

Body Positions for Rodding and Spreading Concrete

Problem:

Concrete, by its nature is heavy (1 cubic foot weighs approximately 148 pounds)

Repetitive, awkward, high force motions may eventually lead to lower back, shoulder and/or wrist pain and/or fatigue.

One Solution:

Train workers to use good body positioning when rodding and spreading concrete.



Concrete placement and finishing requires many different and awkward body positions.



Both feet together increases reaching distance which is hard on the back and shoulders.



A wide stance is more stable, powerful and is easier on the back.

FACTORS:

- Foot placement on and between rebar causes unstable footing that can lead to

IDEAS:

- When pulling a screed rod or a rake, using a stance with one foot in front of the other is less

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| <p>awkward body positions.</p> <ul style="list-style-type: none"> • Lack of worker awareness of the importance of good positioning can cause unnecessary discomfort, injury risk and reduced productivity. • Bay width: When screeds are more than 12 feet apart, the forces to rod/screed the concrete are increased. This may cause even more awkward bending to exert the higher forces. • Low slump increases the forces needed for rodding/screeding and may encourage more back bending. | <p>awkward than when the feet are closer together. Back bending is reduced and balance is better. Also, how far you have to reach is reduced. Use appropriate slump to reduce unnecessary force and awkward postures.</p> <ul style="list-style-type: none"> • Using good insoles provide an impact absorbing material to help protect against rebar digging into the bottom of the feet. This allows for a more stable stance (and less awkward). • Better body positions can reduce worker fatigue. |
| <p>Tip: Providing training on good body positioning is a good reminder of its importance.</p> | |

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| <p>What is “good body positioning?”</p> <p>The fundamental idea is to not bend your spine – or keep your back straight. When you hand rod/screed with one foot in front of the other, the amount of bending at the waist is reduced. If you stand with your feet closer together, you have to bend at the waist more to get to the hand rod/screed.</p> | <p>How to protect your back:</p> <p>Use the strength of your legs as much as you can. That’s easier to do with a spread stance (one foot in front of the other). Sometimes that’s not possible because of space constraints. If that’s the case, be sure and straighten your back by standing up as frequently as you can.</p> |
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A wide stance reduces how far you have to reach



How does good body positioning affect productivity?

When workers report feeling less tired at the end of the day they are more productive. Working in more neutral body positions is less fatiguing and safer.

Contact Information:

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