



Printing Fragile Models With Ease

Use Case – Models with fine features and delicate parts using WSS™150 water soluble support material

Challenge

Support removal generally involves water jetting which often causes breakage to delicate parts under the pressure. Manual support removal can also damage the models resulting in frequent complaints from customer having difficulty removing support material from models that they are able to print.

Solution

Using Stratasys® WSS™150 water soluble support material allowed for easy, hands-free removal of support material in a single step, without the risk of damage by placing the delicate ship models in a vessel filled with regular tap water and waiting for the support to dissolve. Parts as thin as 0.5mm, as seen in this model ship, can now be printed with no risk of breakage upon support removal. L2S™ was also used to solidify the wastewater, in line with local regulations, for safe disposal without the need to send for onward treatment.

Impact

Enabling hands-free support removal using a vessel filled with still water results in paper thin delicate parts that remain intact and perfectly safe, expanding the range of delicate parts than can now be produced. No special skills are required during the hands-free support removal process with water soluble support.