



RhinoCAM Enabled Really 'Cool' Presentations

Making Ice "Cool"

Clem Smart Design is a London-based company that designs, prepares, and coordinates very special and very unique presentations for its clients. The company's President, Clemente Gava, says that when he gets a request for a special presentation or marketing display, he designs the display, coordinates all the production details, and oversees the delivery and assembly to the very end of the process. Amid the many tasks that are required to accomplish these presentations, one task that is very fascinating is the frequent requirement to machine ice for making precision ice sculptures to be included in these presentations and displays. Clem is a Rhino designer and RhinoCAM user and after creating the design for the display in Rhino, he will program the CNC machining for any ice sculptures needed in the display. He works closely with various CNC machine shops to accomplish the CNC machining of the ice objects. Some of the recent projects where Clem has used RhinoCAM to program the CNC machining of ice components are highlighted below.

Norwegian Cruise Lines

In December of 2013, Clem Smart Design delivered and assembled a lounge in the cruise ship, Getaway, which is composed of modular ice panels and sculptures. Each piece was modeled in Rhino and programmed using RhinoCAM and then CNC machined. The ice panels were specially colored and were designed to accent the back-lighting, so that the final assembly resulted in a beautiful environment for those who frequent the lounge. Everything is built to accommodate the constant shifting of the ship. The 'icy' lounge is still in use, months after its creation, because the room is kept at a cool 17 Fahrenheit to keep the ice from melting. In keeping with the theme, drinks are served to clients in 'glasses' made of ice. Check out the Alligator Throne.





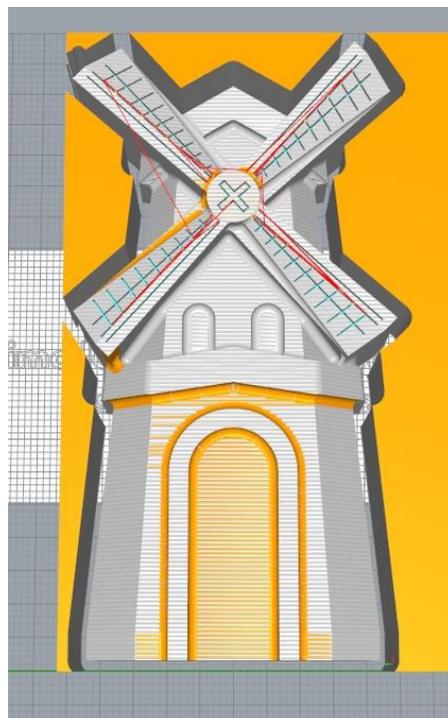
World's Highest Urban Ice Bar

In February, 2014 Clem Smart Design helped to create an Igloo on the 72nd floor of the Shard in London, which claimed to be the World's Highest Urban Ice Bar. The igloo weighed over 2 tons and was assembled in place from blocks of CNC machined ice modeled in Rhino and CNC programmed in RhinoCAM.



The Windmill

This windmill design will be displayed at a pub called the Brewery in London at the end of April 2014. It will feature a bottle of vodka frozen into the doorway of the windmill. The windmill will be about one meter high and will be made of two blocks of clear ice that will be fused together and then CNC machined. The ice will be kept at -7 Celsius at all times. When programming this and other designs, Clem uses long end mill and V-mills for detail. A screen shot of RhinoCAM showing the simulated machined part with the toolpath rendered is shown below:



The Game of Thrones

A client of Clem Smart Design wanted this throne, reminiscent of the TV series, Game of Thrones. This is Clem's own design and is programmed in RhinoCAM and machined in ice.



BMW

The BMW company asked Clem Smart Design to make this model of a BMW car to be displayed during the grand opening of a new BMW dealership in London during February and March of 2014. It is completely machined out of ice and programmed using RhinoCAM. The colors are placed in a machined channel with a special paint, then the channel is filled with another piece of ice.



Here are pictures of the BMW car model being machined in blocks of ice.



James Bond Museum

This large martini glass made of ice was created for a James Bond Museum in London, which recently opened. The object is about one meter high and is made of four pieces of crystal clear ice.



Wedding Bar

This is a five meter long bar made of ice for an Asian wedding. It is designed in Rhino and CNC programmed using RhinoCAM. Notice the bottles and flowers that are frozen in the ice as inclusions.



Hard Rock Café

Here is another bar created by Clem Smart Design for Hard Rock Cafe and machined in ice. Notice the clear and frosted texturing and the guitars frozen in the ice. The logos are machined and painted right in the ice.



Enabling 'Cool'

We at MecSoft are always pleased to see our customers use our products in novel ways. It really is gratifying for us to see that we play an important part in enabling cool applications such as this but more importantly to help other small businesses realize their full potential.