



PEAK

PERFORMANCE

COMPOUNDING, LLC

peak-pci.com

Company Information



- ✓ Established in 2019 by a group of diverse, industry-leading professionals, with over 100 years of combined plastics experience
- ✓ Located in Leominster, MA (pronounced Lemon-ster)
- ✓ 15,000 SQ/FT manufacturing facility
- ✓ Full-service contract manufacturer
- ✓ Custom compounding competency (formulation through production)
- ✓ Toll compounding capability
- ✓ Resin distribution

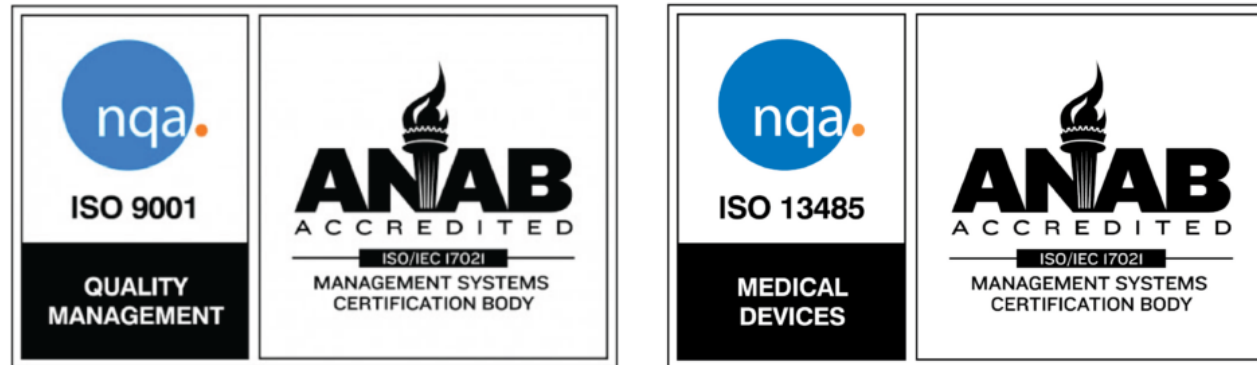


WE PRIORITIZE THE INDUSTRY NEED FOR HIGH QUALITY, TECHNICAL EXPERTISE, SMALL LOTS & SHORT LEAD TIMES

Quality Certifications



- ✓ Our facility is registered to the ISO 13485:2016 and ISO 9001:2015 quality management systems



QUALITY AT OUR CORE

What We Do



- ✓ Specializing in innovative thermoplastic compounded solutions
- ✓ Proudly serving medical, industrial & consumer markets
- ✓ Providing comprehensive services in:
 - Custom Compounding
 - Toll Compounding
 - Medical Compounds
 - Standard Product Lines
- ✓ Wide range of polymer processing capabilities
 - Engineering grades
 - Commodity grades
 - Specialty / high performance
 - Low & high temperature applications
- ✓ Technical expertise (polymer science, processing & engineering)
- ✓ Additional services:
 - Blending /mixing
 - Underwater pelletizing



**PEAK PCI PROVIDES THE HIGHEST QUALITY OF POLYMERIC MATERIALS
WITH NO MINIMUMS AND SHORT LEAD TIMES!**

What We Do



✓ **Custom Compounding**

- Melt blending of polymers & additives to customer specification
- In-house formulation development, process development, scale up & production
- Wide range machine size, lot size, material & additive capability
- Commodity resins, high performance thermoplastics, reinforcement , lubricants, functional additives, colorants

✓ **Toll Compounding**

- Customer supplied ingredients processed to precise specification
- Strong technical expertise to solve challenging problems

✓ **Medical Compounding**

- Twin-screw blending capability in a climate-controlled environment
- Extensive experience in medical material development, processing & compliance
- Proudly serving critical medical device applications including the Minimally Invasive Surgical (MIS) market

