

A FULLY AUTOMATIC SYSTEM FOR WATER TANKS

Persico



Since September 2006 Persico has manufactured and sold 4 Leonardo Tank models, two of which in Australia and two others in the United States, each one having similar features for the production of tanks with various capacities going from 2000 to 6000 litres.

The strong point of the two “American machines” lies in the creation of a multilayer product, being able to guarantee structural properties by using recycled plastic materials, resulting in a remarkable cost-minimization of the finished product.

Before taking into account the Leonardo technology, the customer had tried to obtain the same piece on traditional machines with unsatisfactory results. Thanks to the Leonardo machine the customer is now able to produce really competitive high quality parts in terms of cycle time also. Leonardo is also the ideal solution for the production of items such as slim line rainwater tanks.

Especially thought for the Australian market, the Leonardo system has been designed and built for the production of vertical, slim water tanks having 2000 l and 3000 l capacity, a system that can also be used for the production of other items having a dimension up to 2400x2200x800mm.

Compared to conventional machines (i.e. hot air ovens machines) the advantages given by this system are not less than the following:

1. 35% cycle time reduction
2. 25% energy consumption reduction
3. 38% part weight reduction (thanks to its even areas thicknesses)
4. Mechanical properties improvement
5. Process automation and labour reduction.

The tanks obtained with the “Australian Leonardo” can be distinguished by their constant wall thickness distribution through all the sections of the tank. This guarantees much better mechanical features when compared to the same items manufactured by other competitors. In fact, due to the inherent characteristics of this kind of items, with conventional moulding difficulties are easily encountered in the kiss-off’s areas and also in obtaining an even thickness of each tank section.

On conventional machines (i.e. hot air ovens machines) the mould extremities are covered up, with the heat being mostly concentrated in the central parts: a reality which implies immense energy dispersion.

These conditions are easily solved by the Leonardo technology: the mould is heated up directly by means of diathermic oil, allowing for a regular heating of each single area of the mould, also guaranteeing a differential heating of the different areas according to the structure of the parts to be moulded.

Considering the current trend of the water tanks market in Australia (according to ARMA in some areas it is at -80% with respect to 2007), thanks to Leonardo, our customer is now able to produce more cost-effective, competitive and qualitative tanks, so allowing the Company to face up to this critical situation, in these hard times.

This Leonardo system has been the very first installation in the Australian continent, while a second one for that same company is now under completion.