE DETAILS MAKES THE DIFFERENCE

**ECO100** is a manual washing station made of synthetic material (PE) studied for cleaning, degreasing and decarbonization small and medium size mechanical parts. Its operation is simply: is enough to have a 220V socket (230V, 50Hz) and it's possible to start to work



Opening at 80° with a simple movement

eco100 is equipped with a forced oxygenation system with the function to preserve the stability of the liquid detergent even in strong or very strong presence of pollutants. It also helps the flotation of themselves, contributing, together with the 5 filtration phases, to keep the product performance to the maximum level.









# WHY MC100?

- 1 PROTECTS THE HEALTH OF THE OPERATORS
- **2** CONTRIBUTES TO ACTIVE AND PASSIVE BUSINESS SECURITY
- **3** PRESERVES THE ENVIRONMENT
- 4 IS A VERSATILE TOOL
- **5** IS AN ECONOMICALLY VALIANT SYSTEM
- 6 ALLOWS COST CONTROL
- **7** IS RELIABLE
- **8** LASTS LONG
- 9 IS SUSTAINABLE FOR THE SUPERVISORY BODIES





Washing liquid

# M@100





# DEGREASES RESPONSIBLY\*

- ✓ Solvent free
- **✓** No caustic products
- No microorganism

MC100 is a line of new generation cleaning/degreasing products, projected for the manual cleaning of mechanical parts in the following sectors:

# AUTOMOTIVE INDUSTRY MAINTENANCE

that have reached important objectives including:

## 1 PROTECTING THE HEALTH OF THE OPERATORS

The formulas made in our laboratories in Brescia (Italy) derive from a long experience in the use of solvents and organic products. The MC100 line is born from the excessive slowness with which are eliminated the solvents and the poor efficacy shown in the washing and in the "regeneration" of organic products.

MC100 is entirely "made in Italy", both for the raw materials origin and for the realization itself. The controlled dosage of the components allows to have products without any labeling of danger, under the recent European and world norms CE1272/2008 (CLP), guaranteeing the maximum safety for the operators.

#### They don't need labeling with hazard symbols.

## **2** CONTRIBUTING THE OWN BUSINESS SAFETY

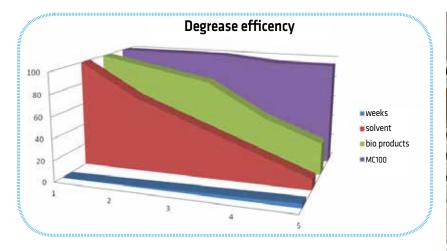
Today it's possible limiting or eliminating completely the use of solvents within a firm. The MC100 products are water-based, totally solvent-free, therefore no flammable. This characteristic reduces or removes the risk of fire inside a building with enormous benefits in real safety and positive repercussions in the Risk Assessment Document (DPR 81/2008 ex 626/94), as well as in costs related to work medical checks (see hidden costs).

## (3) PRESERVING THE ENVIRONMENT

The MC100 are products completely solvent-free (VOC=0) and they are made to satisfy the more exigent operators, given the rooted habit to use them. The MC100 line favors calculations of the VOC budget that all companies must carry out, replacing them to the root.

## 4 MAKING USE OF AN EFFICIENT AND VERSATILE TOOL

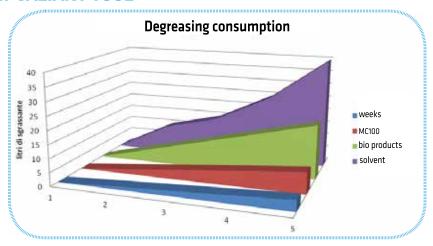
MC100 products can be used either cold or hot and can degrease any type of metal, plastic or other material without damaging it. They replace liquids of various nature in existing tubs or washbasins, and will not make you regret the old products. The degreasing ability and the safety in carrying out this operation make MC100 enables to act positively even in particularly harsh situations.





## (5) HAVING AN ECONOMICALLY VALIANT TOOL

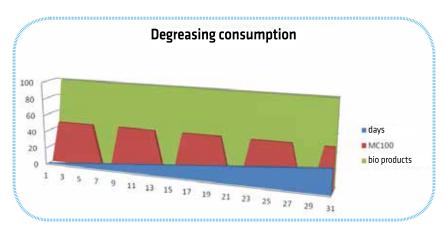
MC100 challenges the conviction that the cheap solvent or organic products are economically valid; in fact, its performance ensures low consumptions and efficiency over time. This is how you avoid continuous solvent purchases (which evaporates fast) and the frequent changes of biological fluids (for inefficiency, bad smell and consumptions due to the high evaporation).



