

Improving Enterprise Performance Through Goal Deployment

Mike Mosher
Functional OpEx Leader
Ingersoll Rand

Joel Knox
Materials OpEx Leader
Ingersoll Rand

Ingersoll Rand Family of Brands



























Air conditioning systems, services, solutions, parts and accessories. Innovative solutions geared toward making high performance commercial buildings and homes healthy, comfortable and efficient

THERMO KING

Transport temperature control systems for a variety of mobile applications, including trailers, truck bodies, buses, shipboard containers and rail cars







Professional tools, hoists, pumps and systems for drilling, fastening, moving and fluid handling



Golf, commercial and utility vehicles for transportation







Rotary, centrifugal and reciprocating air compressors, and treatment products with comprehensive multi-year service agreements, audits, parts, and accessories





Our Business Operating System (BOS) is the standard framework for how we operate

Longevity

6+ Years

Foundation of our commitment to operational excellence and growth excellence

Lean Transformation

2013

40% of conversion costs

2014

60% of conversion costs

2015

66% of conversion costs and 29% of employees

2016

77% of conversion costs and 40% of all employees

Multi-year Performance Trend



Top Quartile Revenue Growth



Top Quartile EPS Growth



Quartile Employee Engagement

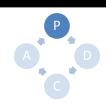
Maturity and Growth



Expansion from manufacturing floor to functional, transactional environments



Reason for Action



Significant improvements in Cycle Time not resulting in improved On-Time-Shipments (OTS)



CEO observes @ Gemba that Standard Work is necessary to deliver consistent results (BOS = best known way...today)

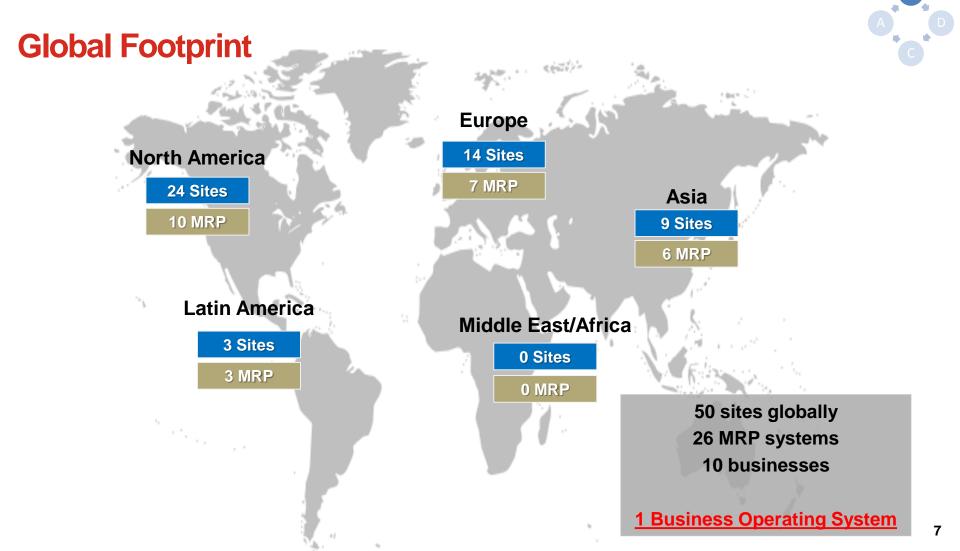
Sites adopting SIOP/Materials Standard Work showing separation in results vs. others



North Box Priority

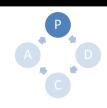








Initial State - Target State



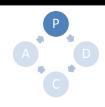
Initial State (2015)	Target State (2016)
14 Required Standard Work Elements	5 Required Standard Work Elements
(SIOP/Materials Only)	(SIOP/Materials Only)
55/700 Site/SW Combinations	200/200 Site/SW Combinations
Deployed	Deployed
11 Sites Performing >95% OTS	50 Sites Performing >95% OTS
9/50 Sites with Daily Management	50/50 Sites with Daily Management
Deployed for Materials	Deployed for Materials

Alignment requires focus ... and a **clear** burning platform from the CEO doesn't hurt!





Gaps



- Deployment methods inconsistent
- BOS considered a document, not a way of acting
- "Deployed" subjective
- Resources focused on other priorities
- Shallow understanding of tools focus on saving the file, not interpreting the output
- Normal vs Abnormal invisible

"The standard work is deployed...where are the results?"

"We have MDI...we update it each week in case anyone wants to look at the results."

