

Roof Bolter Operator

Postural Analyses of Coal Mining in Low Working Heights:
Effect of Working Height and Job Type

- 1. Subject Code _____
- 2. Date _____
- 3. Time _____
- 4. Height (feet +inches) _____ (meters) _____
- 5. Weight (lbs) _____ (kilograms) _____
Body Mass Index (kg/m²) _____
- 6. Age (years) _____
- 7. Time in job (years) _____
- 8. Time in low height mines (years) _____
- 9. Type of knee pad used _____
- 10. Side of Bolter _____
- 11. Side SCSR is worn on _____
- 12. Side cap lamp battery is worn on _____
- 13. Weight of mining belt (lbs) _____ (kilograms) _____

Items worn on mining belt: _____

Least physically demanding task that you perform on a daily basis: _____

Most physically demanding task that you perform on a daily basis: _____

Comments on knee pads used. _____

How often do you clean your knee pads?

How do you clean them?

Subjects will be asked the following questions by a NIOSH representative. This data will be used to determine whether or not an injury to the knee may have influenced the postures utilized by the subject.

Check all that apply:

___ Diagnosed knee injury:_____

___ Pain/Redness/Swelling in front of knee

___ Infection/ Hardening at the front of knee

___ Popping feeling in knee






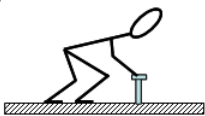


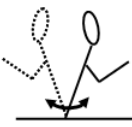



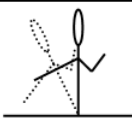
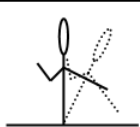

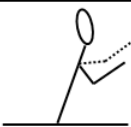
___ Pain inside the knee

___ Catching/Locking of knee

___ Instability/Feeling like knee is going to give away

___ Knee stiffness after waking up

___ General knee weakness

1  Kneeling near full flexion	2  Kneeling near 90° flexion	3  Kneeling on one knee	4  Squatting
5  2 point crawling	6  3 point walking – with object	7  4 point crawling	8  Duck Walking
9  Any above posture with $\geq 45^\circ$ twisting at waist	10  Any above posture with forceful PUSH/PULL exertion of arm	11  Any above posture with forceful SWINGING exertion of arm	12  Any above posture with forceful exertion of leg
13  Any above posture with leaning to left	14  Any above posture with leaning to right	15  Any above posture with an object other than a control in either hand	16  Reaching

Which two postures from the above chart (1-16) do you use most often?

- a) _____
b) _____

Of these (a, b), what percentage of your day is spent in each posture?

- a) _____ %
b) _____ %

Which posture causes the most discomfort? _____

Explain: _____

Which posture causes the least discomfort? _____

Explain: _____

Did the subject indicate that they used an obscure posture (posture not on list)?

If so, please describe. _____

Frequent/ Obscure Posture

1. Describe any frequent or obscure posture. _____

Questions for operator:

1. Why did you choose that posture? _____

2. Did your equipment play a role in your positioning? _____
If yes, what aspects of your equipment played a role? _____

3. Do you feel fatigued or do you have any bodily discomfort? _____
If yes, please describe this fatigue/discomfort _____

Did this play a role in your positioning? If so, how? _____

