

HYPERSYNC[™]

High Performance, Energy Efficient, Easy-to-Use Packaging Molding Solution



A NEW STANDARD IN PACKAGING MOLDING

Husky has industry-leading packaging molding experience and technology expertise. Building upon this proven track record, our HyperSync[™] injection molding machines offer superior levels of productivity, reliability and energy efficiency.

Precise synchronization of mold and machine processes, advanced melt flow control, a high performing clamping unit and Husky's Reflex[®] Platen deliver extremely fast cycle times with high part quality consistency. This, combined with flexible interface options, proactive monitoring, intelligent networking, and intuitive controls help deliver certainty and support for our customers.

Designed to produce thinwall food and industrial packaging, specialty closures and medical applications, HyperSync[™] machines deliver significant value both standalone and as part of an integrated system.



COMPREHENSIVE MATRIX FOR GREAT PERFORMANCE FLEXIBILITY

To meet growing demands for performance flexibility, Husky offers a comprehensive matrix of HyperSync[™] machines. A wide range of sizes and performance options enable optimal production solution configurations for each part's unique molding needs.

HyperSync[™] machines are available from 225 to 600 metric tons with a broad selection of injection units. Longer versions of the clamping unit are available for large shut-height tools.

	RS40	RS50	RS60	RSG80	RSG95	RSG115
HN(L]225	•	•	-	•		
HN(L)300			•	•	•	
HN(L)400		•	•	•	•	
HN(L]500			•	•	•	•
HN(L]600				•	•	•

LOW COST TO PRODUCE

Purposely designed hydraulic and electric power resources enable high machine performance, capability and energy efficiency. A high-pressure hydraulic system delivers benchmark levels of performance and reliability, while electrified axes precise and fast response times enable very tight process control. As a result, HyperSync[™] machines are capable of running extremely short cycle times while maintaining consistent part quality, minimum scrap rate and high energy efficiency.

The high productivity and energy efficiency of HyperSync[™] machines reduce operating expenses – resulting in lower production costs. At high utilization rates, HyperSync[™] machines offer quick payback and high return on investment.

INNOVATIVE ENERGY SAVING TECHNOLOGIES

A number of innovative technologies combine to deliver optimal energy efficiency.

Electric Mold Stroke (ELMS), offered as a standard feature on HyperSync[™] systems, is operated by a highly efficient servo drive that provides high acceleration rates for fast clamp movements.

The implementation of ELMS enables the added **Regenerative Clamp Stroke** energy saving feature. During the deceleration phase of any clamp stroke, the ELMS motor is used as a generator, recycling the breaking energy back into the machine power grid, enabling energy recovery.

Speed Variable Pump (SVP) is a built-in power management system that provides hydraulic power on demand. SVP's reduced components, more compact size and minimized inertia delivers better performance than conventional hydraulic pumps. Separate flow and pressure settings are allocated for the clamp and injection circuits and are specifically adjusted to application needs.

40% SAVINGS IN ENERGY UTILIZATION

Combined, these enhancements can deliver up to 40% savings in energy utilization over the previous generation system without sacrificing performance.



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HIGH MACHINE CAPABILITY

CLAMPING UNIT TECHNOLOGIES



UNIQUE CLAMPING UNIT DELIVERS HIGH PART QUALITY, OPTIMAL MACHINE SIZE AND LONGER TOOL LIFE

HyperSync[™] machines are equipped with Husky's distinctive three-platen clamping unit.

The unique **Reflex® platen** increases part weight consistency from cavity to cavity and can achieve within 0.1% tolerance on a 96-cavity mold.

Superior tonnage distribution enables the production of high-quality parts with reduced clamping force, minimizing mold wear and extending the lifetime of the tool. Wide tie-bar spacing, large platens and a stiff clamp base can run heavy, high-cavitation molds that would typically require larger sizing in conventional machines. HyperSync[™] machines can also run stack molds, yielding significant productivity improvements.

Husky's distinctive three-platen clamping unit is gentle on molds, reducing unscheduled downtime and extending tool life. The unique Reflex[®] platen design conforms to the mold to significantly reduce wear. In addition, the energy efficient Electric Mold Stroke, together with latest software controls, provides greater positioning of the moving platen with a tolerance of approximately 50 microns (about the thickness of an in-mold label) and high mold protection.



