

# SATINAL

Art in Frosting



Machinery & Chemicals for glass frosting / acid etching

S A T I N A L  

---

C h e m i c a l s

Products of **SATINAL** line are of our own formulation and manufacturing.

They are composed of a balanced mixture of selected ground and blended inorganic salts that, once dissolved in hydrofluoric or hydrochloric acid, form a solution able to produce an high quality frosting on glass surface. This kind of process can be realized on glass sheets, glass containers (bottles, containers for the cosmetics), lighting (lamps, light bulbs) and other articles.

#### **SATINAL “S” MICRONIZZATO**

Suitable for the use with manual / semiautomatic / automatic equipment, it gives a transparent finishing , pleasing to the touch (velvety). Particularly suitable for the use of Hydrofluoric Acid.

#### **SATINAL “PLUS” MICRONIZZATO**

Suitable for the use with manual / semiautomatic / automatic equipment and need a quick frosting with a quality level constant over time, but always pleasing to the touch, also in case of high production volumes. Particularly suitable for the use of Hydrochloric Acid.

#### **SATINAL “++” MICRONIZZATO**

Recommended for users that have fully automatic equipment and make glass frosting with formulations of particular “hardness”. Specifically suitable for the use of Hydrochloric Acid.

#### **SATINAL “PLUS” SUPER WHITE**

It has basically the same characteristics of SATINAL PLUS, but in addition has a special white and covering finishing. Specifically suitable for the use of Hydrochloric Acid.

#### **SATINAL “FLAT GLASS”**

Recommended for the frosting of glass sheets (clear, extraclear, coloured, mirror, coloured mirror), it gives a covering and uniform finishing. Particularly suitable for the use of Hydrofluoric Acid.



SATINAL  

---

Machinery

### Manual etching machine with 11 positions



This machine is the first step in the etching decoration process; working with this machine is very simple; it is possible to frost bottles and containers obtaining an high quality. The operator loads manually the items on a specific plastic plate, then the plate is loaded on a trolley; this trolley is moved manually from one station to another, until the unloading area. There is no contact between operator and acids.

### Automatic etching machines (10 positions, 12 positions or 14 positions)

It is a family of full automatic machines.

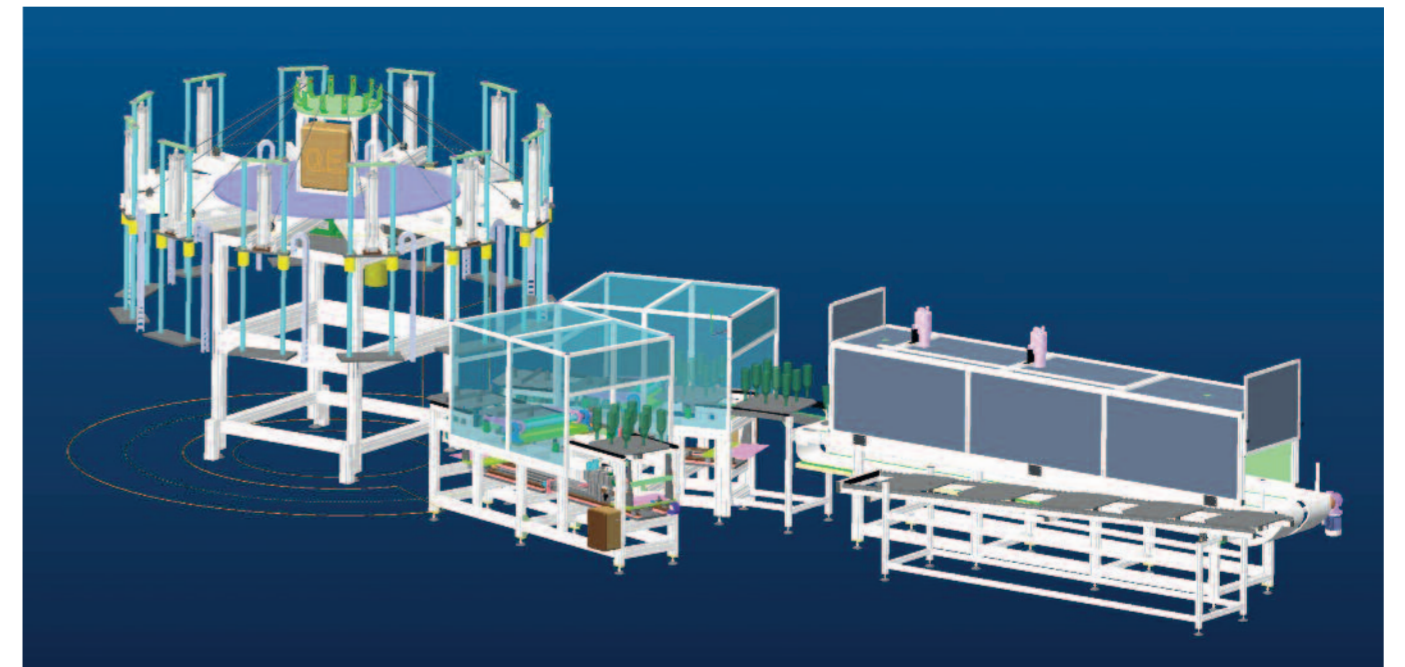
This machines can etch glass treated with “hot-end” or “cold-end” coatings without problems and can etch that can different kind of glass items, such as:

- **Bottles:** for liquors, for wine.
- **Containers for cosmetics:** jars for perfumes, jars for enamels, jars for creams.
- **Pots.**
- **Lamps.**
- **Tableware.**

On these machines, all the working parameters are completely adjustable.

