Ergonomics Services for Manufacturing

Are Poorly Designed Work Places Making You Less Competitive?

No matter what type of product you make, or how sophisticated your manufacturing processes, poorly designed work systems and workstations impact your company's performance. All too often, manufacturing systems and facilities are designed from a purely technical point-of-view. This is a costly mistake, because it ignores the fact that people operate, maintain, set-up, organize, manage, and work in these systems.

Poor Design in Manufacturing Results In:

- · Costly work-related injuries and disorders
- Increased errors, scrap and re-work
- Lower productivity
- Reduced abilities to hire and retain skilled/knowledgeable employees
- Difficulties accommodating aging workers
- Lower job satisfaction
- Higher operating costs and reduced competitiveness

Common Areas of Poor Design:

Workstation Layout and Design

Workstation designs that don't consider the needs and capabilities of workers cause serious performance and health and safety concerns. Design related issues include: hazardous postures, excessive forces, static efforts, repetitive actions, inadequate production related information and feedback, etc., all of which are costly for any company.

Design for Maintenance

When systems are well-designed for maintenance, unproductive downtime is significantly reduced, the likelihood of errors is decreased, the demands on maintenance workers are lowered, and operation costs are reduced.

Material Handling and Flow

Poorly designed material handling tasks directly contribute to injuries and poor performance. By improving how materials are handled, the design of material handling equipment and the flow of materials in your facility, you can significantly reduce the risk of injury for workers and enhance system performance.

Design of Controls and Displays

Well-designed controls and visual displays reduce the probability of human error and ensure that workers have the information needed to ensure high levels of quality and production.

Job Task Design and Organization

Job tasks that are highly repetitive, monotonous, have little physical and mental variety, and provide insufficient information / feedback to workers are much more likely to have high error rates, low productivity levels, and workers that report work-related pain and discomfort.



ESA is Atlantic Canada's leading human performance consulting company specializing in ergonomics. Our Certified Professional Ergonomists have more than 30 years of experience assisting workplaces in the manufacturing sector solve their ergonomics-related design problems and improve their overall performance!

ESA's goal is to help improve the performance of your organization. We do this by identifying design issues that directly impact productivity, profitability, and health and safety. We then recommend practical and effective solutions that improve the design, set-up and organization of work systems, spaces, equipment, and tasks. This results in lower costs for the organization and improved worker health and wellbeing.



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Good Ergonomic Design Saves You Money!

Good ergonomic design means ensuring that the manufacturing work system is designed with people in mind. All systems, no matter how automated, need people to function. Considering the physical, mental, and social needs of people when designing and organizing systems will lead to significantly improved health, safety and well-being for workers and improved productivity and competitiveness for the company. This will save you money!

ESA Can Help You

Our consultants are experts in the identification and assessment of ergonomics-related design issues in manufacturing facilities. We have a proven ability to make recommendations for practical and effective solutions that lead to improved worker health, safety and wellness and work system performance. We are also able to provide customized awareness and training sessions designed to increase in-house knowledge and skill related to the recognition and elimination of ergonomics-related design issues.

methods of analysis and intervention ideas provided direction and useful information that resulted in a significant reduction in our repetitive strain claims in the machining department of our Shaw Wood facility." – Jacqueline Hatt, LPN CHSC, CSS, Director of Occupational Health and Safety, The Shaw Group

"We were very pleased with the

quality of ergonomic consulting services that ESA provided. Their

Workstation Design and Layout Assessment

ESA's assessment process provides a detailed examination of the set-up and design of all workstation components, work tasks performed, and postures adopted. We identify design, task and organizational issues that can contribute to worker pain and discomfort and reduced productivity. We will work with your employees to identify solutions for improved design to reduce exposure to the identified problems.

Job Demands Analysis

ESA's job demands analysis (JDA) process provides the detailed information needed to identify safety issues and process improvement opportunities, and assist with early return-to-work, job assignments, and accommodation. ESA's approach is not checklist based. We quantify all key job demands so that managers, employees, human resources staff, and health care professionals have a clear picture of the demands required. We will then work with your staff to identify, evaluate and select solutions that enhance performance and reduce the risk of injury.

Equipment / Tools Purchasing Decisions

Before purchasing new tools, machines, processing and assembly equipment give ESA a call! We can provide you with expert advice and identify design specifications you should consider before purchase. This allows you to make informed decisions, saving you money for years to come.

Process / Equipment Modifications

Changing your manufacturing process? Modifying your current equipment? Changing the layout of your production machinery? This is the perfect time to do an ergonomic design review to make sure that design issues that affect productivity and worker health and well-being are addressed.

Facility Design and New Process Set-Up

Planning a new facility or installing new production equipment? ESA can help by facilitating a prebuild / pre-installation review. This review will help to ensure that ergonomics-related design issues are identified and addressed during the design, construction / installation and commissioning stages, greatly reducing the likelihood of worker pain/injury and significantly increasing performance of the facility or process.

Customized Training Sessions and Workshops

ESA's applied training sessions and workshops increase your in-house capability to recognize design related hazards and implement effective solutions to improve workplace health and safety and enhance the performance of your organization. ESA's range of practical and effective sessions can be tailored to meet your needs. We can also work with you to create customized training to address specific issues in your workplace.