

PHYSICAL DEMANDS ANALYSIS (EXAMPLE)
DEMOLITIONS WELDER



JOB DESCRIPTION

TASK #	TASK DESCRIPTION	% OF SHIFT
1	Paperwork/Ordering supplies.	5%
2	Set up/gathering tools and equipment.	10%
3	Stick and MIG welding/cutting, grinding, and various repair tasks.	80%
4	Driving to and from sites/ help labour to set up fences, cleanup.	5%

*The physical demands may vary depending on company and location.
 Confirm this physical demands analysis is an accurate representation of the specific job.*

ITEMS HANDLED

- Welding machines on rolling carts (up to 40 lbs. pull force and 29 lbs. push force)
- Welding torch
- Mig welder wire spool (44 lbs.)
- Grinders (6" or 7") - (up to 7 lbs.)
- Pedestal grinder
- Sledgehammer - 8 lbs.
- Hand tools (impact gun, electric drill, ratchets, hammers, wrenches, pliers) (Up to 15 lbs.)
- Forklift
- Band saw
- Chop saw
- Mag drill
- Drill press
- Various pieces of steel tubing ranging in size and weight (can use overhead crane or assistance from other staff for >50 lbs.)

PERSONAL PROTECTIVE EQUIPMENT

- Work boots
- Gloves
- Safety glasses/face shield
- Welding helmet (with mask/shield)
- Hearing protection
- Respirator depending on welding process
- Knee pads

ENVIRONMENTAL EXPOSURE

- Fumes/Gases
- Heat/Cold weather extremes
- Dust
- Wind
- Icy/slippery surfaces
- Noise and vibration exposure
- UV light/Welders' flash/Sparks

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JOB TITLE	DEMOLITIONS WELDER					LENGTH OF SHIFT (HRS)	10
JOB DESCRIPTION							
The worker performs welding which includes repairs on various heavy equipment such as loaders, excavators, crushers, trailers, dump trucks, dump roll off bins etc. They are also responsible for fabricating and welding components such as supports and structures throughout the shop and for various equipment. The welder performs most of their work at the shop but may be required to perform some repairs onsite and various job sites.							
PHYSICAL JOB DEMANDS - Grade using a scale of 0 - 4							
0 = NOT REQUIRED		1 = SELDOM REQUIRED: < 5%			2 = MINOR REQUIREMENT: 5-33%		
-		Less than 30 minutes per day or not daily			30 minutes up to 3.5 hours per day or 1 repetition every 30 minutes		
3 = OCCASIONAL REQUIREMENT: 34-66%				4 = FREQUENT REQUIREMENT: 67-100%			
3.5 hours up to 6.5 hours per day or 1 repetition every 2 minutes				6.5 hours per day up to shift length or 1 repetition every 30 seconds			
INSTRUCTIONS: Place an X under number 0,1,2,3 or 4 to identify the frequency of each body demand or exposure.							
PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED	
WHOLE BODY DEMANDS							
SITTING		X				Sitting on low stool or driving forklift/vehicle.	
SITTING WITH VIBRATION/JARRING	X					-	
DRIVING		X				Driving truck.	
STANDING					X	While grinding or performing welds on equipment or at work table. Operating saw.	
RUNNING	X					-	
WALKING							
LEVEL				X		Around shop.	
UNEVEN GROUND		X				In yard sites.	
SLOPES / RAMPS	X					-	
CLIMBING							
REGULAR STAIRS	X					-	
STEEP STAIRS	X					-	
LADDERS			X			Uses ladders get up on large equipment to perform repairs, welding. Using ladder on waste bins to perform repairs on bin.	
OTHER				X		On/off a step stool. Climbing on/off large equipment.	
LOW LEVEL WORK							
KNEELING				X		When working on lower-level pieces of equipment or while working in awkward spaces to perform repairs on equipment such as excavator buckets. Dependent on workers preferred method.	
SQUATTING			X			When working on lower-level pieces of equipment or while working in awkward spaces to perform repairs on equipment such as excavator buckets. Dependent on workers preferred method.	
CRAWLING		X				To crawl under equipment	

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PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED
SPECIFIC BODY DEMANDS						
NECK MOVEMENTS						
BENDING						
SUSTAINED					X	Looking down while grinding/performing welds, measuring.
REPETITIVE	X					-
TWISTING						
SUSTAINED	X					-
REPETITIVE			X			While welding and grinding.
TRUNK MOVEMENTS						
BENDING						
SUSTAINED					X	Working on lower-level pieces of equipment.
REPETITIVE	X					-
TWISTING						
SUSTAINED	X					-
REPETITIVE				X		Working in awkward spaces to perform repairs on equipment such as excavator buckets.
SHOULDER MOVEMENTS						
OVERHEAD				X		While working at above shoulder height level on large pieces of equipment.
FORWARD REACHING					X	During cutting, welding, and grinding tasks
GRIPPING DEMANDS						
DOMINANT HAND						
REPETITIVE	X					-
CONTINUOUS					X	Gripping materials, tools, welding torch.
NON-DOMINANT HAND						
REPETITIVE	X					-
CONTINUOUS				X		Gripping materials, holding items in place.
FINGER DEXTERITY		X				Pen/pencil.

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PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED
MANUAL HANDLING DEMANDS						
LIFTING						
LIGHT (MAX 20 LB / 9 KG)			X			While working on lower-level pieces of equipment picking up tools off the ground such as hand tools (up to 15 lbs.), grinders (up to 7 lbs.), welding rod (5 lbs.) etc.
MEDIUM (MAX 50 LB / 22.5 KG)		X				Handling various steel materials and while performing various labour tasks such as moving debris, materials etc. (up to 50 lbs. can use overhead crane or other worker assistance for items weighing more).
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
CARRYING						
LIGHT (MAX 20 LB / 9 KG)			X			Carrying tools such as hand tools (up to 15 lbs.), grinders (up to 7 lbs.), welding rod (5 lbs.) etc. throughout the shop and work area.
MEDIUM (MAX 50 LB / 22.5 KG)		X				Carrying various steel materials for example taking steel pieces off storage rack (up to 50 lbs. can use overhead crane or other worker assistance for items weighing more) and carrying them to workbench or work area.
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
MOBILE PUSHING						
LIGHT (MAX 20 LB / 9 KG)	X					-
MEDIUM (MAX 50 LB / 22.5 KG)			X			Pushing/pulling welding machines (39 lbs. pull and 29 lbs. push) throughout shop.
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
MOBILE PULLING						
LIGHT (MAX 20 LB / 9 KG)	X					-
MEDIUM (MAX 50 LB / 22.5 KG)			X			Pushing/pulling welding machines (39 lbs. pull and 29 lbs. push) throughout shop.
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
STATIC PUSHING/PULLING						
LIGHT (MAX 20 LB / 9 KG)	X					-
MEDIUM (MAX 50 LB / 22.5 KG)	X					-
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-