

INGERSOLL RAND MAKES MATERIALS MANAGEMENT CORE COMPETENCY

Ingersoll Rand applies APICS standards to improve customer experience and increases delivery performance 86%

Goals

- Achieve operational excellence
- Turn materials management into a core competency
- Improve inventory turns, delivery performance and customer satisfaction

Approach

- Deploy companywide work standard based on best practices
- Establish a common language
- Develop people through education and certification
- Partner with operations management authority, APICS, to develop playbook

Results

- 86 percent delivery improvement
- \$5.5 million in cost savings over three years
- Inventory turns improved 10 percent; freeing up cash assets of \$125 million
- 85+ CPIM-certified materials personnel making three times higher inventory turns
- 200+ employees engaged in training and certification program supporting operational excellence

A New Focus to Get Behind

When Ingersoll Rand says it is committed to advancing the quality of life by creating comfortable, sustainable and efficient environments, it attributes this ambition not just to its products, but to the people behind the products—their valued employees. So in 2010, when—under the new leadership of Chief Executive Officer Mike Lamach—the company set out to realign their focus on achieving operational excellence, it was no surprise that they turned to their employees first.

Leaders at Ingersoll Rand quickly realized that to achieve their strategic goal of turning materials management into a core competency, they had to establish a common, companywide operational foundation. The company’s two business sectors—climate solutions and industrial technologies solutions—functioned independently of one another, revealing the need to establish standardized operational best practices. There also were key performance indicators such as delivery, inventory turns and inventory accuracy that needed improvement.

“We needed to create a common approach as we moved to an operations-driven company,”
— Clark Ponthier, CPIM, Vice President Operations/Integrated Supply Chain, former Vice President of Materials Management and SIOP, Ingersoll Rand

A Common Language

To make materials management a core competency, inventory turns, delivery performance and customer satisfaction

all had to be measured and improved. But, there was no guiding framework to set the company work standards. Company leaders understood that to elevate operational best practices, it was essential to develop what would come to be called the *Materials Management Playbook*—ensuring employees a universal understanding of materials management roles and processes, and establishing a fundamental common language companywide.

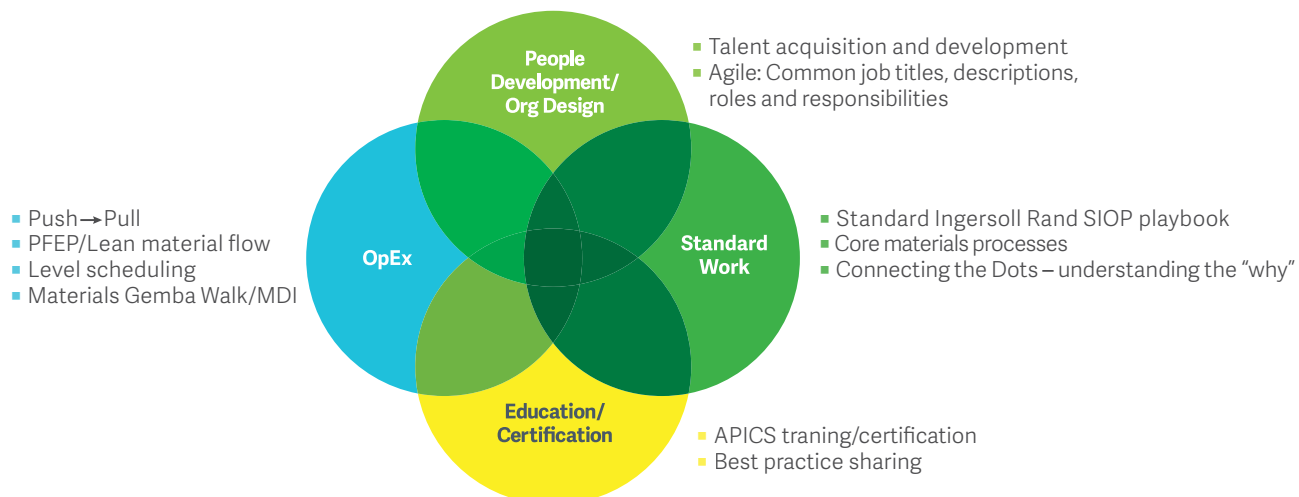
Early on, Ponthier, who was leading the charge to elevate the company’s materials management, organized the Ingersoll Rand Materials and SIOP Council—composed of key materials experts who would govern the new standard of work throughout the organization. After an assessment of the core processes, the council determined that one of the keys to their success would be to focus on establishing proven best practices through industry-leading knowledge, education and certification.

