

1. Department – Chemical and Paper Engineering
2. Project Title – Distillation Optimization in the Pharmaceutical Industry
3. Students –
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4. Sponsor –
 - i. Company Contacts
 - i. Nicholas Muller
 - ii. Zachary Wolf
 - iii. Eric Smith
 - ii. Company Name - Pfizer Inc.
 - iii. Address – 7000 Portage Rd, Kalamazoo, MI, 49001
5. Permission – Yes, we have permission to use the company name in the brochure.
6. Faculty Advisor – Dr. Dania Alsaid
7. Description –

Distillations are commonly used throughout industry to perform separations by phase change, producing a liquid phase and vapor distillate. However, the process of distilling can be slow and energy intensive, providing a limitation in the production process. Possible improvements to current distillation systems were considered on the basis of thermal efficiency, material throughput (cycle time), and material tolerance. Consideration was given to ensure maintenance is straightforward and relatively quick, as fouling, contamination and tank utilization were concerns. Economic viability of the improvements was completed to determine the project benefit. The optimized design offers increased efficiency for production lines.