"We run the Ubertool, but we don't really *use it.*"



Solution Approach



People

- Learning Path developed for all functions (role specific)
- GISC Conference Jeopardy
- Shared learning

Process

- Established as North Box Priority by CEO
- OTS A3s developed at all Sites/Businesses
- Layered Audits
 Established
- MDI refined and deployed

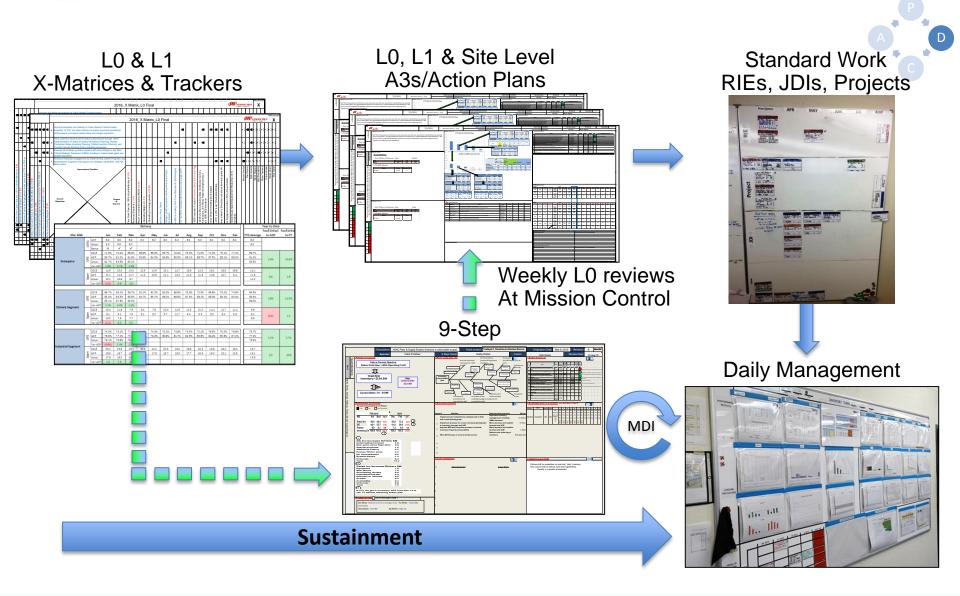
Technology

- Aligned IT investment to rebuild/replace tools
- Improved usability and understanding of existing tools

No silver bullet ...even with alignment, there is no single, perfect solution



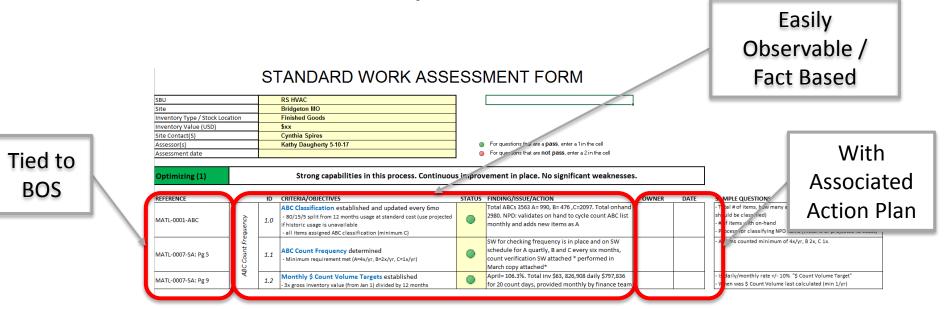








- Layered audits. We're green! We're red! We're green!
- Aligned OpEx coaches to MDI boards
- Problem solving training refresh
- Mission Control Maturity

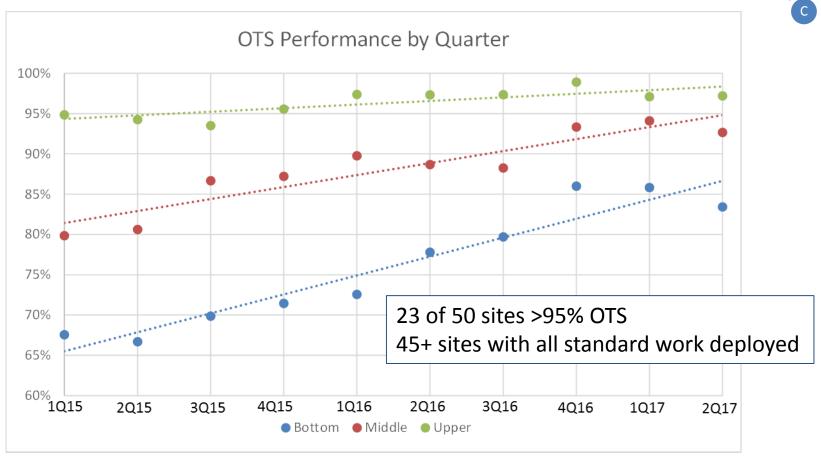






Results: Shift the Quartiles



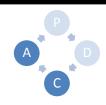


... all while improving employee engagement by 7 pts!





Reflections/Learnings



- Goal alignment ... goal deployment ... A3 thinking
- Process ownership ... Materials Council ownership
- Inspect what you expect
- Spirit of learning and developing people
- Leaders as coaches and everyone a problem solver
- Build on the foundation



Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

Session No: Th/P 50
Aligning the Enterprise Through Goal Deployment

Mike Mosher & Joel Knox

Ingersoll Rand

Michael.Mosher@IRCO.com Joel.Knox@IRCO.com