Ingersoll Rand already had a business operating system in place (BOS), so this approach aligned with the company’s overall strategy. The approach also was designed to support and promote Ingersoll Rand’s Materials and SIOP Council. The mission of the council is to “lead customer fulfillment, develop our people and drive inventory performance through process excellence and by deploying standard work and tools in materials and SIOP.” Figure 1 details Ingersoll Rand’s improvement strategy.

Figure 1

Enterprise Sales Inventory Operations Planning and Materials Management Strategy

Transform SIOP and materials management to be an Ingersoll Rand core competency through education/certification and deployment of standard work, organizational design and lean manufacturing.



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APICS Sets the Standard

Ingersoll Rand knew they would need to align with a reliable operations management authority to address several of the facets within their improvement strategy. When it came to education, certification, deployment of standards and organizational design, they turned to APICS.

Materials Management Playbook and the APICS Operations Management Body of Knowledge

As the Materials and SIOP Council worked to define and document their organizational design, they focused their efforts on developing a playbook based on best practices and common ways to approach the work. The *APICS Operations Management Body of Knowledge* and *APICS Dictionary*—developed and validated based on proven, industry-leading operations management design—served as the foundation to quickly establish their *Materials Management Playbook*.

“As we got together to try to create our own standard work set, we quickly realized that in all of our experiences and leadership, the one barometer we all turned to was APICS,”
— Jason Hill, Program Manager of Strategic Initiatives, Ingersoll Rand

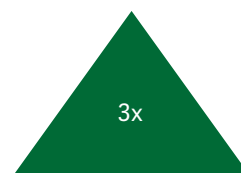
Figure 2

Performance Comparison of CPIM-certified Materials Manager

The data showed those with CPIM certification could improve key performance indicators at a higher rate than their counterparts.

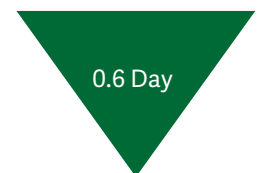
Inventory Turns

CPIM certified materials managers achieving 3 times higher inventory turns improvement



Past Due Days

CPIM certified materials managers achieving 0.6 days less Past Due Backlog



Results That Measure Up

Since 2010, Ingersoll Rand has completely redesigned their materials management organization. They created a standard organizational structure, standard job descriptions, clear roles and defined responsibilities, and a competency assessment for materials managers—all contributing to \$5.5 million in labor productivity savings. Savings were achieved primarily by reducing waste and adjusting work level, and measured through comparisons to standard resource models. These savings were then redeployed to other supply chain areas to support growth and ensure customer focus.

The company also saw significant results in delivery performance, particularly in the reduction of the past due backlog. Delivery has improved more than 86 percent across all business units since 2011 and inventory accuracy has substantially improved. In addition, monthly inventory turns improved 10 percent from 2011 to 2013 year end, resulting in \$125 million in freed up cash assets.

Ingersoll Rand has reaped the rewards of developing a standardized operational foundation—based on a common language—to ensure key roles and processes were founded on best practices and then deployed through employee training and certification to ultimately achieve greater customer satisfaction. The *APICS Operations Management Body of Knowledge* provided this foundation. Today, company compliance with the *Materials Management Playbook* is at 90 percent globally.

“As far as metrics, we’ve seen a dramatic improvement around our ability to serve the customer,”

— *Clark Ponthier, CPIM, Vice President Operations/Integrated Supply Chain, former Vice President of Materials Management and SIOP, Ingersoll Rand*

About ASCM

The Association for Supply Chain Management (ASCM) is the global leader in supply chain organizational transformation, innovation and leadership. As the largest non-profit association for supply chain, ASCM is an unbiased partner, connecting companies around the world to the newest thought leadership on all aspects of supply chain. ASCM is built on a foundation of APICS certification and training spanning 60 years. Now, ASCM is driving innovation in the industry with new products, services and partnerships that enable companies to further optimize their supply chains, secure their competitive advantage and positively impact their bottom lines. For more information, visit ascm.org.

About APICS Operations Management Body of Knowledge

The *APICS Operations Management Body of Knowledge* (OMBOK) is a detailed outline of operations management in one comprehensive reference. The OMBOK helps organizations standardize proven best practices and scope core competencies and process in the field. Visit apics.org for more information.

Contact APICS Corporate Services
+1-773-867-1778 | Corporateservices@apics.org