Day 9 ~ Mid-Plains Industries - a professional custom metal fabricator

Davey and I started the day by meeting Taylor Vopalensky, supervisor and QC person for the machine tool and welding area. We discussed the areas we needed to work in the most, manual lathe, manual mill, CNC mill and CNC turning. I asked that if we had time, I would like to touch up on my skills with TIG (tungsten inert gas) welding.

We then met Mike Anderson, draftsman and engineer for Mid-Plains. We discussed the type of drafting programs they use to operate their machines. They did have a seat of Solidworks they use to download DFX (data files exchange). Solidworks is the software program that is taught at CHS.

Pictured: Davy, Jay Mary & Tracy Dodson

We moved on to Jay Mary, a CNC setup supervisor/operator. We started out with a job that needed to be done so we went to the computer and CAMed it (computer aided manufacturing). We do a lot of this at CHS in our Linkages and Manufacturing Processes classes. When talking to Jay he led us on to BOBCAD-CAM. This is a version of MasterCAM that also runs from Solidworks, so Solidworks and BOBCAD-CAM have partnered up, which I did not know about. I am excited about learning the cost of it vs. MasterCAM. He said it was very user friendly. I watched him program at

least three different parts using BOBCAD-CAM. It pretty much matched what SpectraCAM does, a program we use at CHS on our Intelitek.

There were three really cool XYZ Touchoff Tools that Mid-Plains had. One was on their Haas machine. It costs around $4,000. It was a probe that touched every tool off and kept the memory of it. I think there were 30 tools ready to run from the BOBCAD-CAM software. Right now, we use a .500” dowel pin to XYZ our parts which is very tedious. A second way they XYZed was with a probe indicator, something I had never seen. It costs about $350. It could easily go into any of our four CNC machines at CHS, so that’s exciting to think about. The third method was on the Haas lathe. I don’t know the price, I was just so fascinated how it touched off on all the tools in the tool changer.

We watched Terry Martinsen, who was a materials handler who ran the forklift to move parts to machinists. He was now learning how to run a CNC.

Between machines running and setting up, Jay showed us: the water jet, laser, new presses, a new coordinate measuring machine for sheet metal on at least a 4x4’ glass table, the TIG welding area, the polishing area and the finishing area. He even told us about Jun Keneko, an artist from Lincoln for whom Mid-Plains is making a bunch of stainless steel stands for his artwork; that’s pretty exciting.

We wrapped up the day by introducing Davey to Shawn Kamm, production manager and CHS graduate. I shared with him all my notes I attained at the CTE conference a couple weeks ago about youth apprenticeships. We talked about the three young men we have from CHS going to Behlen Manufacturing in welding and the steps to follow in order for any student to do the same at his facility. He seemed very receptive and I told him I would see him tomorrow.

CHS student Davey loading parts.