Shaping up America’s Workforce

According to the Office of the Surgeon General, over 60 percent of adults are overweight, out of shape, and living a lifestyle that is far too sedentary to even maintain basic health. In a nutshell, data suggests that the American workforce needs to “shape up.” (Surgeon General)

Why should corporate America be concerned? First, companies care about the well-being of their employees and want healthy workers. Secondly, the national trend toward poor dietary intake, lack of physical exercise and obesity is costing employers over a trillion dollars in cumulative expenses related to lost productivity. This shocking fact was presented at a National Institute for Occupational Safety and Health (NIOSH) Symposium held in October 2004. (Drennan, Ramsay & Richey)

Out-of-Shape Workforce Renders U.S. Less Competitive

According to Ron Z. Goetzel, Ph.D., Director of the Institute for Health & Productivity Studies, the issue is real. In a paper presented at the symposium, Goetzel analyzed lost productivity financial data from 2002 and revealed a cost of more than $16,000 per employee. Based on this data, if we apply that cost to the 60 percent of Americans who are overweight and under-exercised, American industry could pay roughly $1.5 trillion for workers compensation injuries, healthcare costs and lost production. According to Goetzel, this issue alone will render us unable to compete in the global market because the cost of “unhealthy American workers” is impeding our productivity. (Goetzel)

Shaping Up With Health & Safety Programs

In response, more and more companies are instituting “fully integrated” safety and health programs. To be considered “fully integrated” a program must have unwavering involvement and support from all levels of management. It must also have a team foundation, a measurement process and a means for maintaining accountability among team leaders.

The goal of instituting a fully integrated health and safety program is to improve workers’ health so as to lessen the risk of soft tissue injuries and other ailments associated with being overweight and the lack of exercise. Some companies are instituting wellness programs that involve a simple stretching routine at the beginning of each workday and/or shift.

The effect of this simple stretching program was stunning for one manufacturing company. It had ranked fourth-worst out of forty U.S. manufacturing plants for safety. After implementing a supervised stretching and exercise program for one year, the plant achieved amazing reductions in injuries...
Zampell Relines Retrofit of Harrisburg, PA WTE Facility

In 2004, Barlow Projects was awarded a major retrofit of the oldest existing Waste-to-Energy (WTE) facility in the U.S. The retrofit was done to increase capacity and ensure compliance with strict new emission regulations. Zampell Refractories was a key contractor on the project.

The retrofit of the Harrisburg unit had a large scope, including new combustion systems and water-wall boilers, ash conveyors and collection systems, a new flue gas scrubbing design and a continuous emissions monitoring system for CO₂, O₂ and SO₂. Zampell Refractories was involved in two major areas:

1) Flue gas scrubbing system: Much of the flue gas scrubbing unit was fabricated in Tulsa, Oklahoma and ZR traveled to Oklahoma to cast the units that were eventually shipped and installed in Harrisburg.

2) Water-wall combustion zones: The project includes three units, each with a water-wall combustion zone that is the heart of the “waste-to-energy” process. The design called for Sic gun mix over studded boiler tubes. Zampell Refractories installed over 70 tons of Sic gun mix in each combustion zone and over 60 tons of refractory in the rest of the unit.

Project work at the Harrisburg facility is another example of ZR’s commitment to the “waste-to-energy” application across the U.S.

Zampell Insulation Completes Mt. Tom Project

New Scaffolding Unit

To maximize efficiency and safety, ZI worked with Cianbro to insulate many sections of ductwork on the ground. However, much of the work was done a few hundred feet in the air, requiring a scaffolding system. Instead of using the standard scaffolding assembly, ZI used a mast climbing scaffold unit. In addition to the time saved in set up, the mast climbing unit offered better access to the work area, thereby increasing the efficiency of the project.

Challenges Overcome

Aside from the normal challenges of a power plant project, ZI dealt with the flooding of the Connecticut River. Rising 17 feet and flooding much of the storage area, the river added an extra obstacle to the job. However, after a few days of clean up, the ZI crew completed the project safely and on time, using over 5000 man-hours with no OSHA recordable injuries.

If you have comments or questions, please call

Dana Partis, Sales Representative
781-953-8292

Jonathan Andrews, Inside Sales Coordinator 978-499-5150

Zampell Company Spotlight:
ZAR-TECH®

Effective February 1, 2006 ZAR-TECH® will be the authorized distributor of the Unifrax Corporation in the New England States.

Since 1942, Unifrax high temperature insulation products have provided heat management solutions in a wide range of markets, including ferrous and non-ferrous metals, chemicals and hydrocarbon processing, power generation, ceramics, paper, minerals processing and incineration. Unifrax offers over 50 different products based on their leading edge technology. They specialize in:

- Fiberfrax® ceramic fiber products
- Insulfrax® and Isofrax® soluble fiber products
- Foamfrax® Insulation advanced installation technology

“We believe the partnership between Unifrax and ZAR-TECH® will be great for our customers,” said Ray Flynn, Vice President of ZAR-TECH®. “When you combine Unifrax products, service and technology with our presence in New England, we make a great team!”

“Zampell Company Spotlight: ZAR-TECH®”

Zampell Relines Retrofit of Harrisburg, PA WTE Facility

ZR WASTE-TO-ENERGY

Power Plant Project

Working for Cianbro Corporation, Zampell Insulation recently completed an insulation project at the Mt. Tom generating station.