✓ **Standard Products**

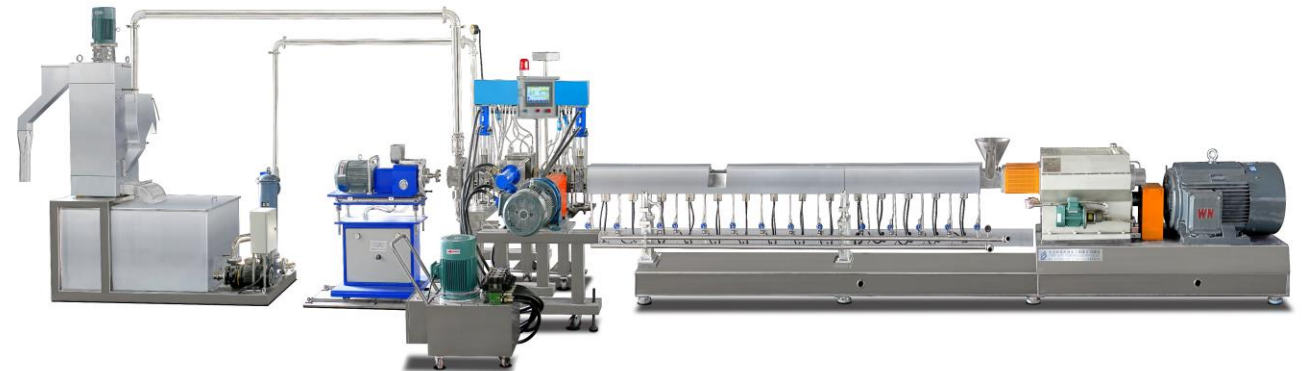
- Ranging from high performance thermoplastics to commodity polyolefins
- Glass/carbon reinforcement, lubricious fillers, functional additives, custom pre-colors, color masterbatches

YOUR FULL-SERVICE COMPOUNDER

Compounding Lines



- ✓ Five fully equipped twin screw extrusion lines
 - 75MM twin-screw extruder
 - 52MM twin-screw extruder
 - 35MM twin-screw extruder
 - 32MM twin-screw extruder
 - 22MM twin-screw extruder



PROUDLY OFFERING SMALL DEVELOPMENT LOTS THROUGH PRODUCTION VOLUMES

Additional Services



✓ **Pelletizing**

- Strand cut
- Under water (moisture sensitive applications, antimicrobial, biodegradable & high-performance)
- Waterless pelletizing for moisture sensitive applications

✓ **Drying**

- Pre & post drying as needed

✓ **Blending /Mixing**

- Dry blending of pellets & powders for lot consistency & cost reduction
- Various methods of pre & post blending, including ribbon blenders

✓ **White Room Manufacturing**

- Controlled environment for production

✓ **Color Matching**

- Precise color matching capabilities for pre-color compounds and masterbatches

✓ **Pulverizing**

YOUR FULL-SERVICE COMPOUNDER

Polymers & Additives



POLYMERS

- ✓ Polyolefins: LLDPE, LDPE, HDPE, PP, EVA
- ✓ Styrenics: PS, HIPS, ABS, SAN, SBC, ASA
- ✓ Polyamides: PA6, 6/6, 6/12, 11, 12, blends
- ✓ Polyurethanes: TPU, blends
- ✓ Polyacetals: POM, homopolymers, copolymers
- ✓ Acrylic: PMMA
- ✓ Polycarbonate: PC, PC/ABS, blends, alloys
- ✓ Polyesters: PET, PBT
- ✓ Thermoplastic Elastomers: PEBA, HYTREL, COPE's, SBCs, TPV, custom (Shore 20A – 100A)
- ✓ Biodegradable/Biocompatible: PLA, PLLA, PHA, cellulose
- ✓ Fluoropolymers: PTFE, PCTFE, PVDF, FEP, EFEP, ETFE, ECTFE, PFA
- ✓ High Temperature: PSU, PPSU, PPS, PEEK, PEI, PES, LCP
- ✓ PVC – Flexible Grades

