

apb224

Andrew Bales's Individual Contribution Page

Spring 2014 Contributions

I am a member of the Plant Cost Calculator team. This semester I reviewed and verified relevant plant cost data. I consolidated the relevant cost data into a more readable excel document. With this relevant cost data I created various cost formulas that are being used in the plant cost calculator, which provides the user with accurate capital and operational cost estimates. I identified user inputs that that would provide a feasible, yet accurate, plant cost estimate. I also wrote code that accesses current currency conversion rates to provide a more accurate plant cost estimate to the user.

Fall 2014 Contributions

I am a member of the Design Team. This semester I worked on the Entrance Tank Flow Control project. I worked on a team whose aim was to develop a new design that improved upon the previous flow control system. I worked to identify design constraints and to determine if the resulting design was feasible. I wrote MathCAD code which outputs an AutoCAD script that models this new design. This included a pipe decrementing function as well as a function to find a minimum, acceptable pipe diameter given various constraints. This new entrance tank flow control design can now be modeled using the AguaClara design tool.