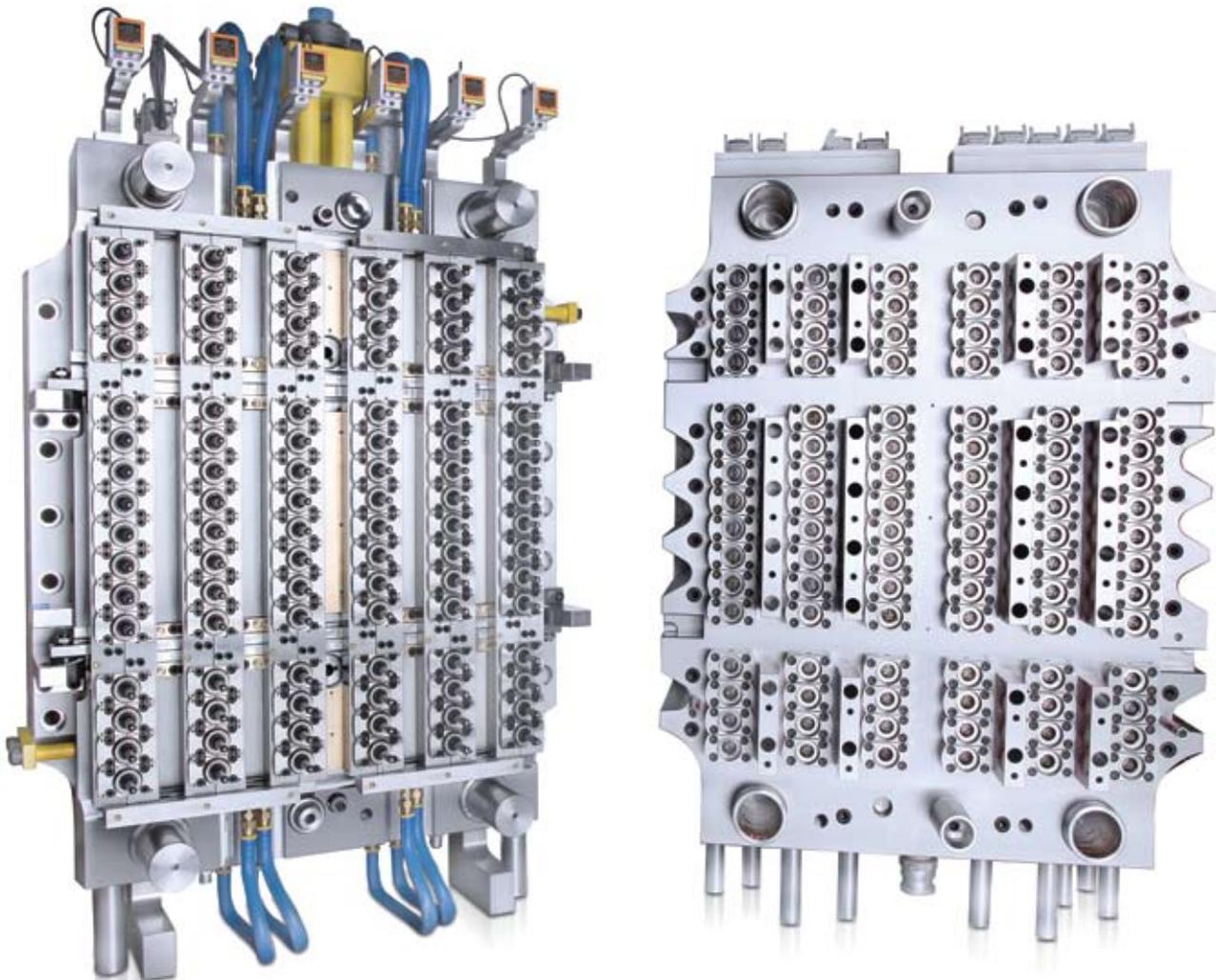


MPET

NEXT GENERATION PREFORM TOOLING SOLUTIONS



▶ INNOVATIVE PREFORM TOOLING SOLUTIONS

Mold-Masters® provides technology leading PET preform molds, conversions, refurbishments and replacement stack parts that deliver savings in cycle time, energy consumption, costs and capital. By leveraging *MasterPET (MPET)* technologies, preform molders can breathe new life into existing capital investments.

Mold-Masters has five manufacturing locations, seven *MPET* refurbishing centers and 28 service and sales locations globally. The company is the industry's largest provider of hot runner and controller technologies with more than 1600 granted and pending international patents.

For over 45 years, *Mold-Masters* has led the hot runner industry in technology and performance. Through *MPET*, the company brings that same leadership and innovation to the preform molding industry.



