

UltraSync Hot Runner Technology

Consistent part filling, excellent gate quality and close nozzle spacing



Benefits

- 100% gate open and close synchronization from cavity-to-cavity
- Improves system balance
- Optimized stem force to achieve excellent gate vestige
- 100% repeatability from shot-to-shot
- Minimized pitch spacing
- Improved reliability and reduced wear
- Applicable for low and high cavitation molds up to 192 drops

Features

- Plate actuation
- Sophisticated alignment components minimize wear
- Easy set-up and operation
- Stem position monitoring
- Simple integration in mold design
- Profiled stem movement
- Individual cavity shut down
- Safety features to avoid gate damage

Husky UltraSync™ technology offers repeatable shot-to-shot and part-to-part consistency through precise stem closing, helping remove variation from the injection molding process. The precision of UltraSync technology is achieved by using either an electric servo motor option, hydraulic cylinder option or pneumatic cylinder option that moves the valve stems with 100% synchronization. In combination with its servo motor the electric option (UltraSync-E) is ideally suited for clean room applications and all electric machines. If the servo motor is used, the set-up screen is conveniently integrated into a Husky Altanium® temperature controller. Electric, hydraulic and pneumatic options are configured to provide optimized force for excellent gate quality. The plate actuation mechanism is built for reliability and limited wear.

Ball and linear bearings ensure longevity. Accessibility to perform routine maintenance tasks is simple and easy. For example, stems on the UltraSync-E can be exchanged in the machine in under five minutes.

UltraSync technology is available with Ultra 350, Ultra 500 and Ultra 750 valve gate hot runner nozzles. A wide range of melt channel sizes and gating options ensures that the system is optimized for your specific resin and application. UltraSync technology allows for a minimum nozzle spacing of 18 mm (0.71") with Ultra 350 nozzles and is an ideal solution for the high precision molding of small parts with less than one gram part weight.

HUSKY®

Keeping our customers in the lead

UltraSync technology has unique and patented features making this the best choice for customers considering plate actuation:

- Patent pending shear pin design disengages the stem if too much force is applied in the gate area
- Patent pending maintenance position for easy access to the valve stems in the machine
- Integration of the servo control into a Husky Altanium controller not only allows for one operator screen instead of two, but also contains a safety feature that prevents the servo from moving unless the system is at operating temperature

UltraSync-E

Electric plate actuation solution ideal for the molding of medical components in a clean room environment. The actuation plate is guided by self-lubricating high precision linear ball bearings requiring minimal maintenance. The electric servo systems have been designed to integrate the servo control module directly into an Altanium temperature controller.

- Reduces the amount of floor space required
- Means easy set-up from a single screen
- Includes a safe start-up program that prohibits stem actuation if the hot runner is not up to set point temperature
- Eliminates potential damage to the system due to operator error

UltraSync-H

Hydraulic plate actuation solution designed to run with a hydraulic power pack to actuate the plate and stems. This reduces shut height with the potential for a smaller mold base versus the UltraSync-E. UltraSync-H covers the same application range as the electric option where integrated hydraulic cylinders provide valve stem actuation force.

- Adjustable stem closing force
- Adjustable stem speed control
- Simple set-up and integration
- Plate position monitoring with digital sensors

UltraSync-P

Pneumatic plate actuation solution addressing the clean room compatibility issues associated with hydraulic solutions. This solution offers minimized shut height and a 40% increase in stem force compared to small individual pneumatic pistons. Accurate monitoring of plate position is achieved with the use of optional proxy sensors.

Contact Husky today for more information on UltraSync hot runner technology.



UltraSync technology allows for close nozzle spacing.

Husky Injection Molding Systems
www.husky.ca

Head Office Canada • Tel. (905) 951 5000 • Fax (905) 951 5384
Asia China • Tel. (86) 21 3850 8000 • Fax (86) 21 5048 4900
Europe Luxembourg • Tel. (352) 52 11 51 • Fax (352) 52 60 10

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