

## Physical Demands Analysis

## CNC Operator – Weeke

Job Title:	CN	C Operator -	Assessment	Calgary, AB		Data	November 24,			
	We	eeke	Location:			Collection	2020			
						Date:				
Completed B	y:	Terilyn Miranda, OT		Submitted on:	May 4	١, 2021				
Disclaimer:		•			•		and location. Please			
							ysis is an accurate			
		representation of the specific job title for the specific location.								
Work		<b>Shift Duration:</b> 5 day			-					
Schedule:				ık per day (2 x 15 m	k per day (2 x 15 minute, 1 x 30 minute)					
		Shift Rotation: Not applicable								
		On call is required: N								
		Overtime required:	No; but may be	available depending	g on pr	oject volume				
Education /		Education required:	* *							
Experience:		Hours required for position: N/A								
	Tickets that may be required (not limited to): First Aid, WHMIS, Construction Safet						ction Safety Training			
Systems (CSTS) and Basic Safety Orientation (BSO).										
Labour	bour N/A									
Provider:										

Job Overview:	programming of the Weeke to complete the cut out as required.								
	% of shift	Job Task	Task Description						
	25%	Review plans for cut-out	<ul> <li>Read and review paper plans for project cut outs, once prepared wood pieces are received</li> <li>Verify plans with team members as required</li> <li>Verify measurements and dimensions of pieces as needed</li> </ul>						
	25%	Set up/program cut out	<ul> <li>Use Weeke computer to set for appropriate cut out</li> <li>Verify measurements and dimensions with paper plans</li> </ul>						
	25%	Load/unload wood for cutting	<ul> <li>Lift and carry prepared wood pieces onto Weeke base</li> <li>Set clamps to hold wood piece in place</li> <li>Push/pull wood piece as needed to ensure it is lined up appropriately</li> </ul>						



		•	Lift wood from base once cut; place on cart or pallet to be
			transported as needed
25%	Cleaning base and	•	Use of air compressor hose to blow wood dust from surface
	area		and ensure a clean work area

Equipment/	Weeke Vantage 36L CNC Router
Tools:	Air compressor hose
	Shop vacuum

Exposures:	Dust/Wood Shavi	ngs						
•	Vibration							
	Loud Noise							
	Chemicals, stains,	glues and paints in surrounding environment						
Environment:	Workstation	Variable depending on task – shared workstations and large equipment usage within a large open warehouse						
	Indoor/Outdoor	Majority indoors						
	Temperatures	Controlled						
	Floor Surface	Cement flooring in work area; tile/low pile carpeting in lobby; wooden stairs						
	Lighting	Fluorescent overhead						
	Noise	Loud environmental noise; various heavy machinery running at one time Hearing protection required with and around tool and heavy equipment use						
	Fumes/Odours/Dust	Exposure to wood dust and debris Fumes from paint, stains, cleaners, adhesives and oils present within work areas						
	Chemicals	Exposure to paint, stains, cleaners, adhesives and oils throughout work areas						
	Vibration	With use of hand tools and heavy equipment						

Personal Protective Equipment Required:	Steel toed boots     Long parts
Equipment Required.	Long pants
	Eye protection
	Ear protection
Personal Protective	• Gloves
Equipment as Required:	

NOC STRENGTH LEVEL KEY					
Strength Level	Strength Level Definition				
Limited (Lim) Up to 5 kg (11 pounds)					



Light (L)	5 kg to 10 kg (11 – 22 pounds)		
Medium (M)	10 kg to 20 kg (22 – 44 pounds)		
Heavy (H)	Greater than 20 kg (44 pounds plus)		

\*Strength Level Key based on the National Occupational Classification

FREQUENCY KEY								
Frequency % of Workday Hours – Based on 8 hour Workd								
Not Required (N/R)	0%	0						
Rarely (R)	1-5%	<25 min/day						
Occasionally (O)	6 – 33%	25 min to 2 hours 40 min/day						
Frequently (F)	34 – 66%	2 hours 41 min to 5 hours 17 min/day						
Constantly (C)	67 – 100%	5 hours 18 min to 8 hours/day						

<sup>\*</sup>Frequency Key based on WCB Alberta Recommendations

Job Demand	Fred	quency /	NOC St	rength	l evel	Details/ Measurements
Job Demand	N/R	R	0	F	C	Details, Measurements
Material Handling:	1.4				1	
Floor to Waist Level Lifting		Н	L-M			-Lifting wood pieces (1 to 60 lbs.) from pallets (5" from ground level) to router table (38" tall)Load dependent on size of wood pieces.
Knee to Waist Level Lifting		Н	L-M			-Lifting wood pieces (1 to 60 lbs.) piled on pallets to router table (38" tall)Load dependent on size of wood piecesHeight of wood variable depending on amount and thickness of wood piles.
Waist to Waist Level Lifting		Н	L-M			-Transferring wood pieces from router table (38" tall) to transport cart (34" tall)
Waist to Chest Level Lifting		М-Н				-Transferring wood pieces from transport cart (34" tall) to router table (38"); lift height
Waist to Shoulder Level Lifting		M-H				dependent on size/shape of wood piece – often large, wide pieces will be carried at a higher height
Waist to Overhead Level Lifting	Х					-None
Front Carry		Lim- H				-Carrying wood for discard from router table (38" tall) to discard bin
Right / Left-handed Carry (Dominant Hand)			L			-Carrying smaller wood pieces to pallet/cart for transport, small wood to discard bin, and paper plans to server for input and review
Shoulder Carry	Х					-None
Static Pushing/Pulling (Force)		М	L			-Adjusting wood pieces on router table; force dependent on type of wood/material being cut, and size of the piece



