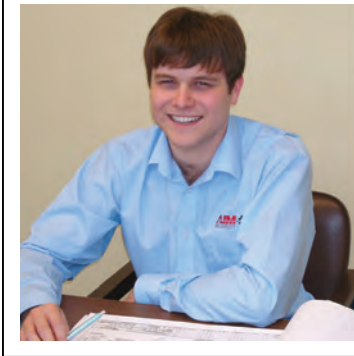




# The "Insider"



## SPOTLIGHT ON DANIEL ISBELL

Daniel grew up in Alabama and graduated from The Alabama School of Fine Arts in Birmingham. He was on the return trip home after visiting another college when he first saw Rose-Hulman Institute of Technology located in Terre Haute, Indiana. The campus and its people influenced Daniel to attend Rose-Hulman where he received his BSME.

Daniel first became acquainted with AIM Machinery when he met Mike Dolder at a Rose-Hulman career fair. He joined the firm in December, 2007, after graduating two quarters early. What Daniel likes most at AIM is the variety of both projects and tasks. For example, one day might require design and detail engineering in the office whereas the next day could require visiting a customer's plant or inspecting manufacturing work at a vendor's shop. Daniel also appreciates the collegial atmosphere which exists at AIM Machinery.

Last summer, Daniel married his college sweetheart, and they reside in LaPorte, Indiana, which is 40 miles east of AIM Machinery's office. On his own time, you may find Daniel playing a video game or attending a movie. He is also interested in road-course racing, and this summer he'll be competing in some auto-cross races.

When performance really matters ... take AIM!



## Major Considerations for Sizing HPU's

Many pieces of industrial equipment are actuated by hydraulic power which is generated by a hydraulic power unit (HPU). Listed below are some of the major considerations for sizing HPU's:

- Based primarily on expected heat levels in the area in which the cylinders will operate, determine if the fluid media will be mineral oil, a water-glycol type or a synthetic. (Note: Fluid type selected may limit system pressure.)
- After system pressure is selected, determine the cylinder and motor sizes and demands. Also, calculate the preliminary horsepower requirement.
- Select pump speed, which is typically 1800 or 1200 RPM. This is done prior to pump selection.
- Check the availability of pumps and motors through an iterative cycle.
- Finally, set filtration requirements, cooling needs, reservoir sizing, etc.

The above items represent some of the considerations when sizing HPU's. Once again, we offer our disclaimer: Do not try these steps without one of AIM Machinery's qualified engineers.

## From the Corner Office by Mike Dolder, President

While every project at AIM Machinery receives our full attention, projects requiring installation during a fixed-time period outage merit special care. As you know, there is an activity planned for almost each minute during an outage, so the installation of any new equipment must proceed like "clockwork".

Recently, we were fortunate to have worked on such a project. This project involved designing and manufacturing a new ladle turntable for a melt shop and retrofitting the structure of the caster deck to support the new turntable. Engineering through manufacturing and delivery had to be completed in 19 weeks. Equipment installation had to fit within a two-week outage window.

Projects, such as these, require the equipment supplier and the end-user customer to work closely together. For this project, I am pleased to report that the level of co-operation was outstanding. The equipment was installed within its outage time window, and the customer reports that they are pleased with the turntable's performance. We feel a sense of pride after every successful project, and the level of pride is magnified for an outage-related project like this one. AIM Machinery and its customers being successful together – for a business like ours, it does not get much better than this! (See the back page of this newsletter for project photos.)



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***More AIM Machinery News:***

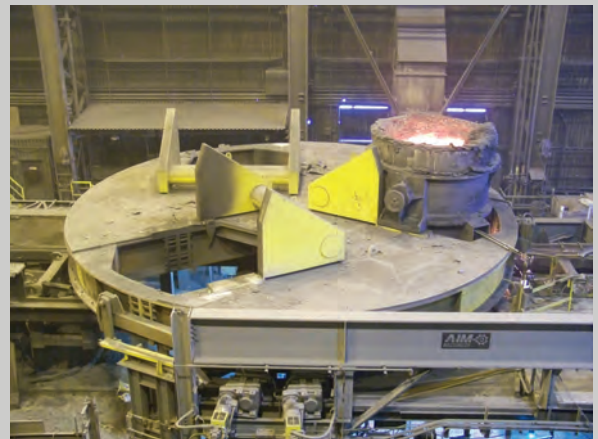
Paul J. Wojcik, Project Manager, is now a registered Professional Engineer in Indiana. Way to go, Paul.

Two promotions were announced:

- John T. Hall, Jr. to Engineering Manager, and
- Rose Hall to Buyer/Expeditor. Congratulations to both!

Please visit us at the AISTech 2010 Conference, May 3-5 in Pittsburgh, PA (booth #1956).

## Three-Ladle Turntable Project



The turntable serves a 4-strand billet caster. The ladle on the right is full and ready to move into position over the caster when that ladle is emptied. The drive wheels in the foreground have a back-up air drive in case of an emergency during a power loss.

Massive guides help the crane operator safely place the ladles. A refractory covered top deck protects the caster operators. The nearly 40 foot diameter turntable was bolted together on-site. AIM Machinery upgraded the support structure to handle the additional loads.