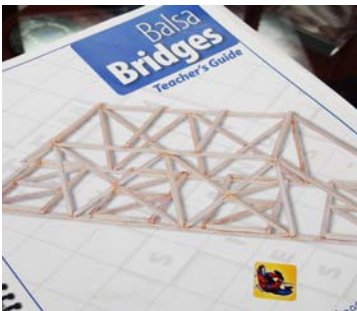


GRAVOGRAPH AIDS GREATER ATLANTA IN TOURNAMENT

April 2011

Gravograph had a chance recently to be of service to the Greater Atlanta Christian School, [GACS] a private K3-12 school located in Norcross, GA. The Junior High had a science competition team "Science Decathlon", which competes in 10 different science events, with two to three students in each event.

The GACS team had a regional competition in Durham, NC in March 2011, and then are hosting the National Event this year at their campus. One of the events, "Bridge Breaking" is where the team builds a small scale bridge out of balsa wood dowels and winners are awarded by bridge efficiency (how much weight the bridge can hold in ratio with how much the bridge itself weighs). Gluing of the joints and the uniformity of the dowels are two of the big keys in a winning bridge.



DANA PRITCHETT,
Gravograph employee Jason's wife, is shown above with the class competing in the "Bridge Breaking" event.

The dowels are made up of 1/16" and 1/4" thick square wooden rods, that are then cut to length with a hobby knife, or a hand-held tool, similar to garden hand pruners. If the cutter's blade is not sharp enough, the cutter will often give the dowels a "pinched" cut instead of a clean cut on the ends. While the hand-cut process can make the angles vary, the laser machines at Gravograph can cut a 35° or 45° angle on the end to make for even ends. The head coach of the team is Dana Pritchett, wife of Jason Pritchett who has been the Training & Engraving Specialist at Gravograph for the last 12.5 years. They talked and thought it would be of great benefit to have the lengths and angles cut by a laser, so every piece is exactly the right length and at a perfect angle (35°, 45° or 90°). The three competing students, the event coach, and the head coach, visited the Gravograph NA Headquarters showroom in Duluth, GA. They were given a brief tour of what lasers and rotary engravers can do, and were shown how to set up in GravoStyle™, a Gravograph professional engraving software, to make cuts on the wooden rods they brought in.

The students were shown how lasers work along with how



to measure the exact amount of materials removed by the laser's beam. A 10 mm square in GravoStyle™ cut a piece that measured 9.85 mm with a caliper, so when they needed a stick to be 50 mm long, they drew a tool path to cut it which was 50.15 mm to compensate for the cutting beam width. They were also shown how to use the method of trial and error to find the exact speed and power that would be needed to cut through the thickness of the rods.

We trust the experience was educational and beneficial, and will go some way to making sure that they are not only host to Nationals, but qualify to compete and to win!



Shown here is Jason helping students with laser precision cutting.



The Outcome...



They decided to combine the NC Regional, and make it also the National Competition. So, whatever places were earned, were awarded a Regional AND a National title.

Schools are allowed to have two teams, and GACS made a "Gold" team and a "Red" team. Two of the three bridges we helped them make, came in 1st Place and 3rd Place in the "Bridge Breaking" event!

The Gold team won 1st place overall, and the Red made 2nd place, dominating the National title this year!

Congratulations GACS!

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