

evp6

"Ewa Przybylko's Individual Contribution Page

Spring 2015 Contributions

This semester, I am working on completing the Materials List to be included with official design documentation sent out when clients request official AguaClara plant designs. This Materials List has the potential to greatly expedite the process of plant construction, as it would readily provide engineers with a complete list of all hydraulic plant components and their specifications. This concept is the continuation of work started in the Fall 2014 semester, and relies on the use of AutoCAD's "block" function. This function allows us to convert objects in AutoCAD to a block type, which can then be readily counted and sorted based on drawing specifications. Using a data extraction tool, an Excel spreadsheet can then easily be generated that includes the unique names of the blocks, along with their count and specification. Not only is this method more professional, but it is also more efficient as it leaves less room for error when compared to the current method of manually counting individual plant components. Along with my partner Stephanie Sun, I have successfully completed initial MathCAD trainings and have begun the process of converting all Entrance Tank drawing code to blocking functions. If testing of this code proves successful, we hope to apply this concept to other plant components and complete the conversion of all AguaClara drawing code to blocks by the end of the semester. This Materials List also has the potential to serve as a financial estimator for AguaClara materials costs, as the prices of hydraulic materials can easily be imported into the Excel file outputs to generate quotes for AguaClara plant construction. "