

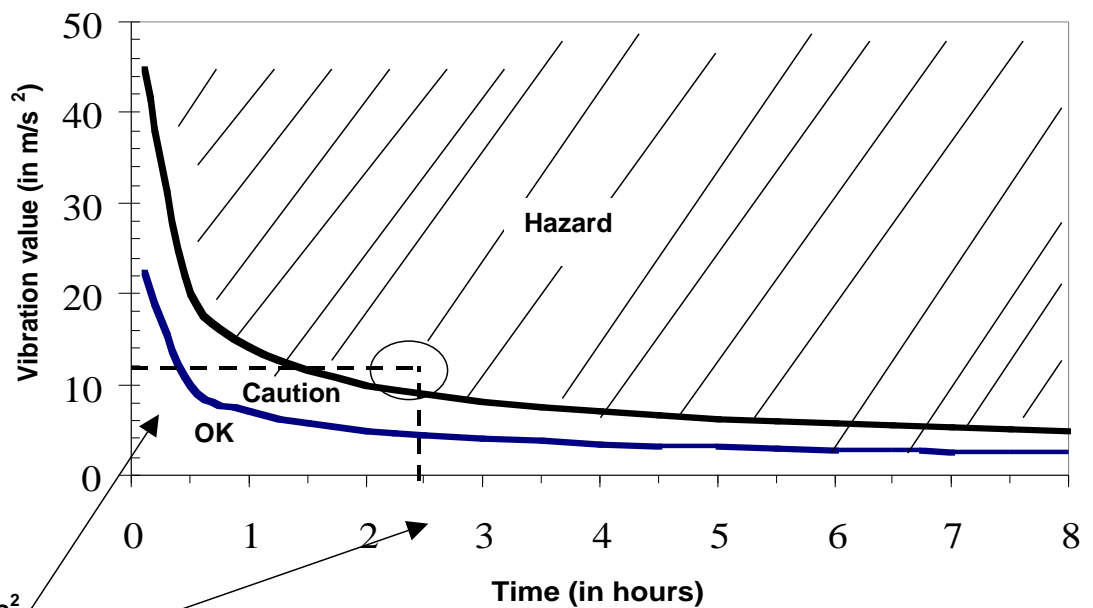
Job	Date / /
Notes	Analyst(s)

The hand-arm vibration analysis on the following page is performed when one or two of the Caution Level job risk factors in the following checklist is present. This checklist is taken from the adapted WISHA checklist.

Moderate to High Hand-Arm Vibration			Check (✓) as applicable
Body Part	Physical Risk Factor	Duration	
Hands, wrists, and elbows	Using impact wrenches, carpet strippers, chain saws, percussive tools (jack hammers, scalers, riveting or chipping hammers) or other hand tools that typically have high vibration levels	More than 30 minutes total per day	Caution <input type="checkbox"/>
	Using grinders, sanders, jig saws or other hand tools that typically have moderate vibration levels	More than 2 hours total per day	Caution <input type="checkbox"/>
	WISHA HAV Analysis – Perform if any Caution condition exists. Actual exposure time is greater than the Hazard Level Exposure Time (See separate work sheet)		Hazard <input type="checkbox"/>

Use the instructions below to determine if a hand-arm vibration hazard exists.

- Step 1. Find the vibration value for the tool. (Get it from the manufacturer, look it up at this web site: <http://umetech.niwl.se/vibration/HAVHome.html>, or you may measure the vibration yourself). The vibration value will be in units of meters per second squared (m/s^2). On the graph below find the point on the left side that is equal to the vibration value.
- Step 2. Find out how many total hours per day the employee is using the tool and find that point on the bottom of the graph.
- Step 3. Trace a line in from each of these two points until they cross.
- Step 4. If that point lies in the crosshatched "Hazard" area above the upper curve, then the vibration hazard must be reduced below the hazard level or to the degree technologically and economically feasible. If the point lies between the two curves in the "Caution" area, then the job remains as a "Caution Zone Job." If it falls in the "OK" area below the bottom curve, then no further steps are required.



Example:

An impact wrench with a **vibration value of $12 m/s^2$** is used for **2.5 hours** total per day. The exposure level is in the Hazard area. The vibration must be reduced below the hazard level or to the degree technologically and economically feasible.

Note: The caution limit curve (bottom) is based on an 8-hour energy-equivalent frequency-weighted acceleration value of $2.5 m/s^2$. The hazard limit curve (top) is based on an 8-hour energy-equivalent frequency-weighted acceleration value of $5 m/s^2$.