ERGONOMICS ANALYSIS

Step 1 – PROVIDE BACKGROUND			
Job/Task: Fill CNC Reservoirs	**Date:** 2-16-10	**Time:** 11:00 AM	**Analyzed by:** Mark Johnson
Area/Dept/Location: Machine Center	**Project Number:** 00134		**Employee Name (optional):**
Lead/Supervisor: Lisa Jackson	**Workstation:** CNCs 1-7		**Job Title**: CNC Operator

Step 2 – CURRENT MAJOR STEPS	Step 3 – ERGONOMICS ISSUES	Risk	Step 4 –SOLUTIONS
1. Place empty 5 gallon buckets (2) on floor	None	Low	
2. Fill buckets 75% full with filler hose	Out-of-neutral posture (bend over) to handle hose to fill buckets **Goal:** Reposition buckets to allow neutral body position when filling buckets with hose	Mod	**OPTIONS**: 1. Plumb each CNC reservoir (cost factor) 2. Obtain cart to position buckets on the cart at a level to allow neutral body position (20" from the floor)
3. Pick up 2 buckets (one in each hand) by bucket handle and carry to CNC machine. Distance: 75 to 125 feet. Bucket weight: each at 30#	Ineffective work process Manual handling of heavy load (evident physical strain) **Goal:** reduce/eliminate significant physical strain	High	**OPTIONS**: 1. Plumb each CNC reservoir 2. Use long hose to reach to each CNC, will require up to 125' of hose 3. Obtain cart to transport buckets
4. At CNC machine set bucket down on floor Pick up one bucket and manually pour into CNC reservoir	Ineffective work process Manual handling of heavy load (evident physical strain) **Goal:** reduce/eliminate significant physical strain	High	**OPTIONS**: 1. Plumb each CNC reservoir 2. Use long hose 3. Obtain cart to maintain buckets in power lift zone and provide a base of support when tipping the bucket contents into the reservoir

5. Return empty buckets to storage area (located by the filler hose)		**Low**	

MISC NOTES

1. No injuries had occurred; however employees reported significant physical strain with the manual handling method
2. Seven (7) CNC machines are operated, depending on use each may be filled 1 to 3 times weekly. Approximately one bucket is used to fill the reservoir at each machine.

Step 5 – FOLLOW-UP

Based on overall review (including level of use, cost analysis to implement various solutions and employee input) **Option 3. Obtain cart** was implemented.

Cart is a Little Giant with two swivel and two fixed 8” wheels with handle on swivel wheel end. Cart platform height is 20”

Cart was purchased for $300.00; employees received training in use of the cart.

Follow-up at 1 and 3 months intervals indicated excellent employee acceptance with significant decrease in reported discomfort and decreased risk of injury.