ADD MULTI-COMPONENT TECHNOLOGY TO YOUR EXISTING MACHINE BY INSTALLING A SECOND INJECTION UNIT.

for years to produce products with a range of complex properties, including several different colors, multiple materials, or integrated functions. A multi-component machine can manufacture products in a single production cell that would normally require additional injection molding machines or downstream processes. You benefit from reduced initial investment and ongoing costs.

Greater Design Possibilities • Hydraulic or Electric • Custom Solutions

Improve the Design and Function of Products
MULTI-COMPONENT TECHNOLOGY

Exceptional Standard Features

The more components a molded part will have, the more injection units need to be connected to the machine. Milacron provides maximum flexibility in the positioning of diverse injection units; they can be arranged vertically, horizontally, in parallel, piggyback or traversing. The combination of individual injection units largely depends on the molded parts to be produced or the molds used, while the selection of injection unit type is determined by the shot weight of the component. The current state of development is injection molding machines with six different injection units.

Added Functionality
- ✔ Soft touch
- ✔ Reinforce structure

Integrated Process
- ✔ In-mold sealing
- ✔ In-mold assembly
- ✔ Single machine control

Aesthetics
- ✔ Colors
- ✔ Surface finish

Cost Reduction
- ✔ Reduced logistics
- ✔ Core vs. skin material
- ✔ Use of recycled material as inside material

Technologies of Multi-Component

Multi-component injection molding combines different materials or dyes to produce high-quality plastic parts. This means you can improve the design and function of products, automatically and cost effectively.

Interval injection molding – Colored surface effects can be reproduced through targeted timing control of two injection units

Sandwich injection molding – The sandwich structure with skin and core layers is achieved through the specific timing control of two injection units

Marbling – Colored surface effects are achieved by inhomogeneous mixing of several plastics in one injection unit

Core-back process – The cavity is extended by pulling a slide and a second component injected

Turning stack mold technology – Stack molds with a vertical rotary device are used for the central section

Rotation technology – The pre-molded parts are transferred to the second station via a horizontal rotary movement

Transfer technology – The transfer of pre-molded parts to the second station via a robotic system takes place directly in the mold or in a second machine

Assembly injection molding – All processes in which assembly steps are integrated directly in the injection molding process