



**GRAHAM
ENGINEERING**

Modular Extruders



UNMATCHED VERSATILITY

The Graham name has long been synonymous with innovations that have helped transform the plastics industry. Graham Engineering Company's (GEC) Compact Modular Extruder is no exception. This state-of-the-art machine is known for quality, reliability, and productivity.

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.

A Tradition in Micro Tubing & Fine Wire

Our unique Compact Modular MD series extruder is designed specifically for clean room and/or controlled environments. The electrical controls are easily serviced and integral with the extruder frame, providing the benefit of reduced machine width and reduced floor space. The low profile control panel enables the operator's unobstructed view across the clean room production area. This machine can be used as a primary or co-extruder.

The machine is designed with smooth external surfaces & rounded corners that allow for quick and easy wipe down. A melt pump can be fully integrated at the time of order or easily added in the future. This machine is available with an option to include the entire main frame & safety guards to be made of stainless steel in place of standard painted steel. Barrel modules are available in Standard Configuration (STD), Corrosive Resistant (CR), and High Temperature (HT) and are completely interchangeable. The Compact Modular MD Series is offered in Small, Medium & Large sizes.

- Small - 1/2" (12.7mm), 5/8" (15.875mm), 3/4" (19.05mm), 1" (25.4mm)
- Medium - 3/4" (19.05mm), 1" (25.4mm), 1 1/4" (31.75mm)
- Large - 1" (25.4mm), 1 1/4" (31.75mm), 1 1/2" (38.1mm), 1 3/4" (44.45mm)

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.

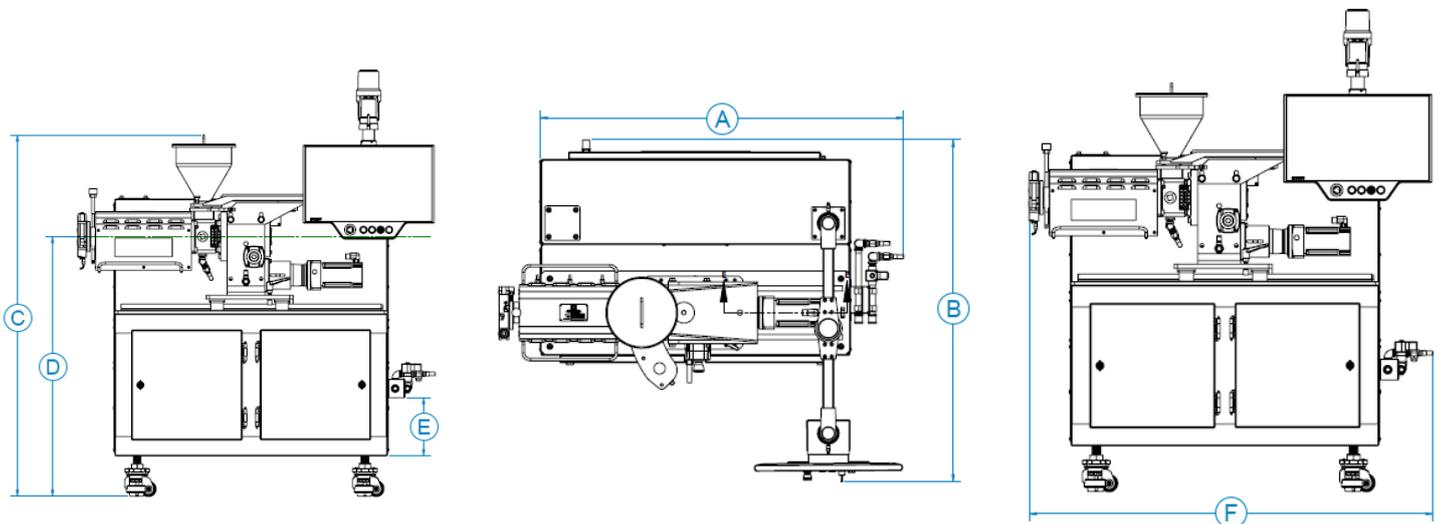
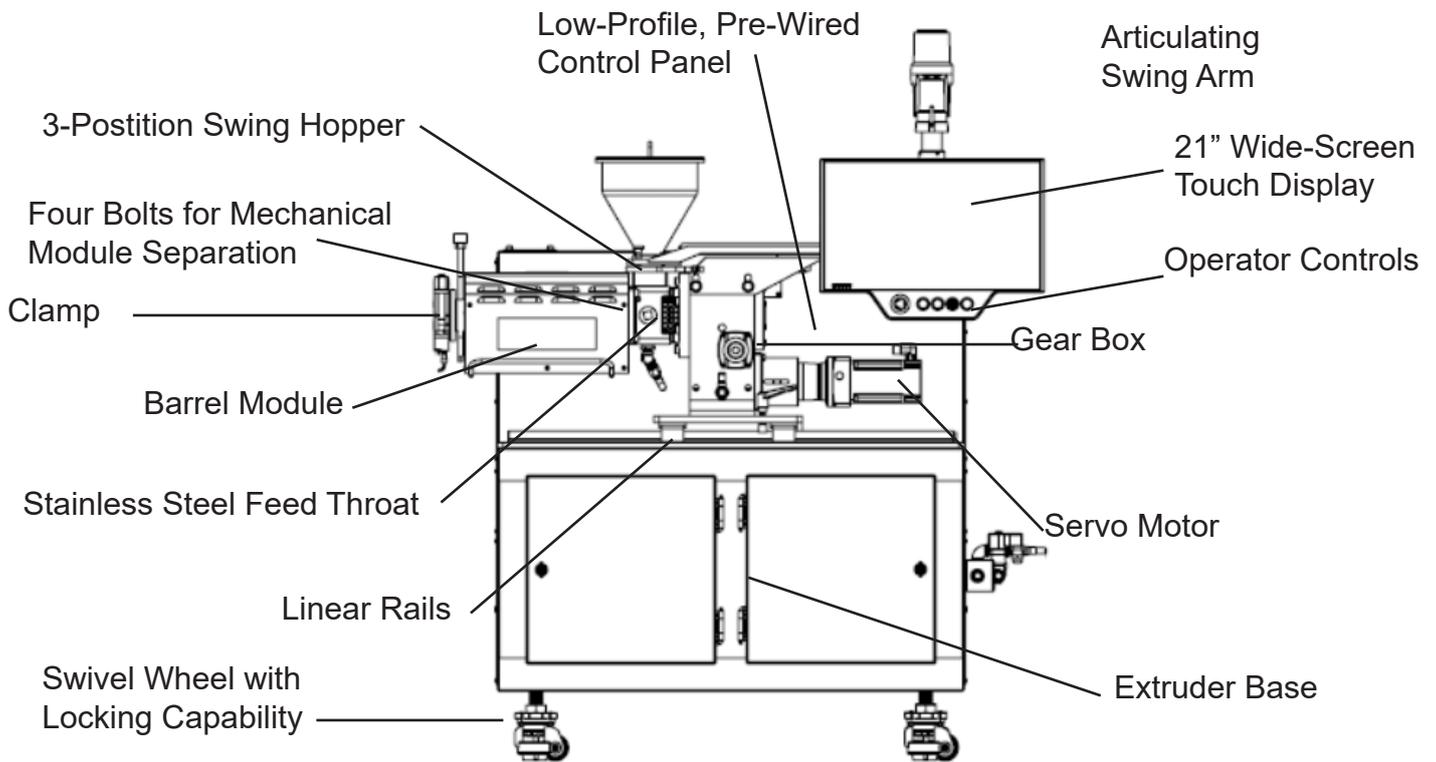
Service That Maintains Peace of Mind

