

The Elusiveness of System Stability

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What do we mean by stability?

1. Customer-expected quality.
2. Right quantity each shift.
3. Right mix of products.
4. We have a safe working environment.
5. We have a standard process by which we identify and resolve problems.
6. We have a standard process for continuous improvement.
7. We consistently satisfy requirements #1, #2 & #3 even though we have disruptions (e.g. late and/or defective parts). (ROBUSTNESS)

1st objective... Become stable!!!

2nd objective – Reduce cost.

Stability Survey



We immediately detect defects and do not send them downstream.

Incoming material is defect free.

Our operations are improving.

We use time studies to update standard work sheets.

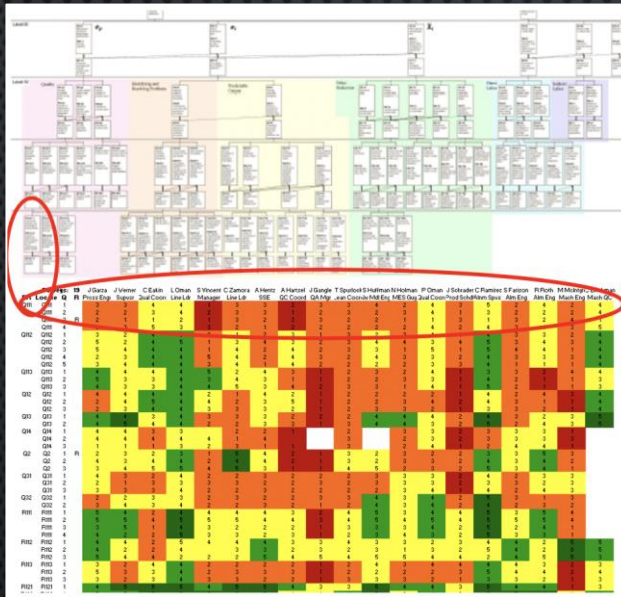
We frequently produce more (or less) than scheduled during a production shift.

Operations are frequently starved due to unavailability of incoming parts.

Cost objectives cannot be met and products cannot flow in unstable systems.

Mfg System Assessment (MIT genesis – the science behind lean)

Quality → Timeliness → Cost



System Stability Map

Gap Analysis

Q112 Ensure that operator consistently performs tasks correctly

strongly disagree *strongly agree* *does not apply*

Standard work methods	1	2	3	4	5	0	Comment
- Operators are involved in creating the work methods.	0	0	0	0	0	0	
- Work methods have been defined for each operation and contain information about required quality standards.	0	0	0	0	0	0	
- A written copy of operator's standardized work is available at each station.	0	0	0	0	0	0	
- Variation in quality is reduced either by adjusting the work method or through operator training.	0	0	0	0	0	0	
- We enforce that every operator performs the tasks according to the work method.	0	0	0	0	0	0	

Multi-Disciplinary Self Assessment

Workforce Education

Collective agreement on Prioritized Re-Design Activities



Collective System Design

Chronic Problem

- Out of station work (robustness vs. cost justification of +inventory)
- CFO vs. COO vs. Sr Exec vs. Shop Floor perspectives
- Leadership nucleus (executive workshops)
- What does right look like?

“Tone”

- Functional Requirement
- It was what we do. We will screw up, not if but when.

System redesign cannot be achieved or sustained without collective tone.

So What?

Biggest Advantages...

- Win more contracts! Win more contracts! Win more contracts!
- Improve quality
- Reduce lead time
- Predictable lead time
- Cost reduction
- Workforce education

Return on Investment...

- 22% reduction in lead time
- 23% improvement in quality
- 32% improvement in the engineering/manufacturing interface

Free online stability survey (27 questions) --- www.hpcholdings.com

Are you ready to take the first step towards stability?

What's holding you back?

Call us! We don't bite!