



RUBBER IN MOTION

MACHINE DESIGNED FOR LARGE FLAT GASKETS

Corbas (Lyon) France – June 2021

REP international, as the premier machine manufacturer in the World of Rubber, has a very broad expertise in injection molding and shows you its tailor-made range of machines designed for large flat gasket applications.

These types of machines have been developed for large-series injection molding involving parts with inserts, for example the injection molding of battery pack seals. Based on its long-standing experience in this field, REP offers a comprehensive range of machines with large-sized heating plates and adjustable configurations to fully comply with the technical specifications of each application and all client's needs.

LARGE-SIZED HEATING PLATES & MULTIPLE CLAMPING

Large flat gasket applications require a demanding process with quality clamping on large-sized plates and the control of low-volume injection over long injection runner lengths.

For this purpose, REP has developed a clamping block system with multiple clamping points associated with hydraulic synchronization. This synchronization ensures even pressure distribution for optimized clamping throughout the whole surface of the heating plates. This in turn leads to very tight flatness tolerances and consequently results in the excellent quality of the molded parts.



Clamping block system with multiple clamping points

PRESS RELEASE



S06 with 1 Injection Unit Y20

INJECTION OF LONG THIN SECTIONS

The use of small injection units combined with high injection pressures allows for high shot size precision and the possible diffusion of low compound volumes over long runner lengths. These machines offer the best performances in flashless molding applications.

With the implementation of multiple injection units and the division of the flow circuits, larger parts can be produced by reducing the runner lengths and pushing the limits of the process.

OPTIMIZED PRODUCTIVITY

Reduced closing and clamping times result in very short production cycles, the shortest ones on the market! It is also possible to integrate systems intended for part demolding and insert loading during the cure time, such as double-plate shuttle kits for enhanced profitability and optimized cycle times.

ERGONOMICS

The flexible machine configurations with the heating plate installed widthwise (long side from left to right) enable the operator to enjoy improved ergonomics to get to the different mold parts with ease.

In short, large flat gasket REP machines mean:

CLAMPING QUALITY:

Thick traverses, multiple synchronized clamping operations;

INJECTION OF LONG THIN SECTIONS:

Injection pressure up to 3,000 bar and circuit division with several injection units;

PRODUCTIVITY: Very fast 3-step clamping, double-plate kits;

ERGONOMICS/ACCESS TO THE MOLD:

Widthwise heating plates, demolding kit or sliding platen.

Here are a few examples of solutions implemented in compliance with the application and customer requirements.

■ S05

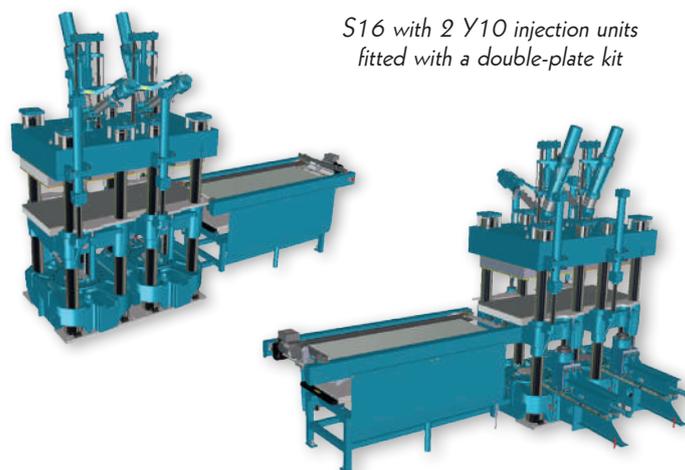
CLOSING UNIT		S03	S05
Clamping force	kN	3,000	5,000
Heating plate dimensions	mm	1,250 x 630	1,500 x 1,000



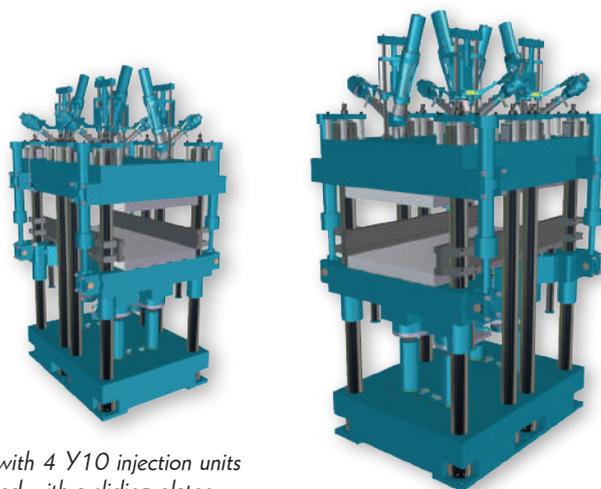
S05 with 1 or 2 injection units
(750 cm³ at 2,000 bar)

■ S16

CLOSING UNIT		S16	S20
Clamping force	kN	16,000	20,000
Heating plate dimensions	mm	2,500 x 1,000	2,000 x 3,000



S16 with 2 Y10 injection units
fitted with a double-plate kit



S12 with 4 Y10 injection units
fitted with a sliding platen

■ S12

CLOSING UNIT		S12
Clamping force	kN	12,000
Heating plate dimensions	mm	2,900 x 1,800



The video shows you one of the machines dedicated to large flat gaskets, which has recently left our factory!

Read more about this topic in our REP News magazine that is available [here!](#)