Dynamic	Lim-L	-Pushing/pulling transport cart (~5.0 lbs push
Pushing/Pulling (Force)		force; force dependent on load)

Job Demand		F	requen	су		Details/Measurements			
	N/R	R	0	F	С				
Upper Extremity Work:	Upper Extremity Work:								
Hand Gripping				Х		-Use of air compressor, shop vacuum, and			
						computer mouse as needed			
						-Handling wood pieces, and paper plans			
Pinch Gripping		Х				-Remove smaller pieces of wood following cuts			
Upper Extremity				Х		-Bilateral handling of wood pieces being			
Coordination						placed/removed from table			
						-Reviewing blue prints			
Reaching Forward			Х			-Placing and positioning wood on router table			
_						-Reaching for air compressor or vacuum for use			
Overhead Shoulder Level		Х				-To access upper areas of router as needed			
Reaching									
Below Shoulder Level			Х			-Lifting wood from low level pallets or carts			
Reaching						-Placing and positioning wood on router table			
Throwing	Х					-None			

Job Demand		F	requenc	у		Details/Measurements
	N/R	R	0	F	С	
Positional Work:						
Trunk Flexion (Bending)			Х			-Adjusting wood positioning on router table, and inspecting wood on table prior to and following cut -Using shop vacuum as needed to clean area
Trunk Rotation (Twisting)			Х			-To place/remove wood from router table; observe environment and surroundings as needed
Kneeling	Χ					-None
Crawling	Χ					-None
Crouching		Х				-Inspect wood at lower level/ on router table or cart
Squatting		Х				-Inspect wood at lower level/ on router table or cart
Neck Flexion			Х			-View wood on router table, pallet, or cart -Reviewing paper plans
Neck Extension		Х				-View upper area of router as needed
Neck Rotation			Х			-Monitor router while cutting, and view wood pieces and plans as needed



Job Demand		F	requenc	у		Details/Measurements		
	N/R	R	0	F	С			
Static Work:								
Sitting		Х				-On breaks as needed		
Static Standing				Х		-When using the computer to set the router, monitoring the router cut, and reviewing the paper plans		
Balancing	Х					-None		

Job Demand		F	requenc	у		Details/Measurements				
	N/R	R	0	F	С					
Ambulation:	Ambulation:									
Walking: Level Surfaces				Х		-Level flooring within the workspace -Anti fatigue matting surrounding the computer station, and router base				
Walking: Uneven Surfaces	Х					-None				
Walking: Slopes	Х					-None				
Jumping	Х					-None				
Running	Х					-None				

Job Demand	Frequency					Details/Measurements		
	N/R	R	0	F	С			
Climbing:								
Stairs		Х				-Standard stairs within site		
Ladder	Х					-None		
Other	Х					-None		

Sensory/Perception		F	requenc	су		Details
	N/R	R	0	F	С	
Hear/Conversations				Х		-Communicating with team members
Hear/Other			Х			-Audible alarms, machinery in use, general awareness of surroundings
Vision/Far			Х			-Viewing team members working in surroundings, monitoring machinery/materials being manipulated
Vision/Near					Х	-Using machinery and hand tools, maneuvering materials, reading blue prints
Vision/Colour					Х	-Viewing appropriate materials -Reviewing blueprints/plans
Vision/Depth					Х	-Using machinery and hand tools, maneuvering materials

Date Prepared: December 4, 2020
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Perception/Spatial			Х	-General awareness of surroundings and machinery in use, maneuvering large materials in space and with machinery use
Feeling			Χ	-Handling materials and machinery
Speech		Х		-Communicating with team members -Following direction in emergency situations

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#### PHOTOS OF TASKS AND WORK ENVIRONMENT

Figure 1: Transferring wood onto router table.



Figure 3: Use of shop vacuum to clean surface.



Figure 2: Adjusting/positioning wood on router table.



Figure 4: Use of air compressor hose to clean wood.





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If you have any questions, and/or would like to discuss this assessment and report further, I can be reached at (780) 429-4761.

Sincerely,

Terilyn Miranda, M.Sc.OT, B.H.Sc

**Occupational Therapist** 

Physical Demands Analysis Job Title: CNC Operator – Weeke

Date Prepared: December 4, 2020





#### SITE SPECIFIC JOB DEMAND ADDITIONS:

Job Demand		F	requenc	у		Details/Measurements			
	N/R	R	0	F	С				
Site Specific Job Demand:									

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### **Validation Agreement**

Job Title:	CNC Operator – Weeke
<b>Data Collection Date:</b>	November 24, 2020

We the undersigned have reviewed the Physical Demands Analysis for this position and agree that the physical demands documented in this report are representative of the true demands of the tasks associated with the job title as assessed on the date listed above.

Completed by:	Terilyn Miranda, M.Sc.OT ,B.H.Sc Occupational Therapist	Lifemark Clinician Name and Designation
Approved by:		Management Representative
Approved by:		Worker Representative
Approved by:		Labour Provider Representative