**2019 ATDKC Excellence in Practice Awards**

**Category: Performance Improvement**

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| **Honeywell’s Mission Ready Factory** |
| **Challenge:** |
| Summary: Mission Ready Factory is a training factory that allows new employees to build training kits in a simulated environment. Approximately 200 employees have gone through the factory to date, resulting in a 100% decrease in unproductive hours.  Honeywell manages the Kansas City National Security Campus (KCNSC) in Kansas City, MO for the U.S. Department of Energy’s National Nuclear Security Administration (NNSA). The campus is an advanced manufacturing, engineering, and supply chain center and manufactures all the non-nuclear components for the U.S. nuclear stockpile.  Honeywell employs operators who build assemblies, and inspectors who verify quality of the assemblies. Due to a 20-year program to completely modernize the nation’s nuclear stockpile, Honeywell experienced a hiring frenzy in 2018.  Due to the nature of the work performed at the KCNSC, new operators and inspectors are not able to start building and inspecting assemblies until they receive security clearance; a process that can take anywhere from four months to a full year. In a given month, approximately 145 operators and 20 inspectors were waiting on their security clearance.  During the clearance waiting period, if operators and inspectors did not have productive work to perform, they charged their time to the “Waiting on Job Assignment” charge code.  Senior leadership asked the Learning & Development team to design a program that would accomplish three goals:   * Give operators and inspectors productive job-transferable activities to perform while waiting on their security clearance * Reduce Waiting on Job Assignment hours by 15% by the end of 2018 * Integrate the software systems used in the factory into the daily activities of operators and inspectors * Reinforce soldering, machining, and mechanical skills of operators |
| **Action:** |
| Based on results of a Needs Analysis, the Learning & Development team created Mission Ready Factory: a training factory for uncleared operators and inspectors.  To design the program, the Learning & Development team:   * Formed a stakeholder team comprised of managers and directors from four cross-functional departments to provide guidance, resources, and approvals needed for the program. * Identified over 30 different training kits that involved soldering, mechanical components, or machining elements. Purchased a quantity of 4,000 kits. * Managed a team of 30 process engineers to develop work instructions for the training kits that mirrored how work instructions are displayed in the real factory. * Managed a team of 10 product engineers who created inspection drawings. * Loaded work instructions and inspection drawings into software systems used by operators and inspectors (see example drawing document.) * Coordinated with the facilities department to build the training factory, which included 50 new workbenches, equipped with updated soldering and mechanical equipment. |
| **Result:** |
| The Learning & Development department was pleased to see immediate, positive results from these efforts. Approximately 200 employees went through the program.   * “Waiting on Work” hours charged by employees decreased by 13,156 hours per month: a 100% decrease. Due to the productive work from the Mission Ready Factory the “Waiting on Work” charge code is no longer used for uncleared employees. * 40 training assemblies were created by the project team. Each of these assemblies is built by an operator, and verified for quality by an inspector. * In order to build an inspect assemblies, employees must use the factory software systems. If an employee is not logged in and checking off on tasks in the software, supervisors are alerted and are able to coach the employee. * If errors are made when building an assembly, the inspector rejects it, and sends feedback to the operator. The operator then must fix the error. Operators are able to move on to new assemblies after successfully building an assembly three times demonstrating qualification on that assembly (duplicating same qualification process used in the factory). * The Learning & Development team received the Platinum Honeywell Bravo Award from Stakeholders; the highest award given by the company. |