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.

The Compact Modular - A Closer Look



	Small		Medium		Large	
A	51.83"	1316.48mm	61.83"	1570.48mm	61.83"	1570.48mm
B	49.19"	1249.43mm	53.24"	1352.30mm	53.24"	1352.30mm
C	58.76"	1492.50mm	58.76"	1492.50mm	58.76"	1492.50mm
D	42.25"	1073.15mm	42.25"	1073.15mm	42.25"	1073.15mm
E	9.45"	240.03mm	10.00"	254.00mm	10.00"	254.00mm
F	57.66"	1655.06mm	71.17"	1807.72mm	71.17"	1807.72mm



The XC Navigator® control system provides complete eXtrusion Control for all our extrusion solutions, from stand-alone machines to complete medical tubing lines. The XC platform is offered in three levels (XC100, XC200, XC300) depending on the complexity of the extrusion application. All three solutions leverage the same powerful technology in our other Navigator® products. Our XC100 solution provides comprehensive control for stand-alone extruders in a package that includes closed-loop temperature control for barrel and die zones, extruder speed control, and optional pressure control. Our XC200 solution provides expanded control for up to 3 extruders from a single HMI, with up to 10 die zones and integrated melt pump control. Our XC300 solution is a highly flexible, modular solution that provides unified control of up to 3 extruders that can be operated independently or linked together in a plug-and-play configuration. The XC300 also offers connectivity to a wide range of downstream equipment, including air systems, vacuum tanks, gauges, pullers, cutters, conveyors, and coilers. The entire suite of XC products includes a full suite of diagnostic tools. The robust design of our XC platform is highly flexible to optimize each specific extrusion application.



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.