The loading and unloading operations are automatic, in this way it is possible to work in a faster, more efficient and safer way.

In the end of the process, the articles are completely dry and ready for being packed or decorated.







## **Satinal products**

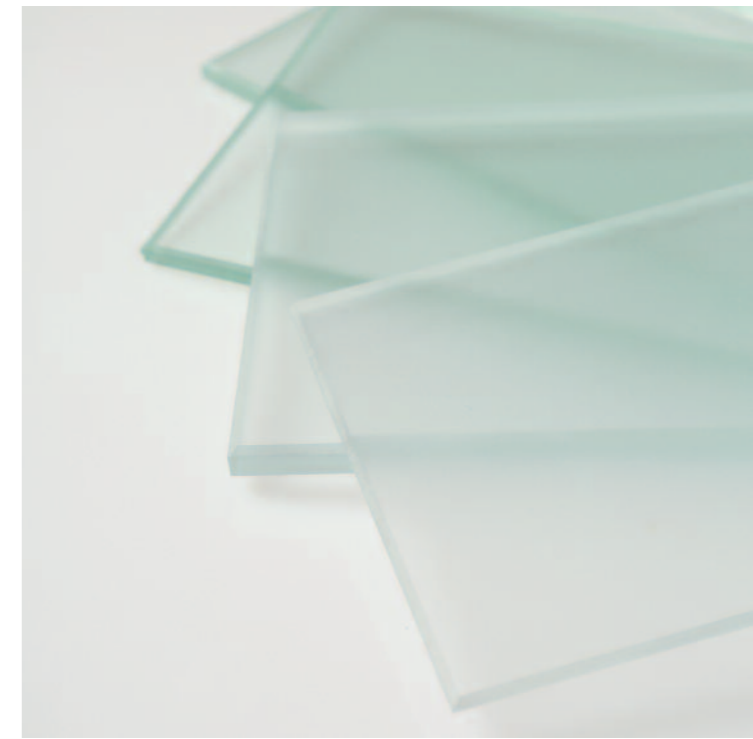
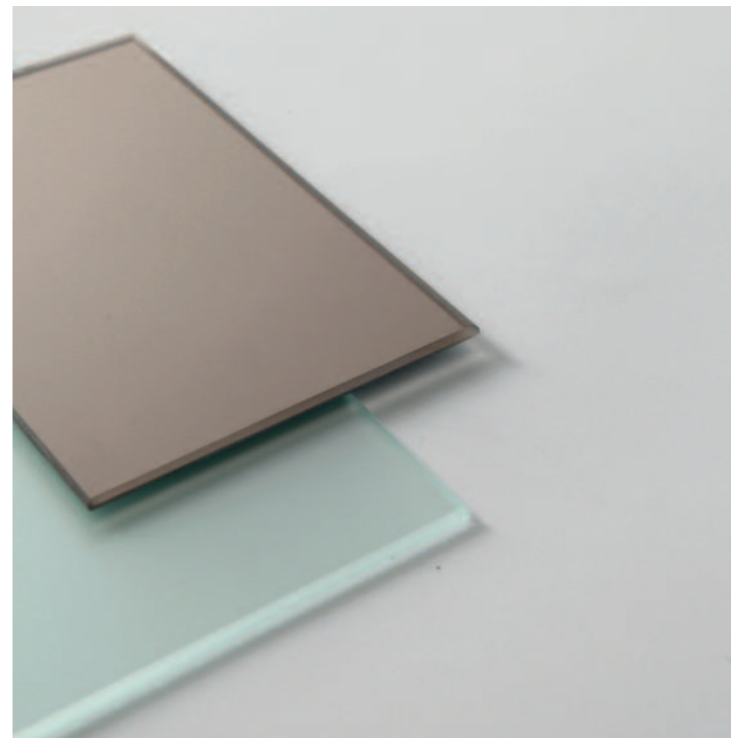
**A wide range of applications**













Satinal S.p.A.  
Via del Lavoro, 1 - 22036 Erba (CO) - Italy  
Phone +39 031 870573  
info@satinal.it - www.satinal.it

**Sales department:**

Leonardo Pirazzoli  
Mobile +39 348 8574605  
Email leonardo@satinal.it  
Skype leonardopirazzoli

Manuela Sangiorgio  
Phone +39 031 870573  
Email customer@satinal.it

Anna Kolpakova  
Phone +39 031 870573  
Email russia@satinal.it  
Skype russia.satinal