Operations/ Engineering Co-op Final Presentation

SPS Technologies - Jenkintown

Eno Shira

May 2020 – September 2020

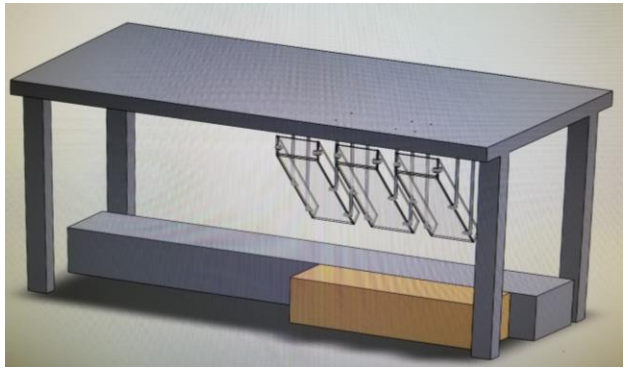
Responsibilities at SPS Technologies

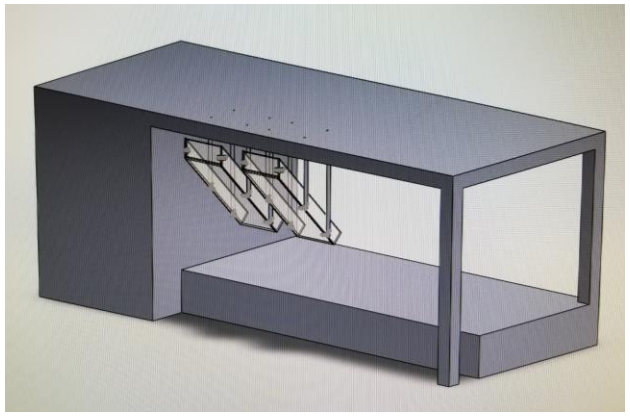
- Conducted root cause analysis for defective and scrap parts for the 12 bolt departments in the organization
- Collected, interpreted and distributed data concerning bolt shop order rejections for the use of supervisors in daily meetings
- Developed automated worksheet to produce monthly quality report cards given to operators
- Participated in 6S projects used to improve productivity, organization and safety in the workplace
- Designed structures to be used for the improvement of the disposal of twist off splined extensions
- Fabricated tool holders to be used for the storage and organization of operator tooling and equipment
- Proactively created and completed projects for the financial benefit of the company

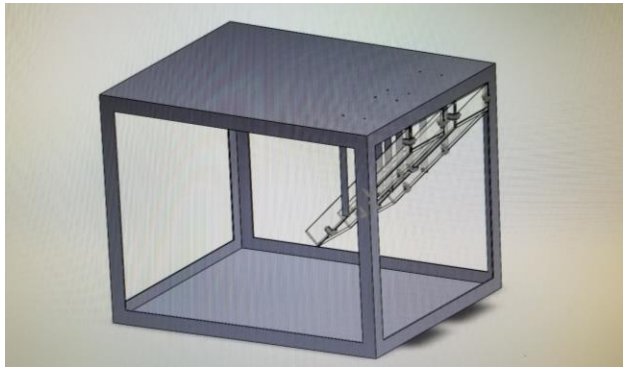
SPS TECHNOLOGIES A PCC Company

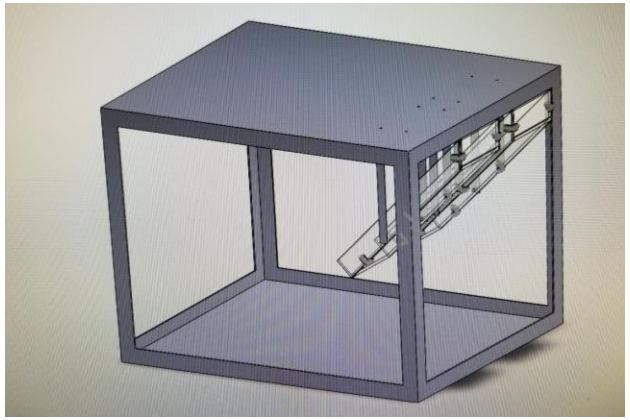
Project 1: Chute Project

- Designed structures to be used for the improvement of the disposal of twist off splined extensions





