

Project Name: VAR Billet Measuring System
Project #: 12555
Customer: Special Metals

Meeting Purpose: Initial Customer Meeting

Date: 12/09/11

Meeting Length: 35 minutes

Present Parties: Jared Dodge (Design Team)
Michael Imhof (Design Team)
Michael Cheney (Design Team)
Michael Hvorecny (Design Team)
Brandon La Quay (Design Team)
Dr. Alan Reisenan (Faculty Guide)
Benjamin Hailer (Special Metals)

Questions:

- **Is the specimen guaranteed to be round?**
The specimen can be assumed to be round.
- **How is the billet transported? How is it mounted to the (horizontally/vertically, crane/fork truck, etc)?**
The specimen is transported through the foundry horizontally, normally on a transport rack.
- **How frequently will we have to measure along the length of the specimen?**
The specimen should be measured about 3 inches.
- **What system is currently in place?**
Currently measurements are taken at either end of the specimen and in the center and the average of the measurements is used.
- **What is the surface of the billet like?**
The specimen is ground using a longitudinal grinder, so the specimen is shiny.
- **What do the ends of the billet look like?**
The ends of the specimen will be cut off at 90 degrees to the surface.
- **Where along the manufacturing process would you like to scan?**
The best place would be at the grinding process.
- **Can we stop the billet to measure it or are we going to have to measure on the move?**
Prefer not to have to stop the billet and go to a special area to measure it.
- **What kind of output is desired (excel, .txt file, etc)**
Excel, csv, .txt all acceptable

- **What temperature is the billet at the time of measurement?**
The temperature is anywhere from 150 – 32 degrees F.
- **Any freedom in positioning the billet.**
The billet should be horizontal.
- **Do we have access to a host computer to use?**
Yes.
- **Is this the only sized billet that would ever be used in the device?**
The billet is 21"-17" in diameter.
- **What is the budget for this device?**
Anything less than \$10,000.

Action Items

1. We will get the a solid model of the grinder to analyze it for a measuring site.
2. Investigate other sensors/ measuring methods.