



St. Louis County Equipment Operator Junior & Equipment Operator Senior Pre-Employment Assessment

The pre-employment assessment for Equipment Operator Junior and Equipment Operator Senior is comprised of seventeen Functionally Based Activities:

Repeated Forward Bend	Bilateral Weight Carry
Prolonged Forward Reach	Elevated Lift
Squat/Kneel/Crawl	Overhead Work
Push/Pull –Arms	Grip Strength
Push/Pull -Legs	Ladder Climb
Walk	Balance
Low Lift	Platform
Level Lift	Hand Tool Simulation
	Shoveling

Each test is briefly described below. Applicants must pass each test in order to pass the pre-employment assessment. The test will be conducted in the order listed. Each test states which job tasks it relates to on the Equipment Operator Junior/Senior Physical Activity Determination form and the Job Description.

Station 1: Repeated Forward Bend:

Forward bend to 18" from waist. Repeat for 2 minutes, averaging more than 20 repetitions per minute. Required when replacing blade and crawling inside funnel to do repair work; during removal of grates; setting up traffic control; replacing chains; while entering/exiting from cab; handling bales; while patting mix into place and during cutting and feeding material into chipper.

Requirement: ≥ 40 reps in 2 minutes

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 2: Prolonged Forward Reach:

Maintain a forward reach at 40" for 30 seconds. Required when replacing blade; during removal of grates; setting up traffic control; replacing chains; adjusting vehicle controls; stacking bales; operating chain saw.

Requirement: Maintain a forward reach at 40" for 30 seconds

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 3: Squat/Kneel/Crawl:

2 minutes of squatting or kneeling/crawling 20 feet. Required when replacing blade and doing repair work; while moving wires or cement blocks; placing chains and binders; picking up bales of hay or tree branches.

Requirement: 2 minutes

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 4: Push/Pull - Arms:

Hold for 3 seconds at 40" hand height: 32 lbs, 65 lbs, and 150 lbs. Required when replacing blade; removing grates; loading and unloading signs, cones and barricades; changing screens; removing build up; starting chainsaws and pulling branches out of ditches.

Requirement: Hold for 3 second at 40" hand height: 32 lbs, 65 lbs and 150 lbs

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 5: Push/Pull - Legs:

Seated, using one foot as if on foot pedal. Force required 90 lbs on a continuous basis for 5 seconds. (Back of chair against wall; place foot in sling attached to spring scale; push down and forward as if operating foot pedal). Required when operating vehicles with a clutch.

Requirement: Push 90 lbs for 5 seconds.

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 6: Walk:

Walk a quarter mile in five minutes. Requirements depend on the job site and weather conditions. Terrain conditions can vary from flat paved surfaces in clear weather to unstable or uneven surfaces that are slippery and/or icy. Walking is also done on steep slopes or low swampy areas.

Requirement: Walk a quarter mile within five minutes

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 7: Low Lift:

Lift and carry for 5 feet: 3 reps of 20 lbs, 3 reps of 45 lbs, 3 reps of 75 lbs with beginning hand height 10"; end hand height 40"; maximum weight required 75 lbs. Required when replacing blade; lifting grates; shoveling; lifting chains, binders, signs, sandbags, metal barricades, barricade bases, cones, ramps, hay bales, chainsaw, brush saw and tree branches or cuttings.

Requirement: Lift and carry for 5 feet: 3 reps of 20 lbs, 3 reps of 45 lbs and 3 reps of 75 lbs

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 8: Level Lift:

Lift and carry for 5 feet: 3 reps of 20 lbs, 3 reps of 45 lbs, 3 reps of 75 lbs with beginning hand height 40"; end hand height 40"; maximum weight required 75 lbs. Required when replacing blade; lifting grates; shoveling; lifting chains, binders, signs, sandbags, metal barricades, barricade bases, cones, ramps, hay bales, chainsaw, brush saw and tree branches or cuttings.

Requirement: Lift and carry for 5 feet: 3 reps of 20 lbs, 3 reps of 45 lbs and 3 reps of 75 lbs

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 9: Bilateral Weight Carry:

Lift and carry for 50 feet: 1 rep of 20 lbs, 1 rep of 45 lbs and 1 rep of 75 lbs with beginning hand height 40"; maximum weight required 75 lbs. Required when replacing blade; lifting grates; shoveling; lifting chains, binders, signs, sandbags, metal barricades, barricade bases, cones, ramps, hay bales, chainsaw, brush saw and tree branches or cuttings.