▶ LOWER PART COST

OVERALL TOOLING FEATURES

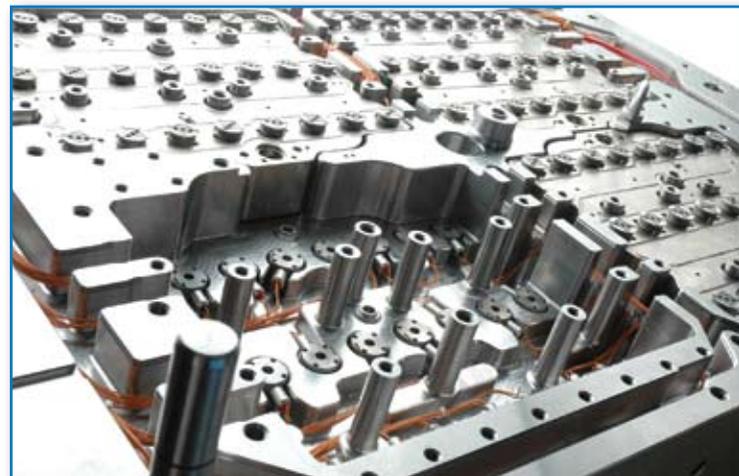
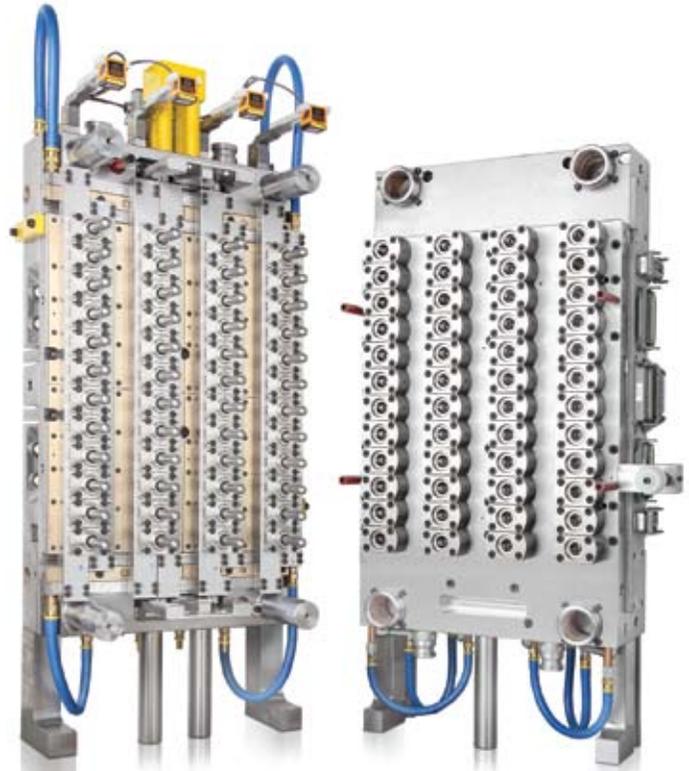
- » 100% interchangeable with existing mold and hot runner platforms
- » Standard interface for water, air and electric connections
- » Fits into all major machine platforms including post mold cooling technologies with 1 to 4 position take offs

COLD HALF FEATURES

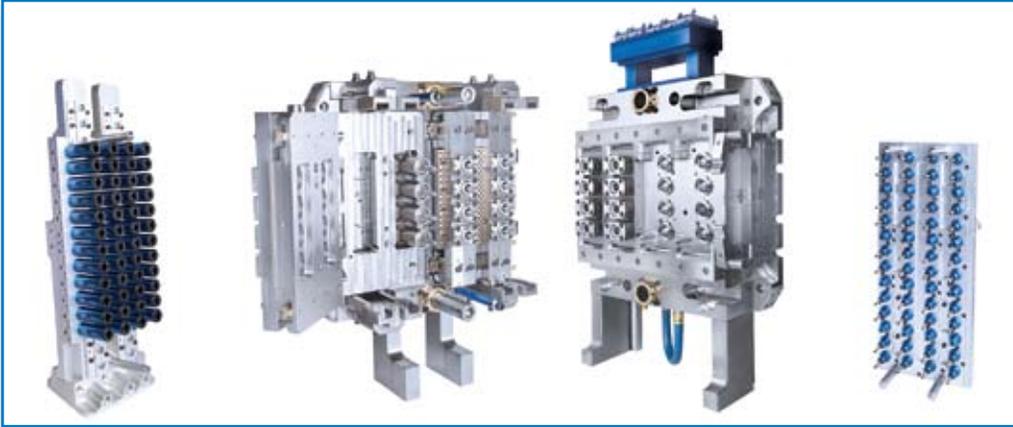
- » Universal mold design fits into other machines without the need for a retrofit kit
- » Patented *iCOOL* conformal cooling technology for reduced cycles, lower water consumption and improved dimensional stability
- » Long life stack designs for extended cycles between refurbishments
- » Patent pending *Rapide* quick part change option
- » Optical part detection

