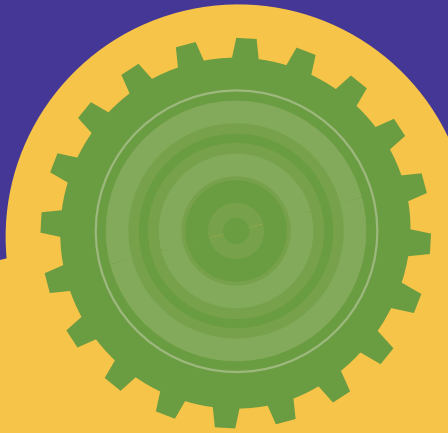




**MANUFACTURING
MATTERS TO THE U.S.**

**MANUFACTURING
JOBS MATTER TO US**



**A Union Member's
Handbook for
Improving the
Future of
Manufacturing Jobs
and the Manufacturing
Industry in the U.S.**

working FOR
America
AF-CIO INSTITUTE

- 
- ▶ Each manufacturing job produces up to four jobs in other sectors.
 - ▶ Each \$1 produced in manufacturing creates \$1.43 in other sectors, a multiplier twice that of services.
 - ▶ Manufacturing jobs provide economic opportunity for the 40% of U.S. workers without post-high school education.
 - ▶ Manufacturing accounts for two-thirds of all R&D and is the leading purchaser of new technology and technical and financial services.
 - ▶ Manufacturing is a leading contributor to state and community tax bases.
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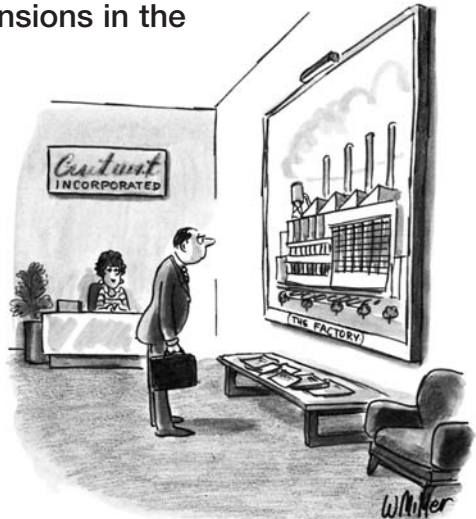
BUT THERE IS
GOOD NEWS
AND
BAD NEWS
FOR U.S. MANUFACTURING

The Good News

- ▶ Over 10% of US workers are employed in manufacturing;
- ▶ Higher than average union density in manufacturing has helped put manufacturing average wages among the highest in the nation;
- ▶ **Union manufacturing wages (+ benefits) are higher still.**

The Bad News

- ▶ Since 2001, the US has lost nearly 3 million manufacturing jobs;
- ▶ Large layoffs are a daily news diet;
- ▶ Health insurance & pensions in the manufacturing sector are threatened.



“Actually, there’s no factory, but it’s something, you know, people expect.”

THE BAD NEWS ABOUT **UNIONIZED MANUFACTURING** IS ESPECIALLY TROUBLING:

The “Union Wage Difference” has declined substantially:

- ▶ Unionized manufacturing workers earned 8.2% more than non-union in 2005, down from 19.2% in 1998 as they traded wages for benefits in order to maintain health care and pension benefits.
- ▶ The union wage premium has declined to just 40 cents per hour (although it’s important to note that unionized workers enjoy a substantial benefit differential over non-union workers).

Non-union shops have virtually closed the labor productivity gap:

- ▶ Value-added per full-time employee is virtually the same for union and non-union workers.
- ▶ Average equipment value per worker at non-union shops slightly exceeds the union average.
- ▶ Employee turnover between union and non-union employers is almost equal.



“We design them here, but the labor is cheaper in Hell.”

WE CAN PRESERVE IMPORTANT MANUFACTURING JOBS IF WE WORK AT IT

In spite of globalization and off-shoring, manufacturing is not disappearing tomorrow: *80% of the companies with 20+ employees that will be in business in 2010 are in business right here right now.*

Let's use this time to improve the performance of unionized manufacturers while helping our members secure their economic future.

**This measure of productivity is the key:
Value-added per employee**

VALUE-ADDED*

FTE

Value-Added = Sales – Purchases
FTE = Employee Annual Hrs / 2080

***Example:** A company sells \$12 million in goods annually and spends \$4 million to purchase raw materials, equipment, services and supplies. Its value-added is \$8 million.

This company has 100 “full-time equivalent” employees (FTE). Value-added for FTE = \$80,000—the amount available for wages, salaries, benefits and profits. Everyone has an interest in raising this number.