Stack molds (with two or more parting lines) can be used for increasing productivity on a wide range of applications like closures, thinwall containers, lids and medical components.

INJECTION UNIT TECHNOLOGIES



Accumulator Assisted Injection



Husky's injection units are equipped with:

- Industry-leading throughputs with available injection pressure above 30,000 psi
- Longer screws for better energy efficiency and greater melt homogeneity
- Direct drive motors on small and medium sized units offer more accurate shot size control

CONNECTED SERVICES

Advanced control and software features simplify operation and optimize the manufacturing process. Husky's Polaris® control enables system-level control from a single 19-inch HMI, with intuitive screens that are easy to navigate. Quick access to critical process parameters and information enables faster start-ups and maximizes overall productivity. Advanced connectivity enables remote diagnostics and allowing for easy connection to process and productivity monitoring software.

ADVANCED MELT FLOW CONTROL FOR REDUCED PART VARIABILITY

To ensure high part quality HyperSync[™] machines are designed to minimize variability. A wide range of resin specific screws, drive speed and power options ensure optimal melt preparation for each application. Accumulator assisted hydraulic stroke enables industry-leading injection rates. With an increased scan rate, EtherCAT control delivers accurate and repeatable injection stroke.



A large touchscreen enables system-level control, easy navigation and simplified operation.

INTEGRATED SYSTEMS

E-IMC[™] IN-MOLD CLOSING TECHNOLOGY FOR FLIP-TOP CLOSURES

HyperSync[™] machines can be integrated with Husky's revolutionary e-IMC™ in-mold closing technology for fliptop specialty closure molds. A servo driven mechanism enables safe overlapping of mold functions with machine movements, providing precise, controlled closing of fliptop closures while still in the warm position with significant cycle time benefit versus conventional systems. Closing speed is carefully controlled, allowing for fast and precise closing movements, ensuring the ideal combination of closing speed and force required to ensure optimal part quality. The use of e-IMC™ in-mold closing technology provides an up to 20% increase in productivity, depending on the application.



UNLOCKING PACKAGING POSSIBILITIES WITH MULTI-LAYER TECHNOLOGY

For expanded design flexibility, HyperSync[™] machines can be integrated with Husky's Multi-Layer Technology. Adding a second resin can add a unique and new functionality to packaging parts. Husky's co-injection technology combines the benefits of a robust, high-performing and easy-to-maintain system with the capability to precisely dose the added layer. With an advanced melt delivery system and enhanced controls, our Multi-Layer Technology provides the ideal combination of product protection and package design, including innovative decorative capabilities.

DELIVERING ON OUR COMMITMENT TO CUSTOMERS

Husky strives to provide unparalleled service and support. In addition to producing robust machines and high-performance systems, we also provide delivery and documentation, start-up service at the customer site, troubleshooting, advisory services and extensive training.

Our mold and machine manufacturing facilities help customers bring products to market faster by providing manufacturing flexibility and the capacity to handle projects of any size in a quick and timely manner. Each location is equipped with state-of-the-art technology and equipment enabling machines and tooling to be produced independently in all locations, with the same high level of quality.

This is all supported by our Husky Advantage+Elite[™] proactive, predictive and transparent monitoring solution. Introduced early in 2020, Husky Advantage+Elite[™] monitors systems within customers' production facilities in real-time while proactively engaging to secure and maintain the lowest total cost to produce and strives to ensure customer equipment is continuously running at peak capacity.



Husky offers a diverse range of solutions to meet your thinwall, industrial packaging, specialty closures and medical application molding needs. Contact us to learn more about our HyperSync[™] machine solution.



Husky Technologies™ husky.co

Head Office Asia Pacific Europe Canada • Tel (905) 951 5000 • Fax (905) 951 5384 China • Tel (86) 21 2033 1000 • Fax (86) 21 5048 4900 Luxembourg • Tel (352) 52 11 51 • Fax (352) 52 60 10 Husky Technologies[™] is a registered trade-mark of Husky Technologies[™] in the United States and other countries, and may be used by certain of its affiliated companies under License. All HUSKY products or service names or logos referenced in these materials are trade-marks of Husky Technologies[®] and may be used by certain of its affiliated companies under License.

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