

Ribbon Sculptures

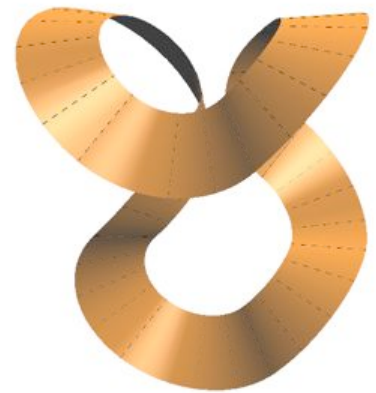
by Bill Ooms

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Made from select hardwoods, these unique “ribbon sculptures” appear to flow and twist through the air. Each sculpture is made from a number of segments of wood, each carefully cut in a compound angle then assembled in various directions to cause the ribbon to twist in different curves. Cutting the wood requires a high degree of precision -- if an angle is off by only 0.1 degree, then after assembling 48 pieces, for example, the ribbon would be off by nearly 5 degrees!

The concept starts with computer simulation. A custom program was written to enable the viewing of the sculpture in 3 dimensions. This allows all aspects of the sculpture to be envisioned prior to the actual cutting of the expensive hardwoods.



After the individual pieces are glued together in the proper sequence, each portion of the curve is turned on a lathe to assure a smooth flowing surface. The dimensions of each curved portion must be carefully controlled to provide the proper angle, thickness, width and radius, thus assuring a proper fit of the final sculpture.

The shapes are limited only by the imagination. For example, the sculpture on the left is a one-sided ribbon (called a mobius). If you start on one side and follow the curve around, you will soon be on the other side of the ribbon. Continuing around will bring you back to where you started!

No two are alike -- each is a different shape or combination of wood.