A new emissions control unit was installed in conjunction with the precipitators and the unit required extensive insulation. ZI insulated and lagged over 20,000 square feet of area on the unit.

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Large Fluidized Boiler Project Highlights ZR Craftsmanship

As we all know, energy is expensive... and the cost is not going down! That’s why many private companies and public utilities are utilizing circulating or bubbling fluidized bed boiler designs to produce power for specific processes or local energy consuming customers.

Advantages of Fluidized Bed Boilers
- The process can support the use of different fuels not normally used in standard boiler designs, such as wood byproducts, low-grade coal remnants and food byproducts.
- The process can be used in concert with other plant processes to burn off combustion gases that would otherwise overload scrubbers or emission systems.
- The process can be designed to minimize emissions, making it environmentally friendly and cost effective.

New Hampshire Project
In the fall of 2005, Zampell Refractories began work on a large circulating fluidized bed project in New Hampshire that is designed to burn wood chips.

Because the circulating unit was designed to burn the wood chips in a fluidized bed and collect the ash in high temperature cyclones, the entire unit is refractory lined – using a combination of gun mix, castable and brick. The size, scope and complexity of the project are massive, requiring a combination of craftsmanship, hard work and safety.

Refractory Scope
Most fluidized bed boilers are refractory intensive and this project was no exception.
- Over 20,000 ft³ of refractory required
- Over 120,000 brick used in cyclones and riser ducts
- Over 600 tons of castable and gun mix used, much of which was carefully tested during installation
- Over 65,000 metal anchors installed throughout the process

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and productivity losses as the following chart illustrates.

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<th>Manufacturing Company’s Injury &amp; Loss Reduction Rate After Implementing a Fully Integrated Health &amp; Safety Program (1 Year’s Results)</th>
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<tr>
<td>Critical Area</td>
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</tr>
<tr>
<td>Recordable Injury Rate</td>
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<td>Days Away from Work</td>
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<td>MSD (Musculoskeletal Disorders) – Related Injuries</td>
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<tr>
<td>Incurred MSD Losses</td>
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At Zampell Companies, we are experimenting with a similar approach. After determining that soft tissue injuries account for 50 percent of our accidents, we are encouraged by research indicating that these injuries can be drastically reduced and even eliminated by involving our employees in a stretching program. To this end, we have been working with a company since the summer of 2005 that specializes in developing programs for the “industrial athlete.” In the coming months, we will begin to implement a five-to-seven-minute stretching program on many refractory and insulation projects.

Small Changes Yield Big Results
With encouraging results like those reported above, evidence is mounting that significant progress can be made simply by “shaping up” our workforce. The bottom line is that by implementing a fully integrated health and safety program, corporate America may be better positioned to maximize employee health and satisfaction while increasing profits. This action could prove pivotal in the fight to maintain competitiveness in the global business arena.

Resources:
Centers for Disease Control and Prevention. National Institute for Occupational Safety and Health, NIOSH. “Steps to a Healthier US Workforce, About Steps.” 1600 Clifton Rd, Atlanta, GA 30333, USA http://www.cdc.gov/niOSH/steps/about.html

www.zampell.com
The Zampell Family of Companies: The Leading East Coast Provider of Industrial Services & Products

Zampell Refractories® is part of the Zampell family of companies. For over 35 years, Zampell has built its reputation on one common philosophy: “A legacy of quality and craftsmanship is embodied in everything that bears the name Zampell.”

Today, Zampell has a truly strong East Coast reach, with services and products available in Auburn, ME, Newburyport, MA, Putnam, CT, Warrington, PA, and Tampa, FL, reaching over three thousand total customers. Few commercial companies have the distribution, reputation and cross-platform capability that Zampell has throughout the east. To learn more about our capabilities, products and services, visit all of us at www.zampell.com.

Zampell Refractories
ZR Massachusetts – Bruno Eramo
ZR Connecticut – Mark Steeves
ZR Maine – Sonny Daggett
ZR Florida – Stacey Boyd
ZI Maine – Lenny Ridley
ZR Mid-Atlantic – Rod Bell & Chris Henne
ZAR-TECH®
ZAR-TECH® is perhaps the largest distributor of refractory and insulation materials in the region.
Zampell Insulation
Zampell Insulation is involved in all industrial applications, installing numerous insulation materials on boilers, tanks, ducts, precipitators, turbines, piping and other equipment.

President’s Message

We believe 2005 was a great year for the Zampell Companies and I want to thank all of our customers for their business and their trust. Along with growth in our core businesses involving waste-to-energy and rotary kilns, we increased our East Coast activity in industrial applications and became more involved in selected projects across the U.S. In addition, our ability to serve our customers with new and improved products and services grew substantially through our Zampell Insulation and ZAR-TECH® companies.

Of course, all of you know that quality growth is not easy in today’s environment. It takes a great deal of dedication by our employees, and I want to thank them for their combination of craftsmanship and customer service.

In 2006, my main priority is to continue to drive the concept of “Zampell craftsmanship” throughout our organization. From our newest employee to our most veteran worker, our mission is to focus on the needs of our customers while delivering the highest quality service or product available.

Again, we appreciate your business. Good luck in 2006!

Jim Zampell

About Zampell Companies

Spanning over 7 decades, Zampell is a name that signifies a heritage of excellence and craftsmanship.