

**LATIGLOSS AND KELON: STRUCTURAL AND GOOD APPEARANCE  
THERMOPLASTICS AS WINNING SOLUTIONS IN HOME FURNISHING**

For over 60 years Serrature Meroni, a well known Italian company with large presence also in the international markets, has produced locks and closing systems both mechanical and electronics, for use in a wide range of sectors that include not only doors and furniture, but also utilities, vending machines and special applications.

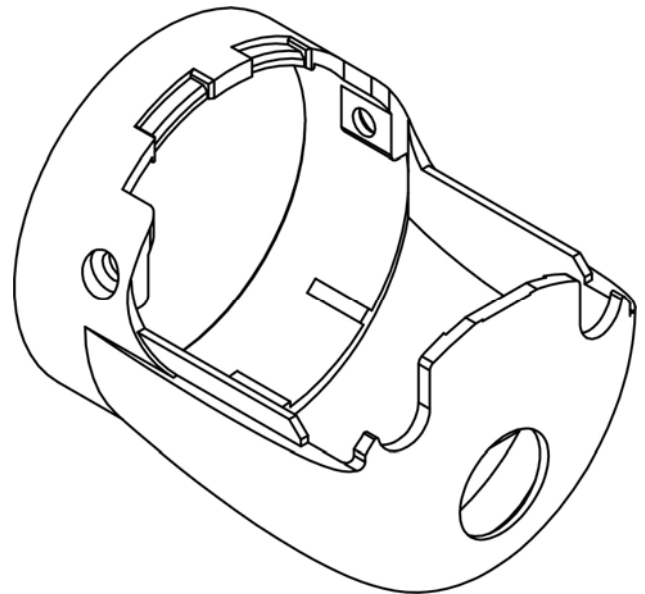
In 1973 the real best-seller of Meroni Serrature made its appearance in the market under the brand name PremiApri (literally PressOpen), an exclusive patent that won several recognitions in the Industrial Design sector.

Among the different models of PremiApri locks, today a new solution is created and named "Combina". The Combina solution, in order to keep up with the times, is created by using special thermoplastic materials, representing an intelligent balance of tradition and technology.



**LATI** has worked together with the idea of Serrature Meroni supplying its engineering thermoplastics suitable for

the design requirements and the technical aspects of the project.



The body, actually the structural frame of the knob lock, is available in metal and in LATI thermoplastic version.

The metal version is realised in die-cast Zamak (an alloy of **Z**inc, **A**luminium and **M**agnesium that gives the acronym too), one of the most proved and reliable materials used in architectural design and furniture industry.

This material, stiff and solid, provides not only the requested mechanical properties, but also the best surface quality.

The thermoplastic version is made by mean of the injection molding technique, using a new and innovative special resin developed and researched by **LATI** and named "**LATIGLOSS**".

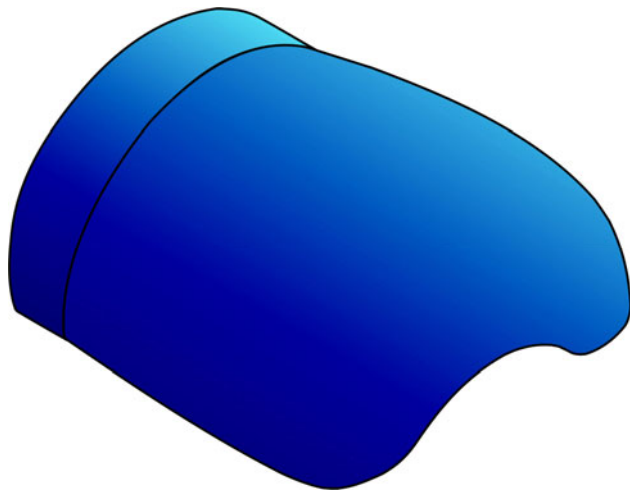
Also studied for the door hardware and furniture industry, this polymer is a compound of nylon 66 reinforced with the 50% of glass fiber, blended with special additives giving a superb surface gloss.

Indeed one of typical limits of glass fiber reinforced thermoplastics is the finishing quality: the glass fiber normally appears onto external surface, causing uneven colour effect or, in the worst case, visible flow lines.

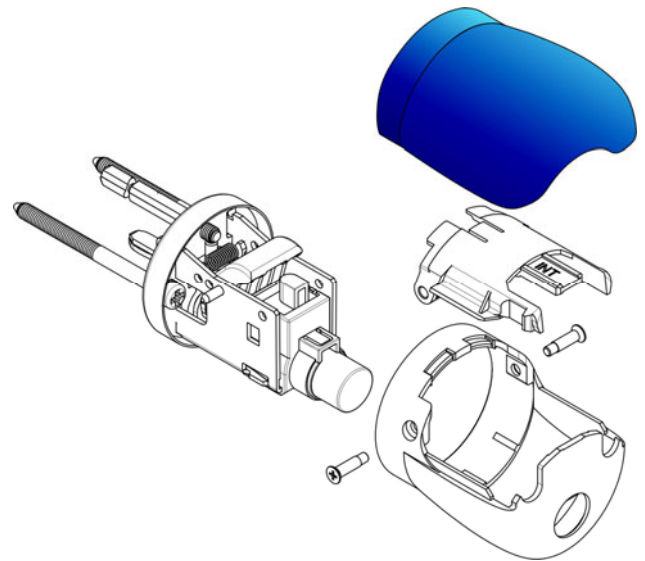
To avoid this behaviour, the mould engineers have to set high cycle times or time-consuming pre-heat operations.

On the contrary Latigloss, without moulding cycle time increase, provides at the same time high-end mechanical properties (similar to metal) and a top-class surface smoothness and brilliance.

The wide upper cap too is made of a thermoplastic resin produced by **LATI**, called "**KELON**".



**Kelon** (an acronym of **Ke**ramic + **Nylo**n) is a nylon 6 based polymer, blended with special ceramic spheres and then heat stabilized.



The presence of these micro-spheres and the thermal stabilization process, give to the material high values of resilience (the ability to maintain the rigid shape and the elastic response too), in conjunction with a uniform "high gloss" surface quality.

All the most known post-finishing operations are allowed with this nylon based material, giving to final customers a wide variety of colours and effects choice.

In simple words, the "Combina" lock drives with the same smoothness the way of tradition, by choosing a worldwide known metal alloy, and technology, by a selected combination of "**intelligent polymers**".

### THE APPLICATIONS

The "Combina" is today presented in all typical functions, and suitable for several applications: passageways, bathrooms, entrances and offices, classrooms and hotel rooms.