



3-Dimensions of Recyclability

Wonder what to do with 3D Printer Plastic Spool? The recycling of plastic materials from the 3D printing process is an effective way to reduce waste, lower material costs, and support the circular economy.

Typically, your local municipal curbside and drop-off recycling programs do not offer 3D printing plastic recycling (failed prints, support structures and scraps) due to the plastics being a type 7 plastic (made from thermoplastics such as PLA, ABS, PETG and Nylon).

With the resources of the Recycling Markets Center, we start by using the RMC's portable near-infrared (near-IR) analyzers to determine what type of plastic you are using to 3D print.

Leading the initiative is our Markets Development Manager who has 40 years of experience in the plastics and recycling industries combined.

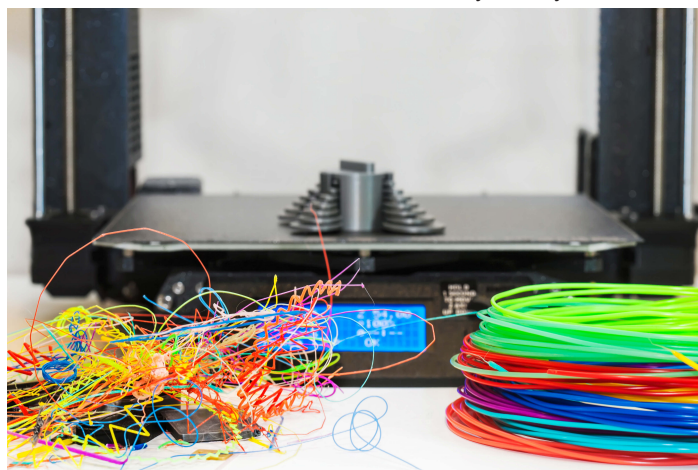
RMC Experts:

- Review Safety Data and Product Composition Sheets;
- Understand what types of fillers may be in the plastic spool;
- Take samples of your 3D printer plastic spool, cuts, or shims;
- Scan samples of the 3D plastic using portable Near-IR technology;
- Review weight and frequency of the plastic spooling waste;
- Post the source to RMC's proprietary Circular Merchant Tool;
- Provide concierge service to Pennsylvania's materials recovery facilities, finding a logical outlet for the 3D material;
- Provide concierge service to out-of-state recovery venues, including printer companies, that may desire the spooling;
- And an urban quarry for resources - closing a circular mission.

Working partnerships with the globally recognized Penn State Materials Research Institute; Penn State Harrisburg; and the Penn College Plastics Innovation & Resource Center allows the RMC to expedite advanced evaluation or development of your product and packaging, introducing ways to enhance recyclability.

RMC maintains a list of Educational Institutions, Maker Spaces and Fab Labs, Specialized Recycling Companies, and Manufacturer Take Back Programs.

Recycling only happens when a discarded item is manufactured into a new package or product. Combining over 120 years of recycling and industrial experience at RMC, contact us to discuss three dimensions of recyclability.



**Pennsylvania
Recycling Markets Center**
Keystone of Circular Economy

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The Pennsylvania Recycling Markets Center (RMC) is a non-profit corporation with mission to reduce or eliminate barriers that lead to expanded end-use of Pennsylvania's recycling. As the only Pennsylvania organization with this uniquely circular mission, the RMC team brings economic development and environmental guidance; recycling industry outreach and research; and manufacturing assistance to stakeholders including entrepreneurs, manufacturers, recycling sorters, collection programs, haulers, governmental agencies and officials, consumers, and educators.

Since inception in 2004, and with funding from the Pennsylvania Department of Environmental Protection, the RMC has an affiliation with Penn State and is headquartered at Penn State Harrisburg with an office also in Pittsburgh. Serving the entire state, RMC assistance includes manufacturing supply connectivity for use of recycled feedstocks; applied research and commercialization assistance in the use of recycled materials; technology and equipment comparisons; and expert curation of technical and business growth knowledge.

The Recycling Markets Center is the keystone of circular economy in Pennsylvania.