Requirement: Lift and carry for 50 feet: 1 rep of 20 lbs, 1 rep of 45 lbs and 1 rep of 75 lbs

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 10: Elevated Lift:

Stationary; with beginning hand height 40" lift 45 lb weight and place it on a higher shelf, ending hand height 62". Required when lifting front cab window, stacking bales, replacing blade, batteries, or sander wing.

Requirement: 45 lbs X 3 reps

Directly relates to the following job tasks: 2, 5, 6, 7, 9, 11, 12

Station 11: Overhead Work:

1 minute 12" above AC joint. Required to access hoist. Changing screen involves a lot of overhead work up to 3 feet high; lifting parts of cab window; placing chains; reaching for vehicle controls;

stacking hay bales or pulling tree branches down.

Requirement: 1 minute 12" above AC joint

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 12: Grip Strength:

Grip strength of 80 lbs for each hand. Required when using an impact wrench and hooking/unhooking screens; removing grates; shoveling; holding Stop/Go signs; loading chains and binders; operating controls; handling bales; operating chainsaw and brush saw.

Requirement: 80 lbs for right hand and 80 lbs for left hand

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 13: Ladder Climb:

3 reps of 3 rungs on a vertical ladder. Required when doing some repair work and getting in/out of equipment of various heights.

Requirement: 3 rungs X 3 reps

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 14: Balance:

Walk length of 8' 2X6; step off; turn; and walk on 2X6 to starting point. Forward, backward and sidestep with zero errors. Required when doing some repair work.

Requirement: Forward, backward and sidestep with 0 errors

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 15: Platform Step:

Step-up test from floor to 28" high platform to simulate climbing into a vehicle.

Requirement: Forward, backward and sidestep with 0 errors

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12

Station 16: Hand Tool Simulation:

Mechanic's tools

Requirement: Demonstrate proper use of mechanic's tools

Directly relates to the following job tasks: 1, 4, 5, 6, 9, 10, 11, 12

Station 17: Shoveling:

5 shovelfuls from bin to yellow container. Empty container back into bin. Required when working on culverts, ditching or shouldering.

Requirement: 5 shovelfuls from bin to container and back

Directly relates to the following job tasks: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12



**St. Louis County
Equipment Operator Junior and Equipment Operator Senior
Pre-Employment Assessment Summary**

Test	Requirement	Performance	Met	Not Met
Station 1 Repeated Forward Bend	≥ 40 reps in 2 minutes			
Station 2 Prolonged Forward Reach	Maintain a forward reach at 40" for 30 seconds			
Station 3 Squat/Kneel/Crawling	2 minutes of squatting or kneeling and crawling 20 feet			
Station 4 Push/Pull - Arms	Hold for 3 seconds at 40" hand height: 32 lbs, 65 lbs, and 150 lbs.			
Station 5 Push/Pull - Legs	Push 90 lbs for 5 seconds			
Station 6 Walk	Walk a quarter mile in ≤ 5 minutes			
Station 7 Low Lift	3 reps of 20 lbs, 3 reps of 45 lbs and 3 reps of 75 lbs			
Station 8 Level Lift	3 reps of 20 lbs, 3 reps of 45 lbs and 3 reps of 75 lbs			
Station 9 Bilateral Weight Carry	1 rep of 20 lbs, 1 rep at 45 lbs and 1 rep of 75 lbs			
Station 10 Elevated Lift	45 lbs X 3 reps			
Station 11 Overhead Work	1 minute 12" above AC joint			
Station 12 Grip Strength	≥ 80 lbs with right hand and ≥ 80 lbs with left hand			
Station 13 Ladder Climb	3 reps of 3 rungs on vertical ladder			
Station 14 Balance	Walk length of 8' 2X6; step off; turn; and walk on 2X6 to starting point. Forward, backward and sidestep with 0 errors			
Station 15 Platform Step	Step-up test from floor to 28" high platform			
Station 16 Hand Tool Simulation	Demonstrates proper use of mechanic's tools			
Station 17 Shoveling	5 shovelfuls from bin to container and back			

Pre-Employment Assessment Test Results: PASS _____ FAIL _____

Therapist signature: _____

Date: _____