Rotational **Who**

Leading companies of the rotational moulding world

An initiative promoted by IT-RO

ROTOMACHINERY GROUP
ROTATIONAL MOULDING TECHNOLOGY
POLYINL ROTOMACHINERY
STP ROTOMACHINERY

A story of **innovation**

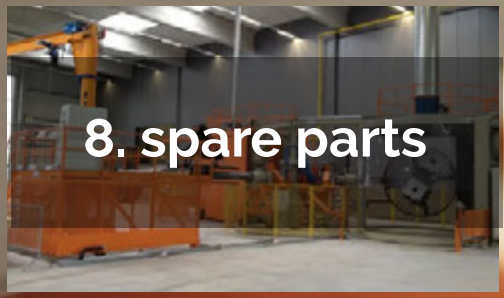
Polivinil Rotomachinery Group represents an industrial reality with over 50 years of experience and technological innovation in the design, construction and installation of the most advanced rotational molding machines.

Over 1000 functioning plants made by Polivinil Rotomachinery are present in over 50 countries spread over 5 continents. The company has two production sites, one based in Italy and one in Canada, both specialized in the design, production, testing and assistance of plants.

The company offers a fleet of machines dedicated to rotational molding that covers all the main types on the market. It also operates in the production of accessories for rotational molding plants, in material management and in the production of complete turnkey systems.

The qualities of a **successful reality**

1. production of high quality rotational machines
2. complete plant design
3. internal production in the two sites in Italy and Canada
4. testing with rotational molding cycles
5. complete assistance to customers in the choice of systems
6. technical training of the personnel in charge of the machines
7. after-sales consulence and technical advice
8. availability of spare parts for rotational machines



Machines with **Indipendent Arms**

These are plants consisting of a single machine for the simultaneous production of items of different thickness or material, with different cycle times or multi-layers.

The carriages move from one phase to another without being tied and therefore different durations can be determined for each station, creating the best production mix, increasing production and maintaining high quality.
This type of plant represents the most advanced solution for the rotational molding of articles of different thicknesses.

The extreme configuration flexibility is also demonstrated by the possibility of easily and quickly replacing the straight arms with angled or C-shaped arms. For each arm and therefore for each mold or group of molds it is possible to determine the exact duration of each phase and the correct molding temperature.

Machines with **Fixed Arms**

The machines with fixed arms constitute the rotational molding plant suitable for the production of articles with similar production cycles and durations for a high production capacity.

The arms move all together and alternate in the production phases at the same time. It can be configured with a cooling chamber and with 2, 3 or 4 interchangeable mold holder arms, choosing straight arms to produce groups of molds or angled arms for larger rotomoulded products according to specific needs.

Given the duration of the critical phase of the process, which can be the formation of the shot in the rotational molding oven, the cooling and extraction phase of the piece, the shots alternate with the same cadence as the arms move from one phase to another simultaneously .

Machines **Shuttle with Stations**

Rotational molding machines with high load capacity for the production of large-sized items. They are made with a central oven.

The ideal choice for composite productions with high cycle differences or for non-daily use of molds that rest on the arms without affecting normal production.
The configurations can vary from 1 to 4 trolleys which alternate autonomously in the central molding oven. The duration of each phase of the molding cycle is independent of that of the others.

It is possible to proceed with the repeated molding of the same rotational product without involving the other trolleys which may be in maintenance or engaged in the replacement of the moulds. The production recipe of each rotational product is stored by the machine for future use.

Machines **Rock'n'Roll HRM**

Machine for rotational molding of very large products, with a tilting bottom. The only one in the market to have the automatic handling of trolleys.

It is designed with a tilting oven for rotational molding which is placed on a castle and one or two trolleys which carry the mold holder arms horizontally from the multi-purpose cooling and loading/unloading station to the point where they are hooked up for their ascent towards the oven.

Depending on the size, the system can be equipped with a different number of fans and digital burners. When the doors are closed, the tilting movement of the oven and the rotations of the mold begin. Allows operators to work at ground level and manage stamping operations from consoles on the machine.

Laboratory Machines

Suitable for the production of small items equipped with all the latest generation instruments and devices for cycle control and fine-tuning.

It is a real shuttle model small-sized rotational molding machine, suitable for a university research laboratory or the research and development division of rotomoulders and producers of raw materials for rotational molding.

It represents a formidable tool for the training of researchers and for the development of new materials for rotational molding or for the effective use of recycled material and scale verification of the mechanical and chemical properties of rotational molded products.

Machines **PRM 900 Box**

Machines for rotational molding in PVC/Plastisol of large series of articles having small dimensions with different degrees of hardness, such as dolls, hygienic bulbs, balls and toys.

The oven houses a straight arm on which two groups of rotational molds are hooked in greater or lesser quantities. Once the cooking phase is over, the molds are cooled by immersion in water and the products are extracted.

The production cycle is very fast and fully automated and the machine is capable of producing hundreds of rotational pieces per hour. With the pre-established frequency, the group of molds with the cooked products ready for cooling is manually extracted.