HOT RUNNER FEATURES

- » Unique *iFLOW* hot runner design for rheologically balanced filling from 2-144 drops
- » Individual valve stem access ports for easy in-press servicing
- » Rigid 5mm valve stem with 4mm gate to extend gate life
- » Patented valve disk reduces PET dust migration
- » Brazed-in nozzle and manifold heaters for improved uptime, precise temperature control and energy savings
- » Optional group or individual nozzle tip control
- » In-press replaceable nozzle tip, seal and insulator



▶ RAPiDE QUICK CHANGE TOOLING



Rapide is an innovative new tooling approach engineered for molders who run two or more different preforms in the same machine with frequent changes. It is designed to:

- » Maximize uptime with part-to-part changeover times as low as 15 minutes with little to no bolt removal
- » Reduce capital expenditures by purchasing only the stack components
- » Allow for the stacks to be reused when higher cavitation molds are required
- » Facilitate faster changeover and to ensure proper storage and care of the replacement stacks with the optional 'pit stop' tool cart

MOLD AND HOT RUNNER CONVERSIONS / REFURBISHING

- » Precision stack components are produced centrally, while the exchange and rework of the mold base is completed at *MPET* refurb centers globally to reduce costs and downtime
- » Three levels of hot runner refurbishing packages are available
- » Each refurbishment comes with an inspection report and warranty for the completed work



PREFORM DESIGN AND PROTOTYPING

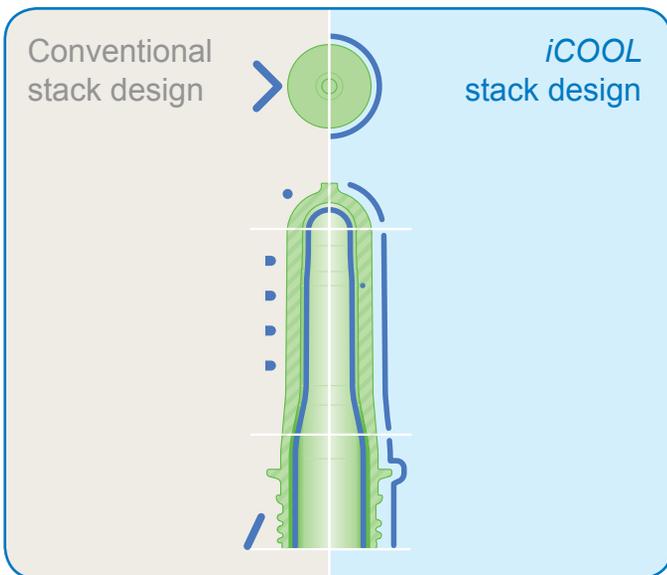
- » Services available to allow you to reduce time and risk in bringing a new bottle to market
 - » Preform design capabilities including availability of patented Cappello lightweighting design
 - » Molding system and modular tooling available for quick preform validation and pilot production runs



▶ FASTER CYCLES, BETTER QUALITY

iCOOL

The patented *iCOOL* mold stack technology provides more uniform and efficient cooling over the entire preform surface when compared to competitive systems.

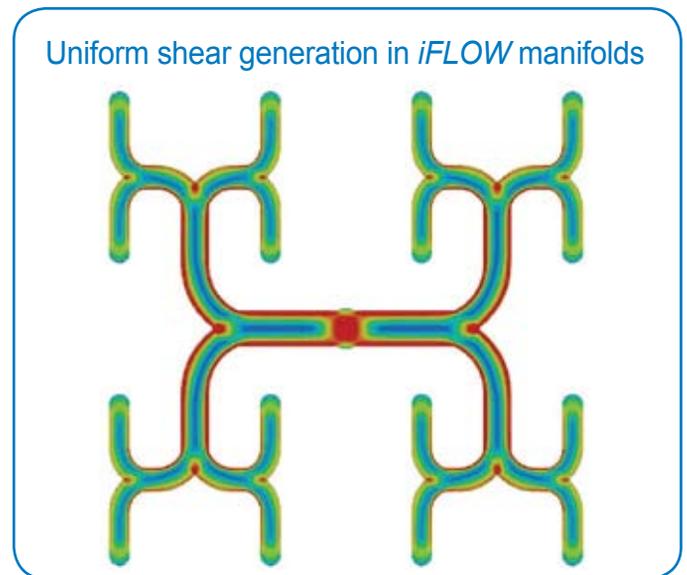


BENEFITS OF *iCOOL*

- » Reduced cycle times
- » Reduced water consumption
- » Increased water temperatures to eliminate the need for chiller tonnage and dehumidification
- » Improved dimensional stability
- » Longer mold and taper life
- » Lower energy consumption

