

# SIMAC ISOLASTIC TOOLING



The heart of the SIMAC *Isolastic* tooling system is the *Isolastic* moulding bag which can be identified by its distinctive blue colour.

## Quality performance..

This *Isolastic* tooling specially formulated as a result of many years development and proven in many applications incorporates an excellent elastic memory characteristic which ensures the bag returns to its original shape after the compaction cycle.



### Tooling is normally in two parts..

#### Common tooling..

This consists of a membrane for each cavity, providing the interface seal between Isostatic fluid and the moulding bag. This “dry bag” system allows moulding bags to be changed without breaking the fluid seal.

This tooling is standard and common to any machine of a given model.

#### Interchangeable tooling..

This consists mainly of tooling that interfaces with, and therefore gives the shape of the pressed product e.g. *Isolastic* moulding bag, top and bottom punches and pressing pins (where parts with internal forms are required).

This part of the overall tooling system can be supplied for single or multiple cavity operation.

The quality of this repeatability enables near net shape pressing to be achieved with an equally high level of repeatability.

SIMAC tooling can achieve repeatable tolerances to within 0.1mm (0.004”) dependant on the application.

Where surface finish of the final product is important this can be achieved by varying the composition of the bag.

To form the closure with the moulding bag, top and bottom steel punches are used. Where the application, e.g. spherical objects, require true all round *Isostatic* compaction then the steel punches are capped with the same *Isolastic* material.

### Versatile..

SIMAC machine designs vary from single to multiple cavity.

Where multiple cavities are involved a high level of flexibility is achieved in terms of tooling configuration. Where there is an even number (say six) of cavities as little as two cavities can be tooled. This can be an advantage where the product volume is low or trial tooling runs are to be carried out. To achieve this the remaining cavities are simply and easily fitted with “blank” tooling.

Where there is an odd number of cavities in the design of the machine it is possible to tool only one cavity.

In addition to this flexibility of cavity configuration it is possible to produce different components at the same time.

### Service..

SIMAC offers a tooling design and manufacturing service, based on many years of experience and applications, ensuring the customer achieves the best from their *Isolastic* tooling.



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