SP.777: Water Jet
Assignment 2

Your first water jet project will be to design a snowflake ornament based on a picture of a real snowflake. You will use OMAX Layout, including the Path function, to create a drawing and get it ready to cut on the water jet. By Monday, you should email me your files or bring a USB stick, floppy disk, or CD-R with your .dxf and .ord files (1 each). Please name them something that will help us match the file name with your name.

Your design will be cut out of several materials, including sheet brass, lexan, aluminum, and anything else we find interesting (plywood?). Please be sure that the design fits inside of a 2 inch square, and bring to class on Wednesday the snowflake pictures that influenced your design.

Be mindful of the capabilities and limitations of the OMAX software that you saw during the demonstration and that are explained in the OMAX help files. All cuts you make should be thru-cuts, not etches or scribes. Don't forget about leaving enough room for the kerf, minding the minimum radius for curves, and making your lead-in/lead-out cuts properly. These are very small objects and these constraints will allow you to become familiar with the detail the water jet is capable of. Other than this, design the snowflake however you want, but keep in mind that this project is intended to get you comfortable with the OMAX software, so try out all the features. You may find especially useful the r-copy, size, and divide features. There is a tutorial and other helpful information in OMAX Layout, under Help; OMAX interactive reference.

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