KYDEX Extrusion Support

Overview
KYDEX LLC is a thermoplastic sheet manufacturer based at Bloomsburg, PA. The 160,000 square plant produces around 35 million pound of sheet per year. The KYDEX sheet is widely used in industry including aviation interiors, mass transit interior, medical equipment components, building interiors, furniture & fixtures and industrial equipment & housings. The project focused on the improving the extrusion support productivity by 25%. It measured the current performance of the extrusion support operator and studied potential improvement to increase the productivity of this job position using a variety of analysis tools such as time study, MOST, Fish Bone diagram etc.

Objectives
The project is to review the current Extrusion Support procedures and determine time required for each element to establish baseline performance data. Then the team will study solutions providing both time and material improvement and investigate value added opportunities as well as non-value added activities.

Approach
- Film extrusion support activities and perform time study to establish baseline performance.
- Perform MOST analysis on the same videos to determine the accuracy of the MOST
- Gather information from line operators and management team
- Perform root cause analysis to determine the cause of problem
- Study value added and non-value added elements using Value Stream Mapping(VSM) technique
- Study potential improvement in packaging procedure and sequence
- Study potential improvement in inspection procedures sequence to decrease worker idle time
- Perform motion study on distance travelled
- Perform MOST analysis on recommended solutions to quantify improvement
- Perform cost benefit analysis on new method implemented

Outcomes
- The sponsor will save $43,481.86 as a result of this project
- Total annual extrusion support time was reduced from 6,851.13 to 4,426.04 hours.
- The overall performance improvement was 35.35%