

IOWA SALES AND USE TAX ON MANUFACTURING AND PROCESSING

INTRODUCTION

This booklet addresses the taxability of purchases of tangible personal property and services for the manufacturing industry. Because of law changes, this booklet should be used only as a general guide. For answers to specific questions, contact Taxpayer Services at 1-800-367-3388 (Iowa, Omaha, Rock Island/Moline) or 515/281-3114 or [e-mail a tax specialist](#).

Manufacturers who also sell the tangible personal property they produce to the final consumer should call Taxpayer Services to see if they need an Iowa sales tax permit. Manufacturers who do not sell to the final consumer do not need sales tax permits.

CHEMICALS USED IN PROCESSING	ITEMS THAT DO NOT QUALIFY	RECYCLING OR REPROCESSING WASTE PRODUCTS
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SPECIAL MACHINERY, EQUIPMENT, AND COMPUTER EXEMPTION

The purchase or rental of computers, machinery, equipment, and other types of tangible personal property, including fuel used in processing, by manufacturers may be exempt from Iowa sales and use taxes under certain circumstances.

QUALIFICATIONS FOR EXEMPTION

Sales or rentals of the following are exempt from tax:

- Machinery, equipment, and computers directly and primarily used in processing by a manufacturer.
- Machinery, equipment, and computers directly and primarily used to maintain a manufactured

- product's integrity or to maintain any unique environmental conditions required for the product.
- c. Machinery, equipment, and computers directly and primarily used to maintain unique environmental conditions required for other machinery, equipment, and computers used in processing by a manufacturer.
 - d. Test equipment directly and primarily used by a manufacturer in processing to control the quality and specifications of a product.
 - e. Machinery, equipment, or computers directly and primarily used in research and development of new products or processes of processing.
 - f. Machinery, equipment, and computers directly and primarily used in recycling or reprocessing of waste products.
 - g. Pollution control equipment used by a manufacturer. It is not necessary that the equipment be directly and primarily used in any kind of processing.
 - h. Core and mold-making equipment and sand-handling equipment directly and primarily used in the mold-making process by a foundry.
 - i. Materials used to construct or self-construct any machinery, equipment, or computer, that is exempt by paragraphs "a" through "h" above.
 - j. Exempt sales of fuel and electricity. Sales of fuel or electricity consumed by machinery, equipment, or computers described in paragraphs "a" through "h" above are exempt from tax.
 - k. Beginning July 1, 2004, core, mold, and sand handling machinery and equipment and replacement parts sold to foundries are exempt. Fuel used in creating heat, power, steam, or electric current used in the core, mold, or sand handling equipment is exempt. Electricity consumed by core, mold, or sand making machinery and equipment used in the mold making business. The design and installation of core mold, and sand handling machinery and equipment are exempt.

MANUFACTURER

"Manufacturer" means any person, firm, or corporation who purchases, receives, or holds personal property for the purpose of adding to its value by any process of manufacturing, refining, purifying, combining of different materials, or by packing of meats with an intent to sell at a gain or profit.

A contract manufacturer is considered to be a manufacturer. A contract manufacturer is a manufacturer which processes tangible personal property on the behalf of other manufacturers. A contract manufacturer does not sell the tangible personal property which it processes on the behalf of another manufacturer.

*Examples of businesses that **qualify as** manufacturers:*

- bookbinders
- newspaper publishers
- contract manufacturers
- printers
- quarrying
- mining
- producers of drugs or agricultural supplies
- lumber millers

*Examples of businesses that are **not** manufacturers:*

- construction contracting
- data processing

- medical doctors
- restaurants
- providing health care
- farming
- hospitals
- transportation for hire
- remanufacture or rebuilding of tangible personal property (such as automobile engines)

A manufacturer is a person or entity different from a merchant, dealer or retailer.

To be classified as a manufacturer, the principal business must be manufacturing. A person primarily engaged in selling tangible personal property to earn a profit and only incidentally engaged in creating products suitable for use from raw materials is not a manufacturer.

INDUSTRIAL MACHINERY AND EQUIPMENT

“Industrial machinery and equipment” means machinery and equipment used by a manufacturer in a manufacturing establishment.

Machinery

“Machinery” is any mechanical, electrical, or electronic device designed and used to perform some function and to produce a certain effect or result. The word includes not only the basic unit of the machinery but also any adjunct or attachment necessary for the basic unit to accomplish its intended function. The word also includes all devices used or required to control, regulate, or operate a piece of machinery, provided such devices are directly connected with or are an integral part of the machinery and are used primarily for control, regulation or operation of machinery.