### (6) CHECKING THE EXPENSE ELIMINATING THE HIDDEN COSTS

The positive effects on the combined use of ECO100 and MC100 are related to the evaluating of how much you can save by taking into account that are eliminated:

- · Disposal costs of exhausted detergents
- Use of spray cans and the related disposal
- Continuous consumption of electricity (24/24 7/7 for tubs with microorganisms) necessary to maintain the temperature stable at 42/45°C. Differently, it would have the putrefaction of microorganisms, an useless use of electricity and a loss of product because of the high evaporation
- Undesired and harmful evaporation (for tubs with solvents)
- Dead times of operators in search of "a place" to degrease
- · Costs related to work medicine
- Costs related to the unfavorable risk assessment under the DPR 81 and VOC assessment in the atmosphere.





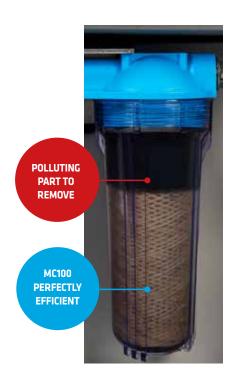


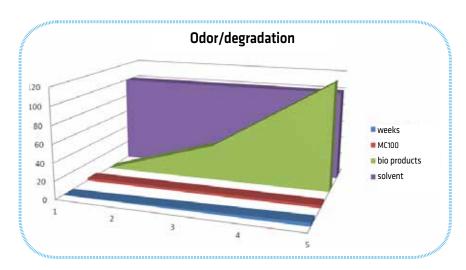
## **7** ENSURING RELIABILITY

MC100 works constantly. Even in conditions of great work and strength pollution, MC100 continues to degrease. It isn't necessary to substitute completely MC100, it's sufficient cleaning it and replenishing it with fresh product.

#### **HOW DOES ACT MC100?**

MC100 degreases, cleans, decarbonizes, protects from corrosion and, left fixed and stable, separates the pollutants. This allows to confer to the authorized smelters of the only part of pollutants, without having to dispose of everything, as is the case for other detergents.





## **8** USING A LONG-LASTING TOOL

With regard to the equipment recommended for the use of MC100 it's automatic to quote the manual washing station EC0100. This equipment made of polyethylene, has a guaranteed duration over time and is well presented within any plant. It doesn't strip, oxidize, get dented like the tubs of various nature in metal or stainless steel. If kept properly, it remains "as new" even after many years of work.



## 9 HAVING A SUSTAINABLE INSTRUMENT FOR CONTROL BODIES

The relationship with the control bodies is an important factor in the choices. Demonstrating that detergent consumptions are monitored, that the use of solvents is limited or even excluded, that in the company is identified a place where the degreasing operations are carried out without effluents it's an authentic competitive advantage. It also means to overcome the most selective inspection and to answer without problems to the checks of the most exigent controller of your territorial competence, for example Arpa (Agenzia Regionale Protezione Ambientale), ASL (Azienda Sanitaria Locale) or Noe (Nucleo Operativo Ecologico dei Carabinieri). The same for all practices related to VVFF (Firefighters), given the reduction or elimination of flammable products.



## WHAT DOES MC100 DO?

- INCREASES THE SAFETY OF THE OPERATORS
- IMPROVES THE ACTIVE AND PASSIVE BUSINESS SECURITY
- PROTECTS THE ENVIRONMENT
- DEGREASES ANY MATERIAL WITHOUT DAMAGING IT
- REDUCES COSTS
- Allows to convert the manual washing tubs of any type and gender (ex. Rexsol, whurt, raasm, safety clean, bio circle etc.) passing from solvent products (harmful) or organic products (ineffective) to products extremely safe and highly efficient, with innovative functions (split of pollutants)
- ALLOWS TO USE THE SAME PRODUCT FOR ANY DEGREASING AND CLEANING OPERATION OF THE PRODUCTIVE DEPARTMENT, SIMPLIFYING A LOT THE BUREAUCRACY AND THE PROMISCUITY OF PRODUCTS





### **SPARES AND CONSUMABLES**

#### 100µ(MICRON) CANDLE FILTER

Fabric candle filter placed laterally inside the plastic bell; it's necessary its replacement normally every 2/3 work months.

#### 3 MODELS:

- 100 μ (micron) candle filter
- 50 µ (micron) candle filter
- 25 µ (micron) candle filter



#### **OXYGENATORS- AIR SPRINKLER**

Hardwood oxygenators placed inside the washing liquids, operated by an oxygenation pump; they favor the detergent stabilization, allocate consistently the temperature and help the pollutant flotation; it's necessary their replacement every 2/3 work months.



