Manufacturers’ Machinery and Equipment Exemption —
Electrical Apparatus and Utility Systems

The Department has issued a series of excise tax advisories (ETAs) to address questions regarding the retail sales and use tax exemption provided by RCW 82.08.02565 and 82.12.02565, commonly referred to as the manufacturers’ machinery and equipment exemption (M&E exemption). This ETA is issued to address the application of the M&E exemption to electrical apparatus and utility systems. Please refer to ETA 3117.2009 for a current list of the issues covered by this series.

In addition to the issues discussed in this ETA series, machinery and equipment must also meet the other requirements of the statutes to be eligible for the exemption. For example, some of the requirements include:

- Purchaser/User must be a manufacturer, processor for hire, or a tester for a manufacturer or processor for hire,
- Must purchase machinery or equipment (devices, industrial fixtures, support facilities, pollution control equipment),
- The machinery or equipment must be used directly in a manufacturing, research and development, or testing operation,
- The machinery or equipment must have a useful life of one year or more, and
- The machinery or equipment must be used more than 50% of the time on an eligible activity.

Therefore, readers are advised that RCW 82.08.02565, RCW 82.12.02565, and WAC 458-20-13601 should also be referenced when making determinations about taxability.

The M&E exemption defines “machinery and equipment” as “industrial fixtures, devices, and support facilities.” Questions have been asked regarding the eligibility of apparatus such as transformers, switches, and circuit breakers, and of system components such as conduit and wiring.
Electrical apparatus and utility systems are either “industrial fixtures” or “devices” and thus eligible for the M&E exemption if “used directly” in a manufacturing operation, testing operation, or research and development operation.

The M&E statute identifies eight separate criteria under which machinery and equipment is considered “used directly.” Qualifying under any one of the eight tests is sufficient to establish eligibility for the M&E exemption. Electrical apparatus and utility systems are eligible for the M&E exemption if the apparatus or system:

1. Acts upon or interacts with an item of tangible personal property;
2. Produces power for, or lubricates machinery and equipment; or
3. Is integral to research and development.

**Electrical Apparatus – Research and Development Operations**

Electrical apparatus used directly in a research and development operation need only be “integral” to the research and development operation to be entitled to the M&E exemption. There is no requirement that it act upon or interact with an item of tangible personal property or produce power for machinery and equipment.

**Electrical Apparatus—Manufacturing Operations and Testing Operations**

Electrical apparatus such as motor control centers, starters, switches, regulators, and exciters “act upon or interact with” tangible personal property, often in a sequential manner. The motor control center, for example, produces an action that results in a reaction by the motor. Switches and exciters work in much the same way. Similarly, circuit breakers and comparable equipment react to an event in another item, and this cause and effect behavior falls under the “acts upon or interacts with” criteria. Thus, these items are eligible for the M&E exemption, subject to meeting the other requirements of the exemption.

Converters, transformers, and other equipment on site, that alter the characteristics of the electricity “produce power” for machinery and equipment, and qualify for the M&E exemption, subject to meeting the other requirements of the exemption. Apparatus that are part of a utility system used for qualifying and nonqualifying purposes should be examined using the allocation standard set forth below.

Transmission and distribution systems located off site do not qualify for the M&E exemption.

**Utility Systems used for Qualifying and Nonqualifying Purposes – Allocation**

The M&E exemption defines “machinery and equipment” to, in part, exclude building fixtures that are not integral to the manufacturing operation, testing operation, or research and development operation that are permanently affixed to and become a physical part of the building, such as utility systems for heating, ventilation, air conditioning, communications, plumbing, or electrical. RCW 82.08.02565(2)(b)(iv).
Conversely, building fixtures are eligible if they are integral to the manufacturing operation, testing operation, or research and development operation, and meet the other requirements of the exemption, such as the “used directly” test. Thus, while the M&E exemption contemplates that these utility systems are to be separately considered as potentially eligible industrial fixtures and not a part of a “building” for purposes of exemption, not all such systems are eligible for the exemption.

Utility systems that serve a building purpose, as opposed to a manufacturing purpose, do not qualify. For example, a utility system used to perform a general building purpose, such as a HVAC system controlling the air temperature or air quality in general, is not eligible for the M&E exemption.

If a utility system is used for both qualifying and nonqualifying purposes, the system should be allocated so that only the qualifying portion of the system receives the exemption, and the building portion does not receive an exemption.

One way of allocating a utility system is by applying the ratio of the qualifying use made of the system to the total use of the system. This ratio must be established and substantiated by sufficient documentation, such as, but not limited to, engineering analyses and power bills. Thus, if the taxpayer can document that 30 percent of a system is used for the manufacturing activity (e.g., 30 percent of the system is dedicated to manufacturing frozen raspberries vs. 70 percent dedicated to cold storage) then this 30 percent qualifies for the exemption.

The concept of allocating portions of a utility system as qualifying or nonqualifying for purposes of the M&E exemption is limited to utility system machinery and equipment considered a building fixture, when used to support both manufacturing machinery and equipment and the building systems. Allocation is not applicable to any other situation. In other areas dealing with dual use of machinery and equipment (dual use meaning property is used in both qualifying and nonqualifying activities) the majority use threshold is applicable. Rule 13601(10) sets forth the criteria used in applying the majority use test.

The statute specifically excludes from the scope of the M&E exemption building fixtures that are not integral to the manufacturing operation. This directly implies that building fixtures that are integral can qualify. However, application of the majority use test to building fixtures would conflict with the legislative intent because it would provide a total exemption for such property. The allocation between exempt use and nonexempt use of a utility system achieves the Legislature’s intent in this area.