## **VisualMILL in Prison!**

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It was a grey Kansas morning in Feb and the Juvenile Correctional Complex (KJCC) in Topeka looked foreboding, like something out of a dark Martin Scorsese movie. There were dark colored buildings with narrow windows with wide spaces around them. A 15 foot fence with razor wire at the top ran around the perimeter of the entire facility. As I got out of the car and shook the cold away, I was filled with a melancholy realization that this facility housed boys and girls who were about my son's age.



The main entrance to the KJCC



Keith Aubert, the woodshop teacher, a very likable young man was there already. He had met me at the hotel and I had followed him to the facility. He looked every bit the prototypical mid-westerner replete with cowboy boots and a faint drawl to his speech.

He led me in to the entrance where I had to leave all my possessions including my cell-phone in a locker at the front-door. Keith advised me to leave my wallet there as well. I picked up my visitor badge in exchange for my driver's license from the bored security guard who did not seem too happy to be out there on a cold Saturday morning letting a stranger into his facility. Keith escorted me into the main building after we walked through a small room that he called the "sally port". The small room included two secure doors that did not open simultaneously. We had to enter through one door and wait for it to lock behind us and then after Keith had swiped his electronic pass, the other door opened to let us into the corridor that led to the main building. The only thing missing was the pressurized airlock in the room!

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As we walked in towards the training room, we saw young men in jump suits lined up for breakfast. Keith explained that the high risk inmates were the ones wearing bright orange jump suits while the medium risk inmates were wearing brown. Some of the young men were in normal clothes and Keith explained that these were the good kids. We walked past an indoor basketball court and everything seemed like a normal high school, except it was inside a highly secure installation and there were guards walking the corridors.

The training was arranged for three of the instructors, of which Keith - Mr. Aubert - as the inmates called him, was in-charge of woodshop. He was going to be leaving the school and wanted to make sure somebody would pick up his teaching assignments once he had gone. Mr. Anderson was being trained to take his place while Mr. Dunning, who taught Computer Aided Drafting wanted to learn more about VisualMILL.



The ShopSabre wood router used in the KJCC woodshop

The KJCC had picked up VisualMILL because the software came bundled with the ShopSabre router that the school had purchased. Keith remembered that Jim Bombardo of ShopSabre had highly recommended the software.

The typical workflow in the woodshop was for students to conceptualize projects and then design them in CorelDraw. Once the designs were finalized, they would be imported into VisualMILL using DWG format files and the toolpaths created. The CAD system that was used in the CAD classroom is AutoCAD and the AutoCAD design files were brought into VisualMILL again using DWG format files.

# **VisualMILL**®

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In the woodshop Mr. Aubert and his students worked mostly with 2-1/2 axis machining toolpaths as well as V-carving. V-carving was extensively used since the students liked to make signs and other keepsake items that they could hand-out to their family and friends. One such project that caught my attention was a small neatly lettered sign that said, "I love you Mom" that had a flower engraved on it. It was a poignant reminder that underneath the jumpsuits and the tough exterior, these were just kids like any other you would encounter in the outside world.



A typical part designed and machined by inmate students at the KJCC

Parts designed and machinat the KJCC using the CNC-

The type of toolpaths created in the Computer Aided Drafting class, taught by Matt Dunning, lent itself more to 3 Axis and 4 Axis machining. Small machine components made of brass or aluminum was what was usually machined there. The challenges in machining here were more related to part fixturing, since typically the parts were multi-sided. With VisualMILL's 4<sup>th</sup> axis machining capabilities this is easily accomplished.

Parts designed and machined by Computer Aided Drafting students at the KJCC using the CNC-Junior CNC mill.

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Overall Mr. Aubert is very happy with the choice of the CAM software that he is using. Most of all he is impressed with the ease of use of VisualMILL and the fact that his students can pick up the software relatively easily. The V-carving functionality and the ability to engrave using various types of router bits is an important requirement that VisualMILL satisfied.

You can call in and you can actually talk to a live person and get your questions answered in a matter of minutes! Without that level of support we would not have been able to successfully implement a CAM product in our school.

Another area where Mr. Aubert is very pleased with VisualMILL and MecSoft is the outstanding support that MecSoft offers. He states, "You can call in and you can actually talk to a live person and get your questions answered in a matter of minutes! Without that level of support we would not have been able to successfully implement a CAM product in our school."

Keith Aubert, Woodshop Instructor

The mission of the KJCC is to provide juvenile correctional programs that are designed to improve the ability of juvenile offenders to live productively and responsibly in their community. We at MecSoft whole heartedly endorse this idea and believe it is important to have such programs. Programs that not only reduce recidivism but also promote public safety and improve the quality of life in the communities they operate in. We are also gratified that our software plays a small part in this noble and necessary endeavor.

#### About the KJCC

The KJCC is operated by the Kansas Juvenile Justice Authority (JJA), a cabinet level criminal justice agency that began operating on July 1, 1997. Individuals as young as ten years of age and as old as 17 years of age may be adjudicated as juvenile offenders and ordered into the custody of the Commissioner of Juvenile Justice. The JJA leads a broad-based state and local, public and private partnership to provide the state's comprehensive juvenile justice system.

For more information, contact **MecSoft Corporation** 

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