



Ergonomics

It's no secret that workplace injuries are expensive for employers. According to the Liberty Mutual 2021 Workplace Safety Index, overexertion involving outside sources (handling objects), other exertion or bodily reactions (awkward postures) and repetitive movements cost businesses over 19.67 billion dollars a year. The science of ergonomics is dedicated to eradicating and minimizing the sources of workplace injuries.

The implementation of effective ergonomics results in increased productivity, a financial savings with fewer worker compensation claims, reduced work-related musculoskeletal disorders that lead to less absenteeism and fewer lost workdays. Ergonomics programs provide a healthier work culture which improves employee job satisfaction that will reduce turnover in labor.

Consulting Services

- Workstation Design
- Hand Tool Design & Selection
- Manual Material Handling (MMH)
- Strength Limits (grip, torque)
- Manufacturability, Usability, Serviceability
- Cart & Caster Design
- Environmental

On-site* Training Offerings

- Ergonomics Team Training (3-days)
- Ergonomics for Engineers (2 to 3-days)
- Leadership Awareness Training (2-hrs.)
- Employee Awareness Training (0.5-1 hr.)
- ErgoTASK (1-3 day Kaizen event)
- Stressor Stroll: Eyes on Ergonomics (4 or 8 hours)
- Customized Offerings

*All training is available on-site and virtually

Workshops are offered on-site and virtually.



NC State University Industry Extension Services (IES) is collaborating with the NC State University Ergonomics Center to provide beneficial ergonomic training.

We Can Help.



Advanced Manufacturing & Technology Deployment



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Southeastern OSHA Training Institute Education Center



Supply Chain & Supplier Matching



Workplace Health & Safety

Ergonomics Assessment

YES NO INJURY HISTORY

- ☐ ☐ Does the site have a high number of first aid reports?
- ☐ ☐ Does the site have a high incident rate, particularly musculoskeletal disorders (MSDs) and/or strains/sprains?
- ☐ ☐ Does the site have a high number of Workers' Compensation claims?

YES NO RISK FACTOR PRESENCE

- ☐ ☐ Does the site have jobs with a high repetition rate (>5/minute)?
- ☐ ☐ Is work frequently conducted over shoulder level (50 inches)?
- ☐ ☐ Are frequent pinches and/or awkward/bent wrist postures present?
- ☐ ☐ Are high forces such as lifting greater than 25 lbs or forceful gripping present?
- ☐ ☐ Does the site have non-adjustable office equipment (chairs, desks, monitors) or complaints from office personnel (back, shoulder, elbow, wrist)?

YES NO JOB EVALUATIONS

- ☐ ☐ Does the site have up-to-date physical demands descriptions of jobs?
- ☐ ☐ Do the site jobs that are known to be problematic- e.g. have caused injuries, quality issues or productivity issues?
- ☐ ☐ Does the site have tools to conduct ergonomic analysis of jobs?

YES NO RELATED KEY MEASURES

- ☐ ☐ Does the site have areas/jobs with high turnover?
- ☐ ☐ Does the site have areas/jobs/tasks that are considered bottlenecks to the process?
- ☐ ☐ Does the site have areas with a high number of quality issues?
- ☐ ☐ Does the site have areas with high level of scrap?
- ☐ ☐ Does the site have areas where wasted motion or double handling is present?

YES NO PROGRAM DEVELOPMENT

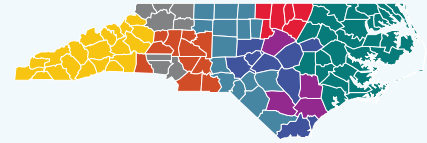
- ☐ ☐ Does the site have an Ergonomics Program or Policy?
- ☐ ☐ Does the site have an Ergonomics Champion or Team?
- ☐ ☐ Does the site have a process to conduct ergonomics analysis of jobs and track control implementation?
- ☐ ☐ Are ergonomic design criteria used to review new products/processes designs?

YES NO TRAINING

- ☐ ☐ Does the site conduct ergonomics awareness training for employees and supervisors/managers?
- ☐ ☐ Is the site Ergonomics Champion/Team trained?
- ☐ ☐ Are site engineers trained on ergonomic design criteria?

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Connect with your Regional Manager to begin the conversation. ncstateies.com/RM

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Industry Extension Services

We Can Help.

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NC State University Industry Extension Services, established in 1955 as the outreach team for the NC State University College of Engineering, provides resources, tools and customized training programs to help businesses survive, thrive and grow.

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