ERGONOMICS: FITTING THE JOB TO THE WORKER



ADAPTING WORK TO THE PHYSICAL ABILITIES AND LIMITATIONS OF THE HUMAN BODY

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POOR ERGONOMIC CONDITIONS: FORCING WORKER TO ADAPT TO THE WORK

Poor ergonomic conditions associated with manual material handling tasks include:

- Awkward or stressful body postures e.g., bending, twisting, overhead work
- Repetitive motions e.g., frequent reaching, lifting, carrying
- Forceful exertions e.g., carrying or lifting heavy loads
- Pressure points e.g., leaning against hard surfaces or sharpe edges
- Static postures e.g., maintaining fixed positions for a long time ⁽²⁾
- Work surface sits too high, causing reaching, bending and lifting

2. Handling heavy objects when lifting, bending forward or stretching upward and outward.⁽²⁾

3. Twisting while bending, especially when exerting force to lift, push or pull objects.⁽²⁾

- 4. Retrieving items from horizontal and vertical areas that can only be reached with excessive arm, head or trunk movement.⁽²⁾
- **5.** Bending, stooping, kneeling or squatting to retrieve items.⁽⁶⁾
- **6** Not performing work in the *Power Zone*: above the knees, below the shoulders and close to the body (not more than 10 inches away from body).^{(2) (3)}



THE CASE FOR GOOD ERGONOMICS

THE PROBLEM:

Workplace musculoskeletal injuries are the most common types of injuries in the [construction] industry, responsible for more than 1/3 of all lost workday injuries and about half of all compensation claims.^{(8) (4)}

The leading cause of workplace injury is over-exertion resulting from lifting, pushing, pulling, holding, carrying or throwing.^{(1) (9)}

According to Liberty Mutual (2014), these workplace injuries account for over \$15 billion annually in direct costs to employers.⁽⁹⁾

Jobs that involve working from the bed of a pickup truck or cargo van expose the worker to awkward movements to access items in the bed, toolboxes or other storage containers located in trucks and vans.

The most common types of over-exertion injuries are due to poor ergonomic conditions in the work vehicle environment affecting the lower back and upper extremities. These injuries can occur suddenly or develop over time, becoming chronic musculoskeletal disorders (MSDs).^{(1) (9)}

Creating a workplace environment with good ergonomics reduces these injuries, saves money and leads to more productive workers.^{(1) (11)}

THE SOLUTION:

Equipping vehicles with more ergonomically correct solutions mitigates exposure to these awkward positions reducing such injuries, reducing costs and increasing productivity.⁽¹⁾ (11)



TYPICAL AWKWARD CONDITIONS IN THE WORK VEHICLE ENVIRONMENT

SITUATION 1:

Stepping or crawling into bed of truck or cargo van



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SITUATION 3: Bending and reaching too far **SITUATION 2:**

Twisting torso to reach items in corner of truck bed or cargo van



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SITUATION 4:

Stepping onto tire or straining from ground to reach into bed



TYPICAL AWKWARD CONDITIONS IN THE WORK VEHICLE ENVIRONMENT



DECKED SUPPORTS OPTIMUM ERGONOMIC BEHAVIOR



DECKED lets you work in your Power Zone. Reaching for items is greatly reduced and items are presented in the best 'ergonomic zone.'⁽²⁾



DECKED brings work to the worker. Materials are presented at waist height in front of the worker, providing the most comfortable working posture. No twisting or unwieldy reaching is necessary. This 'neutral posture' minimizes stress on the body. ⁽¹⁰⁾

DECKED SUPPORTS OPTIMUM ERGONOMIC BEHAVIOR

DECKED creates a 'cut out' work station. Reaching is no longer necessary. Awkward postures are eliminated and work is more efficient and productive with chances of injury at the vehicle greatly reduced.⁽²⁾





DECKED reduces the degree of reaching and stooping to retrieve items which are in the truck bed or cargo van. Items are able to be reached easily and conveniently even when not in the DECKED system drawers.



ERGONOMICS: DECKED IN SUMMARY

DECKED is the optimum ergonomic solution to typical material handling conditions in the work vehicle environment. DECKED brings the work to the worker with a full bed length sliding drawer system which presents tools, hardware and other necessary equipment at waist height so you can *work smarter and play harder*.

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