

Modular Injection Molding Machine



Overview

Modular injection molding machine Find your modular injection molding machine easily amongst the 43 products from the leading brands (REP, Haitian, ENGEL.

Key Takeaways

Modular injection molding machines are highly flexible, customizable systems designed to optimize production efficiency, precision, and energy use across various manufacturing applications.

Overview

Modular injection molding machines are designed with a flexible, component-based architecture that allows manufacturers to configure machines according to specific production requirements, including clamping force, injection capacity, and automation options (Arburg, WITTMANN BATTENFELD, ENGEL, Sumitomo SHI Demag). This modularity enables easy upgrades, integration of multi-component or multi-material processes, and adaptation to new product designs without replacing the entire machine.

Key Features

Customizable Clamping Force and Injection Units: Machines are available in a wide range of clamping forces, from small-scale 40–55 t units to large-scale 55,000 kN systems, supporting both compact and high-volume production. **Energy Efficiency:** Many modular machines incorporate all-electric or hybrid servo-hydraulic drives, reducing energy consumption by up to 55% compared to conventional hydraulic systems.



Multi-

Component and Multi-Material Capability: Modular designs allow for overmolding, gas-assisted molding, and multi-color or multi-material production, enhancing product complexity and value. **Automation Integration:** These machines can be paired with linear robots, rotary tables, sprue pickers, and other automation solutions, supporting continuous, high-precision production and Industry 4.0 connectivity.

Compact and Space-

Saving Designs: Certain models, such as tie-bar-less or rotary table machines, offer small footprints while maintaining high precision and flexibility.

Applications

Modular injection molding machines are suitable for a wide range of industries, including automotive, medical, packaging, electronics, and consumer goods. They are particularly advantageous for: High-precision parts requiring tight tolerances Multi-component assemblies such as overmolded inserts or multi-color products Large-scale production with energy-efficient operation Rapid adaptation to new product designs or materials **Advantages** **Scalability:** Easily upgrade or expand machine capabilities without full replacement **Cost Efficiency:** Optimized energy use and reduced cycle times lower operational costs **Flexibility:** Supports diverse molding processes including structural foam, gas-assisted, and solid molding **Longevity:** Modular machines are designed for decades of use with reliable service support **Leading Manufacturers** **Arburg:** Offers ALLROUNDER CUBE and vertical modular machines for multi-component and high-volume production.

WITTMANN BATTENFEL

D: Provides EcoPower, MicroPower, MacroPower, and rotary table machines with modular, energy-efficient designs.

ENGE

L: Features hydraulic, hybrid, and all-electric modular machines with clamping forces from 280 kN to 55,000 kN. **Sumitomo (SHI) Demag:** Specializes in all-electric, hybrid, and servo-hydraulic modular machines, including multi-component and medical-grade systems. Modular injection molding machines combine precision, flexibility, and energy efficiency, making them ideal for manufacturers seeking adaptable solutions for complex and evolving production needs.

Article Content

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Find your modular injection molding machine easily amongst the 43 products from the leading brands (REP, Haitian, ENGEL, ...) on DirectIndustry, the industry specialist for your professional purchases.

Injection molding machine: Modular injection molding machine from ...

Performance-oriented and at the same time cost-efficient: companies appreciate working faster and more precisely with the electric ALLROUNDER injection molding machines. If you expect top

Modular ALLROUNDERS for multi-component technology | ARBURG

More space, modularity, and operating convenience in multi-component injection moulding. This is your production-efficient alternative for larger moulds and easy maintenance.

Injection moulding machines at a glance

Compact, energy-efficient and consistently high part quality: the victory series - from 280 to 5,000 kN clamping force - offers you the perfect modular system for the

Injection Molding

The modern and comprehensive range of machinery in a modular design meets the actual and future requirements of the market, taking into consideration the best

Injection moulding machines

Sumitomo (SHI) Demag covers the full spectrum of injection moulding automation – including machine technology, robotics, conveyor systems, and intelligent control

MicroPower 15 t | WITTMANN Group

From the simple manufacturing of small parts to the production of high-precision micro parts, the all-electric MicroPower offers optimal solutions thanks to its

Injection Molding Machines 500-60,000 kN

From 500 kN to 60,000 kN – KraussMaffei injection molding machines offer you maximum flexibility and performance and meet all your production requirements.

High-end Multi-component Injection Molding Machine

The YIZUMI C Series multi-component injection molding machine is designed for enhanced quality of life and individualization. Focused on stability and

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Discover how Milacron, your complete lifecycle partner, delivers technology solutions for your manufacturing processes. Our injection molding machines and

Injection molding machine: Modular injection molding

Is injection molding part of your business? When productivity and efficiency are your goal: Choose ALLROUNDER. Because the modular ARBURG injection molding

Modular ALLROUNDERS for multi-component

Rich in variants ALLROUNDERS for process-specific multi-component injection molding such as marbling, interval, and sandwich injection molding. With core

Injection molding machine

Operation Injection molding machine molds can be fastened in either a horizontal or vertical position. Most machines are horizontally oriented, but vertical machines are used in some niche applications

Injection moulding machine: Modular injection moulding machine from ...

Is injection moulding part of your business? If productivity and efficiency are your goals: choose ALLROUNDERS. Because the modular ARBURG injection moulding machines meet your

Large injection moulding machine for demanding components

Large injection moulding machine duo For large injection moulded parts and automotive components Energy-saving & compact Clamping force < 55,000 kN Learn more!

High-end Multi-component Injection Molding Machine

YIZUMI C Series Multi-component Injection Molding Machine offers stable, customizable solutions for high-speed packaging and auto parts with

Injection molding machines at a glance

Are you planning to buy an injection molding machine? Complete solutions by ENGEL Service & support In more than 85 countries here for you Discover now.

Introduction to Injection Molding for Mass Production of Custom

Injection molding machines definitely do not have the modern, high-tech feel of 3D printing technology. There is really nothing cool about injection molding, but nonetheless it is a requirement for most

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