

Enabling Previously Unobtainable Geometries

Use Case – Printing models with Intricate Channels and Cavities using WSS™150 water soluble support material

Challenge

The pebble and its intricate channels demonstrates a case of a "non-washable" part with the traditional support removal process. Removing non-soluble support with waterjet is not an option in cases of intricate channels and cavities as the water does not reach inside the channels.

Solution

Using 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 pebble in a vessel filled with regular tap water and waiting for the support to dissolve. 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

Easy support removal with a vessel filled with tap water means that 3D parts that could be printed previously but could NOT be cleaned, can now be both printed and cleaned with Water Soluble Support. Water Soluble Support reduces the manual labor of removing support with waterjet.

