**Brighton Tru-Edge Assessment Interviews – Matt Herdeman 12/20/2022**

**Bruce’s key opportunities**

1. Training new operators
   1. Takes the longest and hiring people is hard
   2. Minimum 3-4 weeks for level of comfort on easy jobs
   3. 4 operators required for 2 new machines
2. Forklift driver
   1. “Need to get product to and from the machine faster”
   2. One already hired, another being hired
   3. Preparing orders at machines but space is limited – no way to make room for more heads by their respective machines
   4. Not a lot of staging availability
3. Supervisor
   1. Hire another supervisor to help with flow of the day shift and improve organization of product
4. Adding machines
   1. “Only way to speed up tact time is with more machines”
   2. There is a certain amount of time it is going to take no matter what

* Agree that supervision needs an understanding of the operation (some sort of metal forming)
* In a short amount of time could see and understand the workings of the operation where they can know what’s coming, where the material needs to move to, get things staged in the right areas
  + **Reduce 10-15 minutes per day for each of 30 guys is a lot of time and money opportunity**
  + Would pay for the supervisor quickly
* Equipment is adequate
* Skill level does reflect the equipment’s ability to do the work
  + Have lost a lot of experience that could overcome imperfections in the machines
  + Much more difficult for inexperienced guy to work through those imperfections and achieve the necessary quality
* New machines CNC operated – one guy can run two machines
  + **Maybe 100% on one and 80% on another**
  + **Can even help others while the machine is running**
  + CNC – sounds promising to Matt, Bruce didn’t think it was going well
* Purchased new flanging machine with CNC capabilities (coming September)
  + No CNC on flanging machines currently
  + **Multiple piece orders with same head for multiple parts – machine will do 90-95% of the work**
  + **Able to use this time to get the next head ready and finish up inspection, routing of piece that just finished – need supervisor to drive this initiative**
* Don’t make people work harder – make equipment work harder and better for them
* **Confident in CNC and not a large training hurdle – need to have the supervision to encourage operators to take advantage of extra time afforded by it**
* No big productivity increase because of improved processes and technology – operators achieve same level of success with less effort
* Process based opportunities
  + A lot is overcome by the staging aspect
  + **Moving parts that are finished and moving parts toward the next work center is a huge opportunity**
  + Not working well today because no focus on material handlers (forklift driver, considered overhead)
  + Did not replace material handlers, instead added more forklifts for operators to use for their own jobs
  + Added a little bit of overhead to each job
  + **Reintroduce more material handlers and allocate overheard across each of the jobs shipped in the day – “hiding overhead” but properly associated material moving to each job**
* Tool changes and dye changes
  + Completed by the operator, should it be?
  + What does operator do to add value during tool changes if completed by others?
  + In new system, should be able to juggle delivery date and tool change priorities on a screen at every machine
  + Adam L and others are working on a scheduling system and is in the build process
    - Not sure if all driven by delivery lead time or considering a tool change
    - **Tool change can be up to an hour – 6-8 hours a day should be easy to achieve with some scheduling optimization**
    - Tooling is organized in the area of associated machines that might use each tool
* Operational performance
  + All performance is tracked – hours a person puts on a particular operation
  + Weekly review in the production meeting
  + Ones that stand out get peer reviewed
    - “What went wrong?”
    - Ex: extra weld required added more time than expected
  + Bonus plan exists for all hourly employees in the shop
    - If we could put up real time weekly numbers for operators to see where they are, it may encourage better performance working towards goal
    - **If standard hours aren’t correct, they won’t push to finish within the time standard – need good standards in order for this to happen**
    - No motivational factor for hourly employees other than money
    - “We adjust the time standards when things change”
    - **Adjusted time standards recently because of people’s skill level**
      * **Within the last year**
    - Review expected hours in the production meetings (Ex: if extra weld was required but not accounted for)
  + Very sales driven – never sold to a schedule until recently
    - Could not keep up – had to start telling customers that lead times are longer than they had been
* Bring flanger from other location
  + Customers have asked “how many can you make us?”
* **Matt’s prioritization**

1. **Equipment – introducing CNC to have one person do two jobs**
   1. **Reduced manpower (without eliminating)**
2. **Supervisor**
   1. **Make sure CNC capabilities are being maximized**
   2. **Arm them with reporting**

* Other opportunities discussed
  + Moving parts around to next machines efficiently
  + Real time reporting
  + Encourage bonus pool and other motivation

**Interview notes**

People

* Training hurdles
  + Requires working side by side with an experienced operator until comfortable
  + Pressing operators learn more quickly than flanging operators
  + Min 3-4 weeks to become comfortable on “easy jobs”
  + No standard for expected time to learn
* Operator responsibilities
  + Clean up – scrap from machines
  + Loading
  + Unloading
  + Changeover
* Forklift driver
  + One hired, one more to be hired
  + Expected to be preparing product at machines and loading/unloading when needed
* Supervisors
  + Expected to help with flow of the shop and organize of the product
  + Don’t have good measures of productivity
  + **What is being used to evaluate performance?**

Process

* Current staging process
  + Need to get product to and from the machine faster
  + Next days’ worth of work is prepared in a staging process but there is not much room by the machines to hold this
  + Shop footprint is very limited especially with a new machine – product often stages outside
  + Operators supposed to be writing on the product where it goes next – new process and not always followed
* Loading and unloading
  + One forklift driver for the entire floor
  + **How is the communication with operators and forklift driver on when jobs may need unloading?**
  + Some guys can load and unload their own work with forklift
  + Each slot for a machine has the next order – but priorities change of the time
* Pit crew feasibility
  + Unlikely to be effective as there is not a lot of room for more than one person to change out a roll – may only shave off a couple of minutes
  + More room for a couple of guys for pressing machines
  + Still have to consider overhead – extra guys not built into the cost of the job
* CNC / lasers
  + New flanger will have CNC playback technology (?)
  + Trying to implement lasers to help with radius conformity – so far not working great for us

Management

* Lack of understanding of actual processing time
  + Operator could be waiting 30 minutes or more to start next job
  + System processing time measures wait time, flanging, unloading, change overs, etc. all in one
  + When one job “ends”, the next job “starts”
  + Nothing in the system measures the actual processing time separate from all of the other associated time
* Lack of time standards / lack of adherence to time standards
  + There are standard operations for each job, but they have been largely abandoned
  + No longer posting standards for operators to see and take advantage of
  + Each job is broken up into standard times, but standard times vary a lot based on operator and/or requirements – variance of several hours is not surprising

Scheduling

* Current scheduling
  + Prioritize some machines for certain customers
    - May run better/higher quality and adhere better to the standards required by the customer
  + Changes to the schedule happen “every day”
* Sales vs. ops
  + “Sales driven shop” from day one but slowly changing - sell to availability
  + Sales is “well aware” of lead time and capacity issues
  + “If the office calls and says to change it, it will change”
  + **Is there a lock period for scheduling? What is optimal?**
* New scheduling process
  + Bruce is involved in questions about scheduling requirements as this is being built out. **Are others? What needs to be considered that isn’t?**
  + Still being tested at various stages but showing progress – operational in next ~3 months
  + **Concerns about adoption / sustainability?**
  + With lack of technology on floor, this will likely produce printed paper schedules for leadmen to manage
  + This initiative is showing cryogenics as the backlog