

# SACMI-SAMA

## PHO Isostatic presses

### new frontiers in forming technologies

**Modular and high-performance, this range of presses meets the widest variety of market requirements. Alongside the PHO are the solutions for fettling round and non-round pieces; the OFM8 and ROF (robotized fettling) to maximize production efficiency and flexibility whilst maintaining optimum control of quality and repeatability.**

With its range of latest generation isostatic presses PHO451 and PHO700, SACMI-SAMA leads the way as sole supplier of horizontal presses for Tableware able to manufacture pieces having a diameter (before firing, ) between 110 and 480 mm. Already supplied to the top customers in the industry, these new design presses bring to more than 520 the total number of SAMA machines installed throughout the world, which is why SACMI-SAMA is renowned for its extensive know-how and expertise in this field.

An innovative portfolio of technical solutions, to meet any production requirements, is the basis of the design of the PHO451 and PHO700. Starting with the pressing tools, specially designed to limit wear over time, with coatings in polyurethane or adiprene, combined with a press frame equipped with four tie-rods and a high-precision top guide for the mobile parts. Last, but not least, is the important partnership with Gaiotto, market leader for robotized solutions to obtain state-of-the-art automation systems.

Among the main advantages of SAMA's proposal is the possibility to integrate, downstream of the presses, the OFM8 solution for the fettling of round and non-round pieces, with corners (for rectangular pieces) having a curve radius of up to 8mm and variations in the height of the piece edge of up to 10 mm. With the addition of the OFM8, the line performances achieved are unprecedented thanks to the patented system of automatic measurement of the piece

profile. Pieces with a lower radius or height variations of more than 10 mm are finished by means of a robot (ROF). In these



cases, the innovative system of detection with video cameras guarantees maximum precision in the positioning of the piece with data transfer in real time from the machine to the robot.

In addition to the most common tableware items, both presses can be used for the manufacture of cups and mugs taking advantage of the patented double-cavity pressing tools. Demoulding for this application is carried out by a robot.

The combined use of PHO700 and PHO451 can respond to different levels of automation and installation requirements in different countries. This is the ideal solution for large industrial groups, but also for medium-sized businesses which choose to rely on the top quality, reliability and performance of SAMA's machines.

Efficiency, quality and process repeatability are also guaranteed by the control system, which is supplied by Siemens exclusively to SAMA. As with all the latest generation SAMA machines (GREEN series), sustainability is the key feature with a guaranteed reduction of energy consumption of up to 30% compared to conventional solutions.

A further competitive advantage is offered by the extensive spare parts service and numerous pieces of optional equipment for the Isostatic presses (filling systems using pressure or vacuum technology, tools, supply of membranes and linings). Customers from all over the world can also rely on the continuous support of the SAMA technical assistance centre and the pilot plant, installed in our R&D centre, to carry out tests on the pressing tools, sample tests on small preliminary lots before industrialization and for training programs.