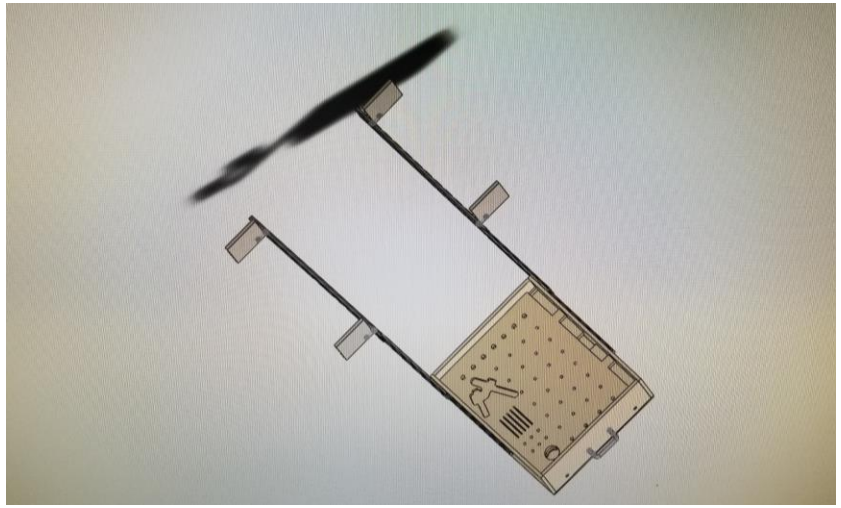


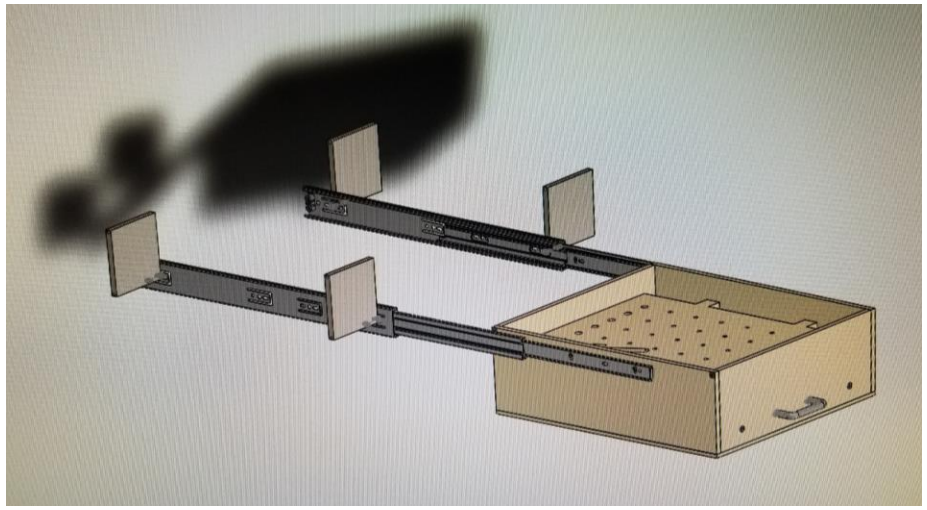


SPS TECHNOLOGIES
A PCC Company

Project 2: CNC Router Project

- Fabricated tool holders to be used for the storage and organization of operator tooling and equipment
- Attached to existent table which houses CNC Router



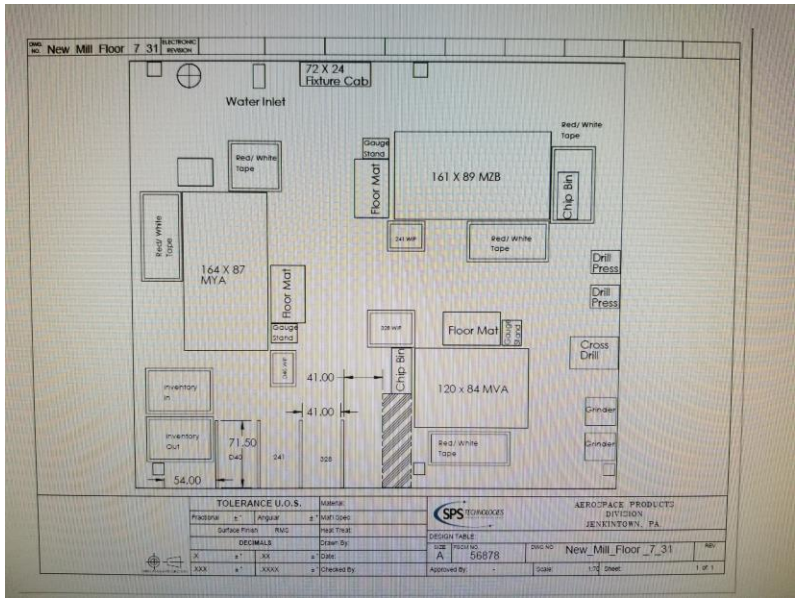


Project 3: Automated Bolt Rejection Sheet

- Need for automated list of bolt rejections on the shop floor
  - Done using Microsoft Excel
  - Can filter based on operator, date, part number, shop order, etc.
  - Different excel sheets with statistics on operators, parts, rejection reason, etc.
- Used for monthly quality report cards to be given to operators
  - Used to notify operators that certain parts are being rejected
  - Also used to discern rejection reason commonalties or themes

Project 4: New Mill 6S Project

- Participated in 6S projects used to improve productivity, organization and safety in the workplace



Project 5: Pan Divider Project

- Designed system of separation for parts in pans to avoid mixing
- Parts are separated per hour
- Needs good separation to avoid rejecting larger than needed quantity of parts

SPS TECHNOLOGIES
A PCC Company

Other Projects

- Deep Drill 6S Project
- Automatics Layout
- Elliptical Standard Control Chart
- Hot Press Database
- MEER Cards for Metallurgical Scrap
- Quality Alert for Grinders
- Saw Project
- Other Small Projects
- Blade Project

What I learned

- Personally, more interested in pure engineering rather than engineering management
- Increased knowledge of engineering management
- How to effectively communicate with operators to improve workplace conditions and output
- Increased skill in tackling projects and keeping within deadlines
  - Remembering all relevant projects and keeping up to date
- Sometimes project descriptions are not specific
  - Allows more freedom in approach but can conversely be more difficult

SPS TECHNOLOGIES
A PCC Company

How to Improve this Co-op

- More personal one on one instruction and training for the co-op
  - Could be done with supervisor, former co-ops or other employees
- More relevant engineering type work for those students with less engineering management inclinations
- Increased project description specificity
  - Decreased vagueness when given as assignment from supervisor whenever possible

SPS TECHNOLOGIES
A PCC Company


SPS
TECHNOLOGIES
A PCC Company