1003-T1-445   **James C Pomfret*** (`pomfret@bloomu.edu`), 400 East Second St., Math/CS/Stats, Bloomsburg Unievrsity, Bloomsburg, PA 17815, and **Youmin Lu** (`ylu@bloomu.edu`), 400 East Second Street, Math/CS/Stats, Bloomsburg, PA 17815. *Solving a process line modification problem.*

Who does a company call when they have to evaluate the implications of shutting down a portion of a very profitable chemical processing operation? well, they first try the nearest big state university industrial engineering departments who may be too busy or too sophisticated to bother with such an ordinary problem. next on their list is the local, small, former teachers college mathematics department. in this paper we describe a summer 2004 project conducted for a local aluminum products manufacturer to estimate the effect on output of modifying process flow in a chemical bathing and anodizing line. we describe the input data provided by the company, the breakthrough in writing a java simulation, and the analysis of our results. we also provide follow-up data from the company showing that actual operations agree well with our projects. (Received September 14, 2004)

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