

3D FILAMENT RECYCLING



DRIVE



Do you have failed 3d prints, old filament, or parts from previous seasons? CougarTech will have boxes for PLA, PETG, and ABS above our stand area where you can drop them off! Only bring filament - no metal, wood, or other inserts, and please bag loose parts if possible.

FACT:

33% of all 3D filament ends up as waste. This contributes to pollution, microplastics, and can leak harmful chemicals into the environment.

FOR MORE INFORMATION:

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What is it:

CougarTech is currently in the process of acquiring an ARTME 3D MK3S, a filament recycler where we take ground-down prints and give them a new life! After we grind down the failed 3D prints, we can place them in the hopper, where the MK3S effectively runs it backward through a hot end. This melts it back into usable filament that can be sent through a 3D printer to make more parts!

How to donate:

In our Pit at FLR, we will have five boxes for different filament types - PLA, PETG, ABS, ASA, and TPU. All we ask you to do is bring your failed prints and sort them into these boxes - color doesn't matter! Please note that if you're not sure what filament you have, we won't know either, so please refrain from bringing in any unknown materials that may mess up a batch.

Why:

33% of all 3D filament goes directly to waste, equating to millions of pounds of pollution each year. Common filaments act similarly to any other plastic, with some taking hundreds of years to decompose. When they do start to break down, they can release harmful chemicals into the soil and water table, harming animals and wildlife. Although there are other options for recycling filament, centers that accept it can be very sparse, making it more convenient for teams to simply throw it out. When this happens, the plastic both contaminates the environment and leads to additional plastic being manufactured to keep up with demand. Luckily, CougarTech hopes to solve this problem by bringing the recycling center directly to you!

How else you can help:

While we can't realistically ask a robotics team to stop 3d printing for good, we can ask that you stick to PLA in any case you can. PLA is unique in its lower environmental impact, as it's made from fermented plant starch rather than petroleum. This means that both the production and disposal of the product are more eco-friendly, and while it's not perfect, it's a step in the right direction! The other thing you can do is source your non-PLA filaments from recycling centers, and store your failed parts until you can bring them to us or a designated 3D filament recycling facility. Remember - the action you take today can lead to a greener tomorrow.