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**SWIMMING POOLS**



**NEW FUNCTIONALITY WITH THE APPLICATION  
OF NEW ARA IONIC ACCELERATOR**

It is common knowledge that :

- the recycling of the water in a swimming pool causes its deterioration, and the development of various types of living organisms such as algae, fungus and bacteria. Consequently it is necessary to attack them with chemical products which damages to human health;
- the crystals of the carbonates and the salts present in water change into precipitates and become calcareous scale, which is the main cause in the reduction of flowing water in the pipes;
- the filters are clogged;
- it is necessary to intervene with chemical treatments that, restoring the functionality of equipments and pipes, attacks also them provoking damages in polluting the environment.

***With the installation of NEW ARA  
we have :***

- ✓ elimination of algae, fungus and bacteria;
- ✓ elimination of chemical agents, anti-scale and anti-bacteria, but also aggressive and polluting;
- ✓ elimination of all pre-existing scale in the pipes or other plants, and the prevention of the new formation of scale;
- ✓ longer duration of the equipments and the pipes of the plants;
- ✓ reduction of the maintenances for the fittings, with consequent incalculable economies;
- ✓ water comparable to mountain sources;
- ✓ safeguard of the environment.

***Installation***

- New Ara must be installed after the recirculation pump and before the sand filter, as per attached scheme.
- The size of the apparatus must be calculated as follows :
  - private use*  
cubature of the swimming pool x 6 : 24 h/day
  - public use*  
cubature of the swimming pool x 8 : 24 h/day
  - children's swimming pool*  
cubature of the swimming pool x 24 : 24 h/day
- The re-washing of the sand filter must be effected 3 or 4 times the week in the warm periods, in winter 1 or 2 times the week.

## Very important

In the case of rain in open air swimming pool, algae can grow and develop as a result of an acid rain. In order to re-establish the functionality of the swimming pool, only 2 or 3 re-washings of the sand filter for some days are required.

### *The NEW ARA ecological system for the water treatment of the swimming pools*

The improvement of the water of the swimming pools constitutes a problem of priority importance, because of the ecological-sanitary implications.

It is, in fact, basically a particular body of water, that needs to be often recycled and for long periods, exposing it alternatively to chemical and biological pollution and, therefore, to the purification in the treatment plant, for more times the day (normally from six to eight times during the twenty-four hours).

Therefore it is a water, which is continuously polluted, not only from microbial populations in number and elevated variety, but also from secretions and excrements, inevitably fed by the consumers. It requires purification systems well projected, well managed and effective.

The method more used, but also more discussed is the **chlorination of waters**.

The chlorine in fact, even if it manages a good bacteria-killer action, is in the middle of hard disputes for the serious drawbacks it provokes.

**The chlorine and its by-products are often a cause of serious troubles to human health.**

Apart from the trouble depending on its acrid odour, the chlorine determines serious irritations to the conjunctival mucosae and it provokes numerous forms of dermatitis.

Besides it gives rise to chemical, highly harmful compounds, such as the halometanis.

They are compounds coming from the interaction of the chlorine with organic substances (proteins) and consequent formation of halogenated compounds. The most common are chloroform, the trichloroethylene, the trichloroethane, the tetrachloride of carbon. All of them are highly toxic and many are cancerogenic too.

Concentrations of free and active chlorine, higher than 0.2 ppm, should make illegitimate unloading waters from swimming pools in the sewer system, according to the italian law.

With the installation of a ionic accelerator NEW ARA, **we fully eliminate the use of chlorine and the inflow of all chemical additives**, elements certainly harmful for human health, used for their anti-algae and anti-scales action.

In fact the simple passage of water inside the device will be enough, respecting the due exchanges of the liquid mass, to eliminate the existing bacterial positions.

Besides the whole water system of the swimming pool, that **will be maintained free from calcareous scales, will need a small consumption of electric power and, above all, a notable decrease of expenses for maintenance.**