ADDITIVES

- ✓ Custom Colors
- ✓ Glass & Carbon Fiber
- ✓ Lubricants
- ✓ Antimicrobial
- ✓ Anti-stat
- ✓ Carbon Black
- ✓ Fragrance
- ✓ Cross-Linking
- ✓ Metals
- ✓ Minerals
- ✓ Processing Aids
- ✓ Nano Carbon
- ✓ Heat Stabilizers
- ✓ Reinforcements
- ✓ UV Stabilizers
- ✓ Impact Modifiers
- ✓ Silicone
- ✓ Overmolding
- ✓ Bonding
- ✓ 3D Printing
- ✓ Laser Marking

Medical Manufacturing



- ✓ White Room Compounding
- ✓ Climate Controlled Environment
- ✓ Twin-Screw Blending Capability
- ✓ Medical Market Applications
 - Class 1: dressings, luers, locks, tubing, connectors
 - Class 2 – catheters, syringes, sheaths, MIS instruments
- ✓ Processes
 - Injection Molding
 - Blow Molding
 - Extrusion
 - Tube
 - Sheet

- ✓ Infrastructure
 - Five twin-screw extrusion lines
 - Strand & under-water pelletization
- ✓ Liquid Injection
- ✓ Quality Certifications
 - ISO 9001:2015
 - ISO 13485:2016



OUR TEAM HAS EXTENSIVE EXPERIENCE IN MEDICAL MATERIAL DEVELOPMENT, PROCESSING & COMPLIANCE

Medical Material Capabilities



✓ Radiopaque Filled Materials

- Medical polymers blended to specification for x-ray visibility (up to 85% by weight)
- Barium Sulfate
- Bismuth Subcarbonte
- Bismuth Oxychloride
- Tungsten

✓ Lubricious Technologies

- Custom formulations for low friction applications

✓ Functional Additives

- Mineral reinforcements & stabilizers for enhanced processing & performance

✓ Custom Colors

- Pre-colors
- Masterbatch
- Color concentrates
- Food grade & medical grade pigments



INNOVATIVE THERMOPLASTIC SOLUTIONS FOR MEDICAL DEVICE APPLICATIONS

Mixing Equipment



- ✓ **Drum Tumbler**
 - Dual 55-gallon drum tumbler
 - Stainless steel mixing drums
- ✓ **Medium Stainless-Steel Ribbon Blender**
 - ~2,500 lb. mixing capacity
 - Liquid/oil sprinkler feeding capability
 - Equipped with large bulk box tipper
- ✓ **Medium Stainless-Steel Ribbon Blender**
 - ~3,000 lb. mixing capacity
 - Liquid/oil sprinkler feeding capability
- ✓ **Large Stainless-Steel Ribbon Blender**
 - ~8,000 lb. mixing capacity
 - Liquid/oil sprinkler feeding capability
- ✓ **Vertical Blenders (2)**
 - 4,000 lb. mixing capacity
 - Augur type mixer
- ✓ **High Intensity Mixers**
 - Henschel type with mixing blades
 - High RPM/high shear
 - Equipped with large bulk box tipper

ENSURING LOT TO LOT CONSISTENCY

Analytical Testing



- ✓ Testing and verification of incoming raw materials
- ✓ Conformance testing of all products throughout production process
- ✓ Post-production verification of finished products
- ✓ Melt Flow Analysis
- ✓ Izod and impact testing
- ✓ Filler Content Analysis
- ✓ Moisture Content Analysis
- ✓ Flexural and tensile testing
- ✓ Color Spectrophotometer
- ✓ Density testing
- ✓ Lab vacuum oven
- ✓ XRF - Heavy Metal Analysis
- ✓ High Resolution Digital Microscope (dispersion measurement)
- ✓ Regulatory testing and compliance documentation

IN-HOUSE CAPABILITY FOR QUALITY ASSURANCE

The Peak Difference



- ✓ **No Minimums** – Laboratory trials through large-scale production
- ✓ **Fast Turnaround** – Short lead times for development samples and production lots
- ✓ **Quality Commitment** – Each lot is manufactured to specification and tested in our in-house QC lab

YOUR TRUSTED PARTNER



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THANK YOU!