



## **PEAK PERFORMANCE COMPOUNDING ENABLES PROCESSING EFFICIENCY & COST REDUCTION FOR HIGHLY FILLED, LOW DUROMETER MATERIALS**

### *A Customer Success Story*

Manufacturing compounds with a high loading percentage of fillers and additives often provides processing challenges; particularly when base resins are soft in durometer. Peak Performance Compounding, LLC. has optimized the feeding, blending and extrusion process to provide optimum dispersion and pelletization of these blends for a wide range of market applications.

The following case study outlines how Peak Performance Compounding LLC. has solved a critical manufacturing challenge for our customer and provided substantial cost savings at the same time.

**Customer Profile:** A leading resin supplier, providing specialty materials to a diverse portfolio of industries; including consumer goods, medical & pharmaceutical, industrial & manufacturing, building & construction, food & beverage, aerospace & automotive, oil & gas and energy.

**Material Needs:** An ultra-violet (UV) resistant elastomeric compound

- Low viscosity
- Low durometer
- Highly filled

**Material Challenges:** This particular customer needed support in the manufacturing a highly filled compound. Specific processing & business challenges include:

- Filler dispersion (due to high loading levels)
- Pelletizing (due to low durometer / tack)
- Cost efficiencies (due to low production yields and additional processing steps)

**The Peak Solution:** Peak has extensive experience in processing these types of elastomeric, low durometer, compounds. Utilizing proper equipment, extrusion processes and down-stream operations we were able to meet customer goals and application requirements.



- Customized under-water pelletizing, specific to low durometer material
- Unique continuous blade sharpening procedure
- Customized feeder technology and screw design

**The Outcome:** Peak proudly met our customer's unique material needs and provided them with the following material and business-related benefits:

- Ability to market a high quality, UV elastomeric compound to their customers
  - Pellet consistency in size and shape (spherical)
  - No strings or tails
- Increase in production yields (less scrap)
- Elimination of both pre- and post-production steps
- Significant cost savings compared to manufacturing in-house or with less-experienced compounder

For more information on this case study or to discuss how Peak Performance Compounding LLC. can assist with your unique material needs, please email [info@peak-pci.com](mailto:info@peak-pci.com)