



 **GRAHAM**  
ENGINEERING  
Mini Hercules®

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**Mini Hercules® Accumulator  
Head Blow Molder**



## UNMATCHED EXPERTISE

The Graham name has long been synonymous with innovations that have helped transform the plastics industry. Graham Engineering Company, LLC (GEC) is known worldwide for state-of-the-art technology, quality, reliability, and productivity. GEC equipment produces a wide array of high-quality plastic products year after year.

*Our vision focuses on delivering innovative solutions to a diverse customer base.*

Continuous technological innovation, client/partner relationships, product line diversification, and strategic alliances are all part of the GEC vision – a commitment to leadership tied directly to the needs of our customer base.

### MINI HERCULES® ACCUMULATOR HEAD BLOW MOLDING SYSTEMS

Graham Engineering quality and performance you trust in a compact size for small industrial applications:

- 2.5 lb, 5 lb, or 8 lb shot size
- Single or dual head configuration
- XBM Navigator® control system
- 1-hour color change
- Platen design for easy mold removal
- Bottom or side discharge
- 2 auxiliary hydraulic valves standard
- Production parts within 4-5 cycles

The Graham Engineering Mini Hercules® accumulator head machine is packed with standard features in a compact size for small industrial applications.

It is available in 2.5 lb, 5 lb, or 8 lb shot, single or dual head configuration. The proprietary Graham Engineering spiral diverter offers continuous internal cleaning during production and a 1 hour color change for most materials.

A 75mm extruder is standard with a 90mm extruder as an option. You can select bottom or side discharge to meet your specific requirements. The machine has two auxiliary hydraulic valves, standard, with additional valves available. This blow molder features the award-winning XBM Navigator® control system.

### Technologies to Give Customers Every Edge

In today's competitive market and high production environments, GEC is continually looking for ways to help customers improve production quality and speed. We strive to enhance the value of the products made on our machines and achieve our customer's sustainability goals through source reduction.

### Service That Maintains Peace of Mind

GEC is firmly committed to providing the highest levels of customer support. Our service professionals can respond around the world to ensure that every machine exceeds customer expectations and helps your company achieve the highest possible standards of success.

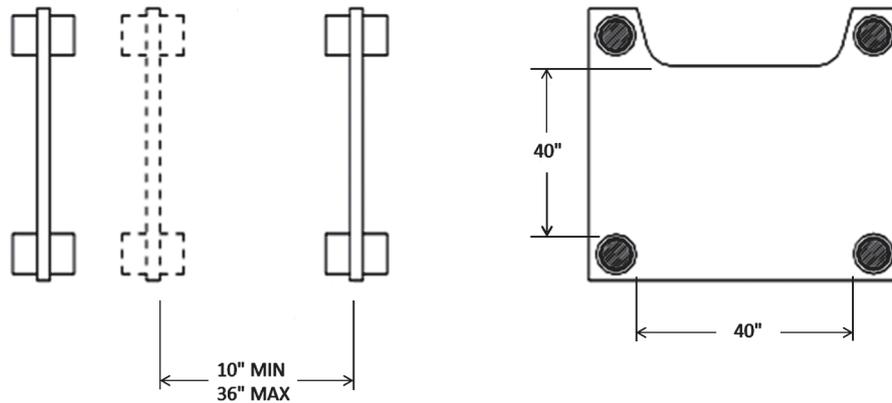
*Our experience brings confidence, trust, and peace-of-mind.*

GEC's professional team of highly experienced field engineers are always ready to provide all the on-site services your operation may need. Also, remote diagnostics enable us to troubleshoot and solve many problems from anywhere. Our service and spare parts groups focus on a single goal – superior customer satisfaction, based upon maximizing your ROI.

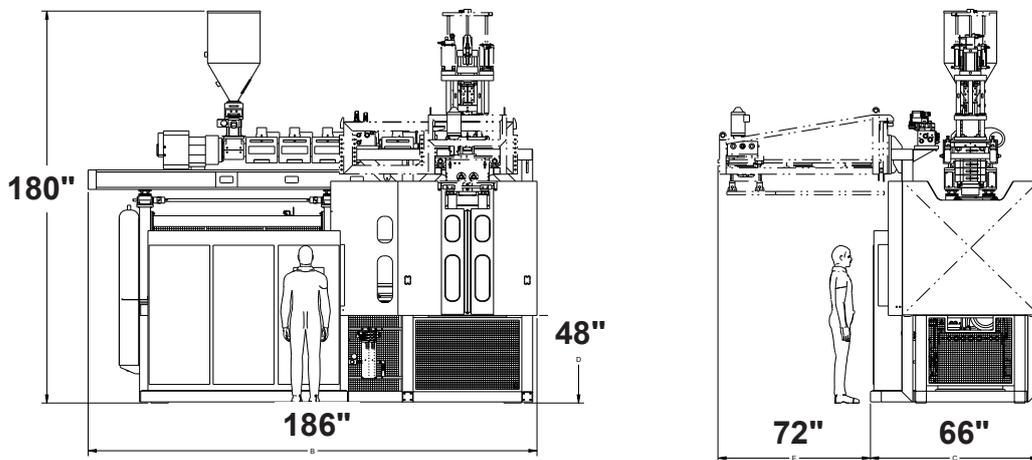
# Mini Hercules - A Closer Look

Shot Capacity lb (kg)	Tooling Size — Inch (mm)	Dual Head Centers — Inch (mm)
2.5 (1.125)	1-6 (25-152)	14 (355.6)
5 (2.25)	2-9 (51-229)	16 (406.4)
8 (3.625)	2-9 (51-229)	16 (406.4)

Extruder	Estimated Output (HDPE) lbs/hr	Estimated Output (HDPE) kg/hr
75mm smooth	450	205
90mm smooth	800	363
90 mm grooved	1000	455



## Integrated press with mechanical synchronization



*\*All sizes are approximate.*



The XBM Navigator® control system provides complete machine control for our eXtrusion **B**low **M**olding equipment. The PC-based control system employs hardware designed and tested for industrial environments. The industrial PC is compact, mounts directly to the DIN rail, and provides outstanding CPU performance with real-time characteristics for precise control of machine functions. The touch screen interface is highly intuitive and allows the operator to control the process from pellet to finished product. Key features include closed-loop temperature control, 180-point parison programmer, clamping unit control, and seamless integration of downstream conveyors and trimmers. The system also includes a full suite of diagnostic tools. The comprehensive documentation package is fully integrated into the HMI. The entire system is explicitly designed to minimize downtime and maximize output.



Graham Engineering's exclusive PC-based control system is designed specifically for extrusion and extrusion blow molding machinery. Developed in 2001 as a replacement for traditional PLC-based systems, it provides more flexibility, a higher performance, with a lower cost. The Navigator control system comes in various versions to fit your needs. XC100, XC200, XC300, XBM, and XLS provide varying integration, optimization, and customization levels to your Graham Engineering extruder.

