

JOB DEMANDS ANALYSIS REPORT

Position Title: Lineman

Date: 2009 - 2017

Overall Level of Work: Based on this evaluation, this position is classified at the *Heavy* level, as defined by the U.S. Department of Labor in the Dictionary of Occupational Titles.

Specific Physical Demands^A

The description of job tasks which were factored into this evaluation was observed where possible, and provided by employees performing the job and supervisors overseeing the job.

Physical Demand	% of Job	Forces/Weights (lbs.)		Description
		Ave	Max	
				Strict policies are in force, lifting over 70 lbs requires team lift or other mechanical means.
Floor to waist lift	2-5%	50#	70#	Guy wire roll, Steel elbows, Insulators, cross members, hardware, Crimper pump, chain hoist, gas cylinders
Above waist lift	2-5%	30#	70#	Cross members, insulators, rolled wire, hardware
Bilateral lift/carry	2-5%	50#	70#	See all above
Unilateral carrying	1-2%	40#	70#	See all above
Push/Pull	5-8%	70#	150#	Occasionally pull wire, Hotstick torque: 75# for Distribution lineman, 210# for Transmission lineman
Sit	20-50%			In remote locations may spend up to 1/2 of shift in vehicles accessing sites
Stand/ Walk/Balance	25-40%			May walk up to 1/4 mile at a time over uneven terrain and in varied weather conditions
Forward bend- standing	2-15%			Reaching from bucket lift, hot stick activities, working in panels, ground work
Forward bending sitting	<1%			
Kneel/ Squat/crouch	10-15%			Ground work, electrical boxes, pole/cross member prep
Supine lying	0-1%			
Stair climbing	3-6%			
Crawl	0-1%			
Vertical Ladder climbing	1-3%			Climbing onto truck, into bucket, Pole climbing
Trunk rotation - standing	2-15%			Reaching from bucket lift, hot stick activities
Trunk rotation - sitting	3-5%			
Reach – above shoulder	5-10%			Hot stick, hardware installation, pulley operation
Reach – shoulder or below	10-25%			Install hardware, crimp wires, may perform with extender (hotstick)
Looking up	10-15%			Observing pole work from the ground
Handling	20-40%			Hardware installation, crimping, hot stick work
Fingering	10-15%			Hardware and wire handling
Forceful gripping	10-12%	80#	100#	Manual crimpers, hardware management, tool handling (including hotstick management) shoveling, bar, pick
Forceful pinching	2-5%	15#	20#	Handling hardware wearing leather and rubber gloves
Unique activity: Pole climbing *Pole top rescue	0-40%			Requires the ability to work hooked to pole for up to 2-3 hours at a time on an irregular basis
Unique activity: *Pole top rescue (practiced with 175# wt)				Requires the ability to lower dummy to the ground from the pole while hooked into the pole (ability tested yearly)

^AThe Dictionary of Occupational Titles (D.O.T.) defines Occasionally as 1-33% of the day, Frequently 34-66% of the day, and Constantly as 67-100% of the day.

^BPounds of force is the amount of *force* exerted during the pushing and pulling tasks.









Summary of weights and Measure







- Insulators 75-96 lbs
- Crimpers (17.5 lbs)
- Box of Washers 42-55 lbs/box
- Roll of Guy wire 74 lbs (3/8") to 155 lbs (7/16")*
- 6" Steel Elbow 155 lbs*
- Anchor plate 31 lbs
- Cross Member: 60-75 lbs (Heavier cross members require hoist)







- Crimper weight is 85 lbs
- Crimper pump weight is 100 lbs*
- Hot stick 11# (12')
- Cable clamp weight is 38#

- Ground cable weight is 21# (handled at the end of a hotstick is ~210 foot-lbs of torque)
- Pulley weight is 76#
- Chain hoist is 74#
- Cable clamp is 38#

Essential Tasks *(Strict policies are in force, lifting over 70 lbs requires team lift or other mechanical means)

Task	% of day task performed	Illustrations	
Pole top <ul style="list-style-type: none"> • Climb (may require up to 2-3 hours at a time) • Replace cross members • Instal hardware • Hotstick management 	0% up to 40%		
Bucket truck <ul style="list-style-type: none"> • Replace cross members • Instal hardware • Hotstick management 	10-40%		
Demonstrate ability to perform pole-top rescue			
Underground Utilities <ul style="list-style-type: none"> • Operate backhoe • Place/run cable • Hardware installation 	10-40%		

Task	% of day task performed	Illustrations	
<p>Hot stick and hand tool activities</p> <ul style="list-style-type: none"> • May require leather + insulated gloves • Pull switches, • Install/attach wires • Hardware installation 	20-40%		
			
			

Task	% of day task performed	Illustrations	
		 <p data-bbox="639 648 1000 716">Hot Stick = up to 210 lbs torque force to attach ground</p>	 <p data-bbox="1062 648 1437 716">Transmission Crimper (85#) / pump (100#)</p>
		 <p data-bbox="688 984 922 1020">Cable clamp (38#)</p>	
		 <p data-bbox="797 1373 992 1402">Chain hoist 74#</p>	 <p data-bbox="1084 1367 1409 1402">Transmission Pulley (76#)</p>

Environmental Conditions:

Inside (vehicle, office) ___Heat ___Cold ___Wet ___Humid ___Noise ___Light ___Vibration
 Outside X Heat X Cold X Wet ___Humid ___Noise X Light ___Vibration

Tools Used/Equipment Operated:

Pickup truck, bucket truck, backhoe, augers, cross members, variety of hand tools, hot stick, reach poles, wires, insulators, steel and PVC pipes, anchor assembly,