

## Presents

### Industrial Arts goes high-tech for the 21st Century



Joe Harbaugh, a student at Shiloh High School in Hume, Ill., made this coffee table. The grapevine was designed with ArtCAM software. “ArtCAM supplied the 2D vector artwork and we created the 3D model from their artwork,” explained Mark Smith, Harbaugh’s instructor. “We modified the leaves of the grapevine so they would be thicker and we changed the grapes so they were less uniform like

real grapes. Joe and I worked on this for a few months of class time.” Mastercam design software was used to create and machine the top and underside of the top. “After the table was designed, we cut the grapevine in a piece of MDF to verify that the grapevine was what we wanted and to verify that the program we produced in ArtCAM would cut like we expected. We outsourced the legs from Adams Wood Products. “Once everything was cut to specification, we pre-finished the table pieces before we assembled the table. This involved Joe staining the individual pieces and applying one coat of finish. Then Joe rubbed out the finish and sprayed on a black glaze, which he then wiped off so only the details retained glaze. Then he sprayed the last coat on the pieces. This was the first piece to be glazed at Shiloh High School. We went to a local cabinet shop, Das Holz Haus, and had their spray room technicians teach us how to glaze.”



ArtCAM V6 software program in progression