Economists tell us: To pay a decent wage, companies need to achieve at least \$80,000 Value-Added/FTE. Our goal should be at least \$90,000.



HOW DO WE REACH A HIGH
VALUE-ADDED/FTE
TO MAINTAIN AND GROW THE
UNIONIZED MANUFACTURING
JOBS

?



It can be done by:

- ▶ **Full Utilization – Increasing orders:** Pull more production from the same capital equipment.
 - The more a plant keeps its expensive, high-precision machinery busy full time (8,760 hours a year), the more VA/FTE.
 - The more the company exports to, and imports from, other companies in the same region the better for the general quality of life in the region.
 - The more the company imports from other unionized companies the better, of course!
- ▶ **Learning Lean – Increasing productivity** for each Full-Time Employee without sacrificing working conditions. (some unions call this High Performance Work Organization)

How do we achieve that?

- ▶ By recognizing that although the term “lean” is one that many unions rejected as simply a synonym for speed-up or job loss—because it was applied only to front-line workers—**“lean manufacturing” is now accepted as a theory and a set of techniques** that are part of a systematic approach to eliminating non-value added activities in the manufacturing process. In its purest form, lean becomes part of the culture of the organization and its tools are applied to the entire enterprise to eliminate non-value added activities..
- ▶ By **building high-performance work organizations** that partner with their unions and employees to adapt changes in human resources practices, training and culture necessary to improve the production processes—not by trying to compete on costs alone—such organizations can achieve:
 - Perfect first-time quality;
 - Reduced waste;
 - Responsiveness to consumer demand;
 - Flexibility – greater product diversity with greater efficiency;
 - Long term relationships with suppliers.
- ▶ By **helping our members to obtain the knowledge and credentials for 21st century**, high performance manufacturing by promoting apprenticeship programs, specialty certifications (including Manufacturing Skills Standards Council certifications) and foundational skills credentialing.

WHAT'S THE DIFFERENCE BETWEEN **GOOD LEAN** AND **BAD LEAN?**

There are two approaches to lean production, **Lean Standardization** and **Learning Lean**. Only one really responds to the needs of workers and unions, as well as employers— **Learning Lean**.

Used alone, **Standardized Lean** can actually lower VA/FTE.

A recent Advanced Manufacturing Project study indicates that lean manufacturing programs have been used in many union firms in recent years. In many cases, however, the union did not play a significant role in the design and implementation of the lean improvement process. Therefore, workers did not trust the process (fearing job loss or increased duties) nor embrace the changes derived from these lean activities.

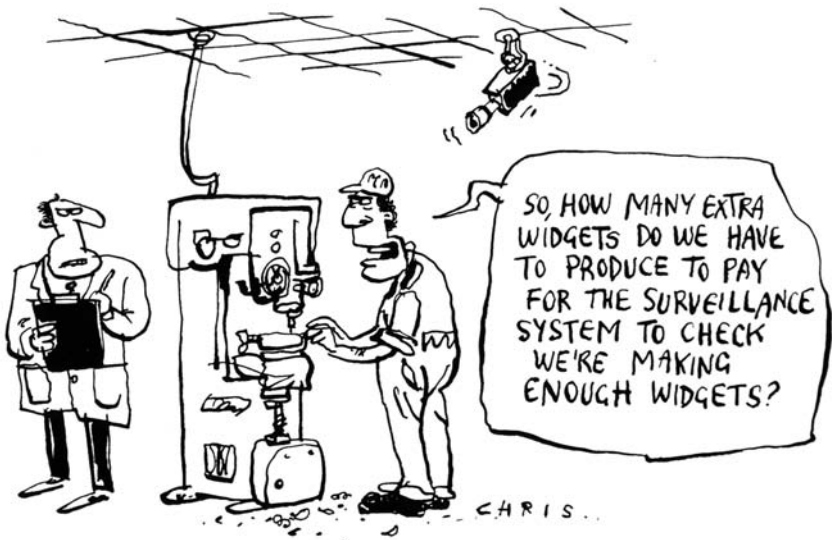
Although the **Lean Standardization** manufacturing model can achieve significant performance improvements by focusing solely on the technical elements of lean production, it cannot achieve the full potential of **Learning Lean** (HPWO).

Using only the **Lean Standardization** model, management may have to spend more on technology and supervision to monitor production and reduce waste.

Learning Lean can make the difference for everyone—workers, unions, employers & the community.

Although taking the time and energy to achieve meaningful union participation may cost more initially, the full benefits of lean cannot be achieved without it.

