VelocityEHS® | Accelerate®

Manual Whole-Body Assessment Data Collection

Introduction

- Introduce yourself and your teammates
- Describe the reason you are visiting the workstation
- Describe the activities you will be performing
- Ask permission to take photos and videos

Collect job and operator information.

Job Information

Job Name

Location

Process/Equipment

Reference Number

Shift

Number of Operators Exposed

Product

Station

Description

Tasks

1

2

3

4

5

6

Forces

Description	Force	Units *(circle)*
		lb kg
		lb kg
		lb kg
		lb kg

Measurements

Description	Measure	Units *(circle)*
		in ft cm m
		in ft cm m
		in ft cm m
		in ft cm m

Operator Survey

	Operator 1	Operator 2
Time on job:	_____ Year(s) _____ Month(s)	_____ Year(s) _____ Month(s)
What is the most difficult part of the job?		
What improvements would you like to see for the job?		

Operator Discomfort Survey

Body Part	Operator 1							Operator 2						
	Severity (Circle)				Frequency (Circle)			Severity (Circle)				Frequency (Circle)		
Left Hand/Wrist	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Right Hand/Wrist	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Left Elbow	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Right Elbow	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Left Shoulder	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Right Shoulder	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Neck	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Back	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always
Legs	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always	Mild	Moderate	Severe	Unbearable	Seldom	Often	Always

Ergonomics Hit List®

☐ Bent Wrist

Previously Wash Rag

☐ Overhead Reach

Previously Shoulder Too High

☐ Horizontal Reach

Previously Horizontal Distance

☐ Awkward Neck

Previously Hungry Head

☐ Bent Back

Previously Butts Up

☐ Twisted Back

Previously Twist and Shout

☐ Squat/ Kneel

New

☐ Static Sit/Stand

Previously Sit vs. Stand

☐ Heavy Lift

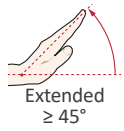
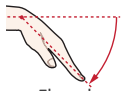
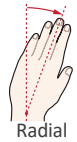
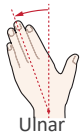
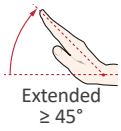
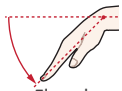
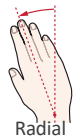
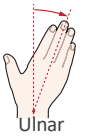
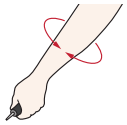
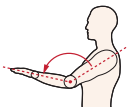
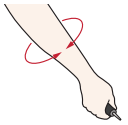
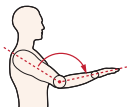
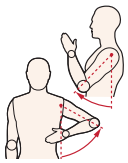
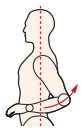
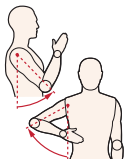
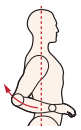
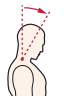
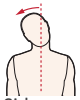
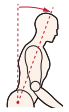
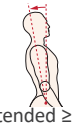
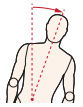
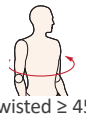
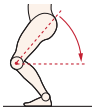
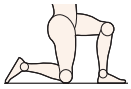
New

☐ Excessive Force

New

Whole-Body Assessment

Circle Posture and Force risk factors when they are observed.

	Hands and Wrists		Elbows		Shoulders		Neck	Back	Legs
	Left	Right	Left	Right	Left	Right			
Posture	 Extended ≥ 45°  Flexed ≥ 45°  Radial Deviation ≥ 20°  Ulnar Deviation ≥ 20°	 Extended ≥ 45°  Flexed ≥ 45°  Radial Deviation ≥ 20°  Ulnar Deviation ≥ 20°	 Rotated Forearm ≥ 90°  Fully Extended ≥ 135°	 Rotated Forearm ≥ 90°  Fully Extended ≥ 135°	 Arm Raised ≥ 45°  Arm Behind Body ≥ 20°  Shoulders Shrugged	 Arm Raised ≥ 45°  Arm Behind Body ≥ 20°  Shoulders Shrugged	 Flexed ≥ 30°  Extended ≥ 30°  Sideways ≥ 30°  Twisted ≥ 20°	 Flexed ≥ 20°  Extended ≥ 10°  Sideways ≥ 15°  Twisted ≥ 45°  Back Unsupported	 Squat ≤ 45°  Kneel  Feet Unsupported
Force	≥ 2 lb ≥ 0.9 kg ≥ 2 lb ≥ 0.9 kg ≥ 10 lb ≥ 4.5 kg	≥ 2 lb ≥ 0.9 kg ≥ 2 lb ≥ 0.9 kg ≥ 10 lb ≥ 4.5 kg	≥ 10 lb ≥ 4.5 kg	≥ 10 lb ≥ 4.5 kg	≥ 10 lb ≥ 4.5 kg	≥ 10 lb ≥ 4.5 kg	PPE ≥ 2 lb ≥ 0.9 kg	≥ 25 lb ≥ 11.3 kg	Foot Pedal ≥ 10 lb ≥ 4.5 kg
			Both Elbows ≥ 15 lb ≥ 6.8 kg		Both Shoulders ≥ 15 lb ≥ 6.8 kg				

For body areas with Postures or Forces circled above, circle Duration and/or Frequency limits when they are exceeded.

Duration	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 10 sec	≥ 30% of day
Frequency	≥ 30/min	≥ 30/min	≥ 2/min	≥ 2/min	≥ 2/min	≥ 2/min	≥ 2/min	≥ 2/min	≥ 2/min

Add up the risk factor categories (Posture, Force, Duration, Frequency) that have at least one item circled. The Posture, Force, Duration, and Frequency categories are each worth 1 point, so scores for each body area should range from 0 – 4.

