Lean Inventory Tracking System for i3 Electronics Mold Manufacturing Area

Carter Contreras, Stephen Fisher, and Zachary Shaw

Thomas J Watson School of Engineering Binghamton University, Binghamton, NY

Corresponding Author: zshaw2@binghamton.edu

Author Note: Carter Contreras, Stephen Fisher, and Zachary Shaw are senior students studying Industrial and Systems Engineering at Binghamton University. The authors would like to give a special thanks to mentors Mark Bubel, John Millard, Jason Kress and general manager Jim Thornton of i3 Electronics Inc. for their continued guidance and support.

Abstract: i3 Electronics is a cable and harness manufacturer who recently made a large purchase that contained 10 Grimco cabinets filled with thousands of toolings used for the molding process. These cabinets were very disorganized, and were not suited for use within the i3 facility. The team was asked to make these cabinets useable and organized, and to create a master database that will serve as a lean inventory tracking system for the toolings that they acquired. The database will reduce cycle time by allowing operators to quickly identify and locate necessary toolings for a specific mold, and help cost estimators generate more accurate quotes. The database will be created in Excel, and will employ a series of functions that accept user input, search for data through a series of worksheets, and output desired information. The database will be implemented through the i3 server, and used by all employees.

Keywords: Cable and Harness, Inventory Tracking System, Excel Database, Cycle Time Reduction