



What Are Fine Motor Activities?

FINE MOTOR SKILLS AND MICRO-MANIPULATION ACTIVITIES

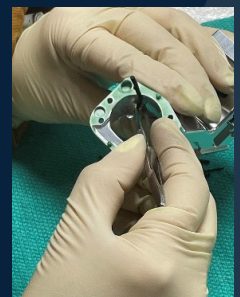
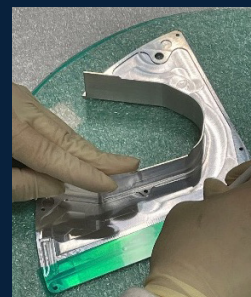
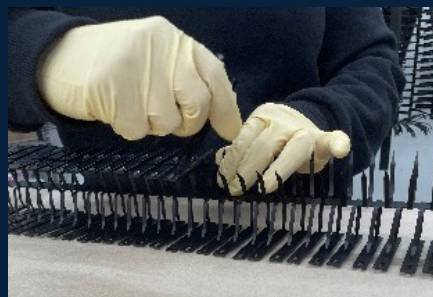
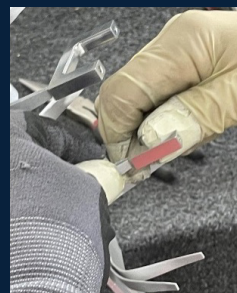
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Fine motor activities are everyday activities that focus on fine motor skills. These activities encourage a range of fine motor skills, including:

- ▶ **Pincer Grasp**
The act of grasping by pinching the thumb and index finger together.
- ▶ **Finger Isolation**
Activating a single finger to do tasks like pushing or pointing.
- ▶ **Thumb Opposition**
Coordination between the thumb and other fingers to squeeze or hold something while strengthening the “web space” between the thumb and index finger.
- ▶ **Tripod Grasp**
Employing the pincer grasp while the object rests on the middle finger, much like what occurs when you hold a pencil.
- ▶ **Bilateral Coordination**
When both hands coordinate with each other.

All these fine motor skills are used when employees conduct functions like those shown here. Depending on the nature of your workplace, other fine motor skills may be used and should be identified.



What are Fine Motor Skills?

Fine motor skills are the refined movements and actions of the hands, fingers, and wrists that enable precision and dexterity of movement. Fine motor skills can be broken down into different motor components that impact the ability to use the hands in functional tasks and tool use. With respect to metal manufacturing, a large part of the job is masking, prepping, and mounting very small metal parts to a frame. This job requires a great deal of these fine motor skills, and we should be aware of what activities go to which tasks.

Here are some examples of what some of these fine motor skills are and how they are used.

PINCER GRASP

Pincer grasp refers to pad-to-pad grip needed to pick up small, bead-sized objects. Pincer grasp is important for many fine motor tasks. Any functional skill that involves holding items between the thumb and index finger are based on effective development of pincer grasp.

FINGER ISOLATION

Finger isolation is the ability to isolate and use the fingers one at a time in functional tasks. Finger isolation is using one finger to perform a task. Pointing with the index finger, wiggling all of the fingers individually, and counting out the fingers on your hand are finger isolation.

THUMB OPPOSITION

Opposition of the thumb means the tip of the thumb touches the tip of a finger, or the fleshy pad of the thumb touches the pad of a finger. When opposing the thumb to the fingers, small objects are able to be held and manipulated. When opposing, the thumb's thenar muscles work to advance and position objects, such as holding a pencil when writing, managing a button with ease, and pulling a zipper.

TRIPOD GRASP

Tripod grasp is the opposition of the thumb to the pad of the pointer finger and middle finger when grasping and manipulating objects. Tripod grasp is the optimal (though not the only functional) grasp used to hold and write with a pencil.

BILATERAL COORDINATION

Coordinated use of both hands together, or using one hand as a stabilizer and one hand as a manipulating hand. Bilateral coordination includes three components: symmetrical movements, alternating movements, and dominant hand/ supporting hand movements.

Worksite Fine Motor Skills Activity Evaluation

List what workplace activities use the fine motor skills above.

FINE MOTOR ACTIVITY	JOBS THAT INCLUDE ACTIVITY	EXERCISES THAT APPLY
In-hand manipulation	<i>Masking, taping, etc.</i>	<i>Finger, wrist, or both</i>
Finger strength and control		
Finger isolation		
Pincer grasps		
Tripod grasp		
Thumb opposition		
Bilateral coordination		
Crossing the midline		

Fine Motor Activities

The work you do is very technical and detailed, so sometimes overworking those small muscles in your hands, fingers, and wrists is unavoidable. Stretching can help prevent small muscle groups from getting overworked, musculoskeletal disorders (MSDs), and pain and discomfort in general. Stretching allows your body time to recover, relax, re-energize, and helps prevent muscles from getting stiff.

WRIST TILT



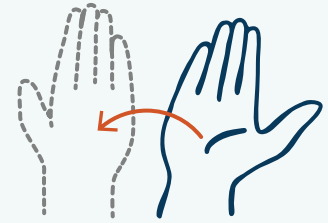
PURPOSE: To stretch wrist and forearm.

With hand open and facing down, gently bend wrist from side to side, as far as possible. Hold for 3 to 5 seconds. Repeat 3 times.

Remember that taking even a short break is better than none at all.

Stand up and move around when you stretch to allow your body to move and promote blood flow.

WRIST ROTATION



PURPOSE: To stretch wrist and forearm.

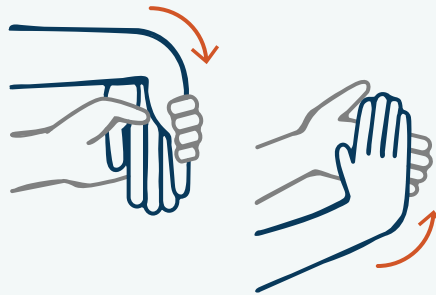
Start by stretching your arm and hand out, and slowly rotate the wrist down until you feel a stretch. Hold for 3 to 5 seconds.

WRIST FLEXION/ROTATION

PURPOSE: To stretch wrist and forearm.

Grasp hand and hold fingers with the other hand. Slowly bend wrist down until you feel a stretch.

Hold for 3 to 5 seconds. Relax. Repeat 3 times. Repeat with slow upward bend of the wrist to point of gentle stretch. Hold and relax.



TIP

Stretch only to the point required to feel the muscle, and then just relax, and hold your position until the muscle feels less tight.

Try to pause and stretch at least once per hour.

FINGER STRETCHES

PURPOSE: To stretch fingers and hand.



Start with your hand open



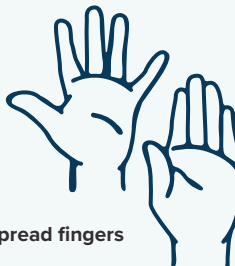
Knuckle-bend



Karate fist



Closed Fist



Spread fingers



Finger to thumb touch

REPEAT AS NEEDED