#### **FLOW BRUSH**

Brush with finely-ridged bristles (scraping) in synthetic material. Specifically made to facilitate the cleaning work, through which, by operating the pedal, it's guaranteed the constant flow of detergent.

#### 3 MODELS:

- Flow brush
- Ergonomic flow brush
- Flat flow brush for wide surfaces



#### **MAGNET**

Magnet for the interception of ferrous metal particles.

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#### **METAL FILTERS**

Wire mesh filter in stainless steel for the filtration.

#### 2 MODELS:

- 2.5 mm coarse filter in stainless steel
- 600 µ mesh filter in stainless steel



#### **BASKET**

Drilled basket, made in synthetic material to house small size particles during the disassembly of parts to clean and/or for the soak of very dirty pieces; it is placed under the spurt of detergent of the articulated nozzle.



#### **WASHABLE BAG FILTER**

Bag filter in nylon placed under the central opening of the tub that collects the coarse part of removed dirt; it's sufficient a washing and the repositioning (until the break of the filter itself).

#### 3 MODELS:

- 100 µ bag filter washable
- 50 µ bag filter washable
- 25 µ bag filter washable



#### **FILTRO A SACCO USA E GETTA**

#### 2 MODELS:

• 100 µ bag filter

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• 50 µ bag filter



#### **MEMBRANE PUMP FOR OXYGENATION (5 W)**

Membrane pump for the oxygenation of degreasing liquids MC100. Its action, that is perceived through the air sprinklers, favors the detergent stabilization, allocates consistently the temperature and helps the pollutant flotation.



Immersion pump for the detergent recycling; it's necessary to activate the brush and the articulated nozzle.





#### **TEMPERATURE SENSOR PT100 + LEVEL DETERGENT FLOAT**

Temperature sensor for hot tubs with the float for the liquid level alarm.



#### **O-RING BELL FILTER**

O-ring seal for bell filter holder. Out of standard size.







## **SPARES AND CONSUMABLES**

#### **SUPPORTING STIRRUP**

Drilled supporting stirrup in stainless steel for single and double filter.



#### **BELL FILTER HOLDER**

Plastic bell filter holder for the housing of 25/50/100micron fabric candle filters with reductions, hose connector and air outlet valve.



#### **DOUBLE BELL FILTER HOLDER**

Plastic double bell filter holder for the housing of 25/50/100micron fabric candle filters with reductions, hose connector and air outlet valve.



#### **KEY FOR BELL FILTER**

The key for the opening and the closing in safety of the bell filter holder for the replacement of candle filters.



#### SUPPORT FOR THE BAG FILTER

Stainless steel support for supporting the bag filters both washable and no washable.



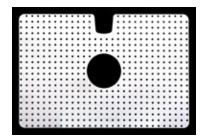
#### **SUPPORT FOR THE PUMP**

Stainless steel support for supporting and housing of the liquid pump.



#### **DRILLED GRATE IN STAINLESS STEEL**

Pre-cut to size stainless steel grate of 1 mm for the protection of the work surface.



#### **THREE-WAY VALVE**

Three-way valve for the flow deviation of the detergent MC100 from the brush to the articulated nozzle. The valve allows to use at the same time the brush and the articulated nozzle.



#### **HOSE WITH FLAT NOZZLE**

Articulated nozzle with terminal to be applied on threeway tap. It allows to direct and maintain the spurt of the detergent in the desired position.



#### **DITHERED HOSE**

Anti-crushing and anti-wear dithered rubber hose for liquid/brush.



#### STAINLESS STEEL SUPPORT FOR WORK SURFACE

Stainless steel support for the opening and the maintenance of the surface in the opened position.



#### **800 W RESISTANCE**

800w resistance for heating the MC100 detergent.



# ECO100 ECO100

## Technical and dimensional characteristics

Work surface	900 x 600mm
Work height	850mm
Overall dimensions	1120 x 800mm
Front edge height	1000mm
Back edge height	1080mm
Maximum capacity	250 Kg
Possible work temperature	from room temperature to 50°C
Standard temperature	35°C
Heating power	800W
Liquid pump power	80W
Liquid pump capacity	400 l/h
Maximum capacity of tub	120 l
Optimal capacity of detergent load (MC100)	100 l
Minimum operating level	60 I
Electrical supply	220V (230V 50Hz)
Empty weight	about 55 Kg
Material	LDPE

**AUTHORIZED DEALER:** 