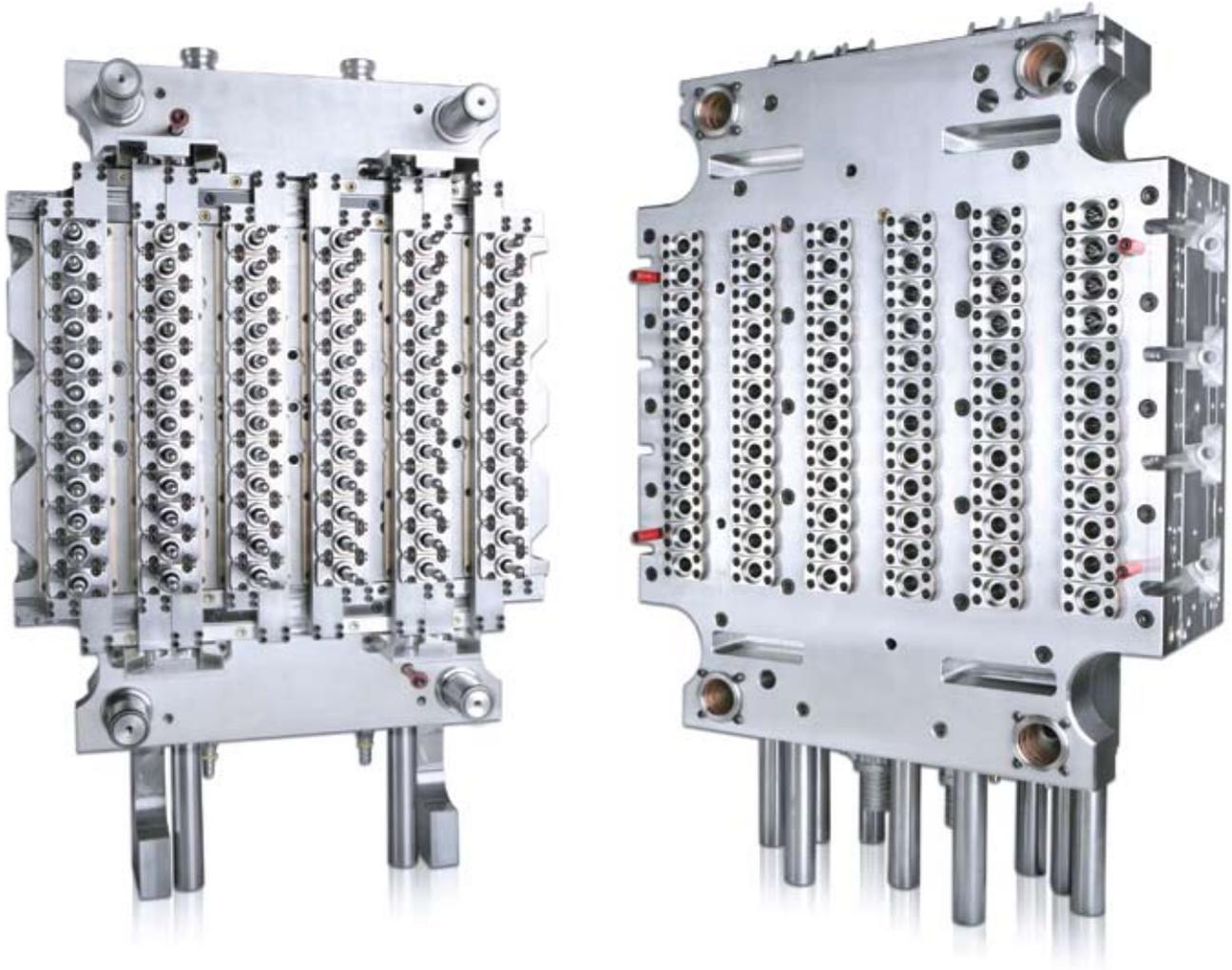
iFLOW

The proprietary design of *iFLOW* manifolds and nozzles for PET reduces shear heat generation, lowers energy consumption, improves balance and reduces pressure drop.



BENEFITS OF *iFLOW*

- » Faster fill times
- » Reduced hold time and pressure
- » Lower AA levels (less need for AA blocker)
- » Lower energy consumption
- » Rapid color changes
- » Reduced maintenance costs



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