Score (0-4)									

Circle Physical Stressors when they are observed.

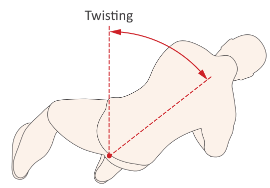
Physical Stressors				
Vibration	Low Temperatures	Soft Tissue Compression	Impact Stress	Glove Issues

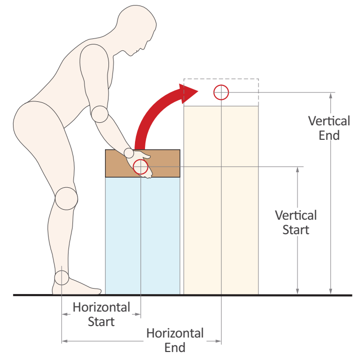
Manual Material Handling Analysis

Lift/Lower Task	Weight (lb or kg)	Horizontal (in or cm)		Vertical (in or cm)		Twisting (degrees)		Grip (circle)	Duration (hours)	Frequency (lifts/min)
		Start	End	Start	End	Start	End			
								Good Fair Poor		
								Good Fair Poor		
								Good Fair Poor		

Make two measurements, one at the start of the lift and one at the end.

Horizontal:	Vertical:	Twisting:
measure from the ankle to knuckle on middle finger	from standing surface to knuckle on middle finger	degrees traveled from neutral (0 degrees) in either direction





Push/Pull Task	Initial Force (lb or kg)	Sustained Force (lb or kg)	Hand Height (circle)			Distance (circle)	Task Frequency
			Chest 53" (135 cm)	Forearm 35" (89 cm)	Thigh 22" (57 cm)	Feet: 7 25 50 100 150 200 (Meters: 2.1 7.6 15.2 30.5 45.7 61.0)	Every ____ seconds, or Every ____ minute(s)
			Chest 53" (135 cm)	Forearm 35" (89 cm)	Thigh 22" (57 cm)	Feet: 7 25 50 100 150 200 (Meters: 2.1 7.6 15.2 30.5 45.7 61.0)	Every ____ seconds, or Every ____ minute(s)
			Chest 53" (135 cm)	Forearm 35" (89 cm)	Thigh 22" (57 cm)	Feet: 7 25 50 100 150 200 (Meters: 2.1 7.6 15.2 30.5 45.7 61.0)	Every ____ seconds, or Every ____ minute(s)

Carry Task	Weight (lb or kg)	Hand Height (circle)		Distance (circle)	Task Frequency
		Elbow 41" (105 cm)	Hand 28" (72 cm)	Feet: 7 14 28 (Meters: 2.1 4.3 8.5)	Every ____ seconds, or Every ____ minute(s)
		Elbow 41" (105 cm)	Hand 28" (72 cm)	Feet: 7 14 28 (Meters: 2.1 4.3 8.5)	Every ____ seconds, or Every ____ minute(s)
		Elbow 41" (105 cm)	Hand 28" (72 cm)	Feet: 7 14 28 (Meters: 2.1 4.3 8.5)	Every ____ seconds, or Every ____ minute(s)

Workstation Layout

Direct Causes

Add Category Here

	Direct Cause	Category
1.		
2.		
3.		
4.		
5.		

Direct Cause Category

- PD Product Design
- PF Process Flow/Design
- ET Equipment/Tool Design
- WL Workstation Layout
- DP Dunnage/Packaging
- O Other

Improvements **Brainstorm ideas to improve the operation.**

Improvement Title

Improvement Description

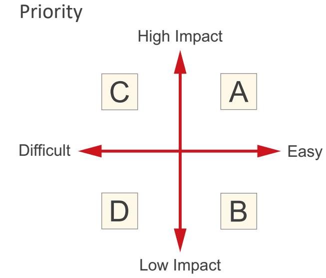
Targeted Date

Responsible Person

Vendor

Estimated Cost

Priority



Direct Causes Addressed 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improvement Title

Improvement Description

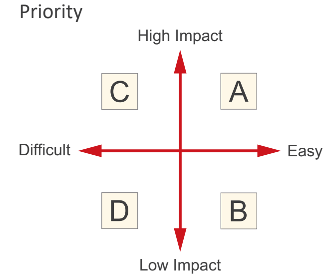
Targeted Date

Responsible Person

Vendor

Estimated Cost

Priority



Direct Causes Addressed 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improvement Title

Improvement Description

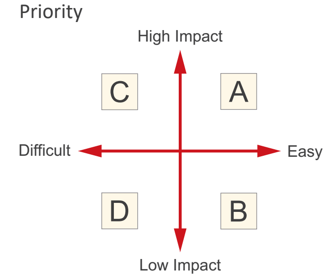
Targeted Date

Responsible Person

Vendor

Estimated Cost

Priority



Direct Causes Addressed 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improvement Title

Improvement Description

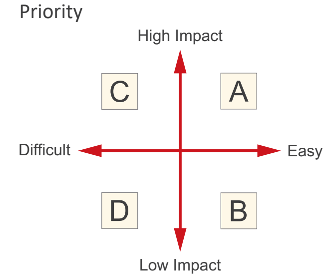
Targeted Date

Responsible Person

Vendor

Estimated Cost

Priority



Direct Causes Addressed 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improvement Title

Improvement Description

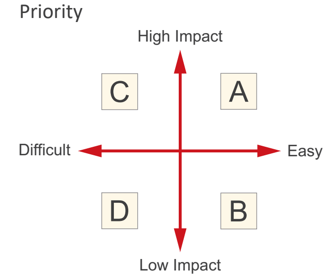
Targeted Date

Responsible Person

Vendor

Estimated Cost

Priority



Direct Causes Addressed 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