A true **Learning Lean**/High Performance program requires highly skilled and motivated workers who can exploit the potential of new technologies, support increased product complexity and adapt to new production processes and work organization models. Union/management partnerships that formally involve the workers through their union in employing these lean techniques while achieving changes in human resource practices, training and culture are most effective in achieving the aims of a more productive and higher VA/FTE workplace and more economically secure communities.



We want to promote the Learning Lean (HPWO) model that combines:

- ▶ Workers' participation in problem solving;
- ▶ A partnership between the employer and the union;
- ▶ A committed, responsible, well-trained workforce dedicated to quality, innovation and learning;
- ▶ Low-waste manufacturing practices (lean).

This model employs lean production techniques and changes workplace culture, leading to higher VA/FTE.

When the culture involves workers in a Learning Lean, High Performance environment, a plant is much more likely to reach higher standards of low-waste, high-performance production at a lower cost.

Most international unions have endorsed and facilitated the creation of high performance work organizations or other forms of union/management partnerships and have resource materials and staff that can assist your local union.

The Learning Lean (High Performance) Model Generates Better Performance Because . . .

- ▶ Continuous innovation allows plants to handle more variety & smaller orders.
- ▶ Routine self-management reduces costly supervisory overhead;
- ▶ Continuous improvement efficiently empowers workers to employ the knowledge that only they have.

The Learning Lean Model leads to High Performance Manufacturing

“High performance manufacturing combines a highly skilled and empowered workforce, advanced technology, and new ways of working to achieve superior levels of quality, customer satisfaction and efficiency.”

High Performance Manufacturing, McGraw-Hill Glencoe

TO BOOST PRODUCTIVITY AND RETAIN
HIGH WAGE JOBS
WORKERS AND UNIONS NEED
THE F.U.L.L. MODEL
[**FULL UTILIZATION LEARNING LEAN**]

The F.U.L.L. Model is a business growth model, not just a cost reduction model.

Learning **L**ean without **F**ull **U**talization will eventually mean fewer jobs, albeit better paid ones, unless productivity gains are reinvested only into new product lines.

Our plants must become busy, lean organizations that fully employ both their technology and workers.

This way, rather than losing jobs as productivity rises, we create them.

To establish and promote this trend—especially for unionized firms, unions need to implement **F.U.L.L – Full Utilization Learning Lean**—an approach that combines a high level of investment and production (*Full Utilization*) with highly skilled, worker-empowered lean techniques led through union/management partnerships such as HPWO (*Learning Lean*).

GETTING TO FULL UTILIZATION LEARNING LEAN (F.U.L.L) A UNION AGENDA

1. Assess our employers

Score Manufacturers on:

- ▶ Pay & benefits
- ▶ Productivity level and trajectory
- ▶ Intentions to invest and improve performance at their current location
- ▶ Level and projections of:
 - Exports from the region
 - Purchases from the region
 - Purchases from unionized firms.

2. Work to raise our employers' score

- ▶ **Pay & benefits:** Understand your employers' financial health. Work pro-actively to improve it while simultaneously negotiating hard to get your members' fair share of the added value they produce.
- ▶ **Productivity level and trajectory:** Find out how to implement Learning Lean, shifting to production based on maximum worker empowerment and minimal waste. Research your company's VA/FTE and identify possible steps to increase it.
- ▶ **Intentions to invest and improve performance at their current location:** Assess investments in training, technology advances, and production improvements;
- ▶ **Level and projections of:**
 - Exports within and outside the region: Learn about your company's track record.
 - Purchases from the region: Work with unions and others to create incentives to purchase from the region and improve your company's track record.
 - Purchases from unionized firms: Learn what your company buys from unionized firms and negotiate ways to increase these purchases.

3. Advocate for Public Policies that Reward These Better Companies

- ▶ We need **fair trade laws and tax policies** that provide incentives to invest in U.S. manufacturing.
- ▶ We need to **remove tax subsidies** given to companies that **abandon manufacturing** in the U.S. and invest abroad in low wage countries.
- ▶ **Target public Workforce Investment Act (WIA) \$** on helping recruit and train for family-sustaining jobs.
- ▶ Demand that **public dollars for incumbent worker training** including apprenticeship programs, specialty certifications and foundational skills credentialing* efforts be tied to production re-organization and technological change.
- ▶ Require **Manufacturing Extension Program (MEP)** assistance to be **targeted on the better-paying smaller manufacturers.**
- ▶ Adopt a **uniform system of credentialing* high performance manufacturing-needed skills**—such as the labor-endorsed Manufacturing Skills Standards Council (MSSC)—to avoid duplication of development effort and to make clear to employers what workers & job-seekers know.

* For more information on credentials and certifications for manufacturing workers go to: www.workingforamerica.org.

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