Exempt machinery

Machinery is exempt when used directly and primarily in processing.

This includes machinery...

- to maintain a product’s integrity
- to maintain any unique environmental conditions required for the product being produced
- to maintain unique environmental conditions required for other machinery and equipment used in processing
- to test and control the quality and specifications of a product
- in research and development of new products or processes of processing
- in recycling or reprocessing of waste products

It also includes...

- Pollution control equipment used by a manufacturer
- Materials used to construct or self-construct any of the above machinery
- Jigs, dies, tools, and other devices necessary to the operation of or used in conjunction with the operation of what is ordinarily thought of as machinery

Taxable machinery

The following are examples of machinery which are *not* directly and primarily used in manufacturing and processing; they are taxable when...

- a. Used exclusively for the comfort of workers, such as air cooling, air conditioning, and exhaust systems. These are taxable.
- b. Used in support operations, such as a machine shop, in which production machinery is assembled, maintained or repaired. These are taxable.
- c. Used by administrative, accounting, and personnel departments. These are taxable.
- d. Used by plant security, fire prevention, first aid, and hospital stations. These are taxable.
- e. Used in plant cleaning, disposal of scrap and waste, plant communications, lighting, safety, or heating. These are taxable.
- f. Used exclusively for the efficient use of other machinery, such as air cooling, air conditioning, and exhaust systems. These are taxable.
- g. Machinery does not include buildings designed specifically to house or support machinery. These are taxable.

Equipment

“Equipment” is any tangible personal property used in an operation or activity by a manufacturer in a manufacturing environment. Examples include, but are not limited to, are tables on which property is assembled on an assembly line and chairs used by assembly line workers.

Examples of exempt equipment

Following are items which became exempt July 1, 1997; they were taxable prior to that date. They must, of course, be used directly and primarily in processing by a manufacturer.

- coolers which do not change the nature of materials stored in them
- equipment which eliminates bacteria
- palletizers
- storage bins
- property used to transport raw, semifinished or finished goods within a manufacturing plant
- vehicle-mounted cement mixers if used by a manufacturer, not a contractor (Note: May be subject to use tax as a part of a vehicle subject to registration)
- self-constructed machinery and equipment
- packaging and bagging equipment, including conveyor systems
- equipment which maintains an environment necessary to preserve a product’s integrity
- equipment which maintains a product’s integrity directly
- quality control equipment
- electricity or other fuel used to power the machinery and equipment mentioned above

COMPUTERS

The sale or rental of computers used in manufacturing, research and development or in processing or storage of data or information by a manufacturer is, under certain circumstances, exempt from tax.

The sale or rental of computers directly and primarily used in the recycling or reprocessing of waste products is also exempt from tax.

Hardware

“Computer” means stored program processing equipment and all devices fastened to it by means of signal cables or any communication medium that serves the function of a signal cable. Examples of devices fastened by a signal cable or other communication medium include:

- terminals
- card or tape punchers
- printers
- optical readers
- display units/monitors
- document sorters
- card readers
- tape readers

Excluded from the definition of computer is point-of-sale equipment, such as scanners and cash registers.

Software

Prewritten “canned” software is taxable. “Custom” software is exempt.

Software consisting of an operating or executive program upon which the basic operating procedures of a computer are recorded and which serves as an interface with an application program and is purchased as a part of the sale of the computer for which it operates is exempt.

Such software is fundamental and necessary to the functioning of a computer, as it coordinates, supervises, or monitors the basic operating procedures of the computer. These programs control the operation of a computer by managing the allocation of all system resources, including the central processing unit, main and secondary storage, input/output devices, and the processing of programs.

Application software is taxable. It is considered a collection of one or more programs used to develop and implement the specific applications which the computer is to perform. Application software calls upon the services of the operating system or executive program to function.

Optional service or warranty contract

An optional service or warranty contract which is a computer software maintenance or support service contract is taxable at 50 percent if it is billed and paid in one lump sum. Contracts which provide technical support services only are not subject to tax.

POLLUTION CONTROL EQUIPMENT

The sale or rental of air or water pollution control equipment is taxable unless the equipment is used by a manufacturer.

“Pollution control equipment” means any disposal system or apparatus used or placed in operation primarily for the purpose of reducing, controlling or eliminating air or water pollution.

Liquid, solid and gaseous wastes are included within the meaning of the word “pollution.”

“Pollution control equipment” specifically includes, but is not limited to, any equipment required or

certified by a government agency of this state or the United States. Examples include wastewater treatment facilities and scrubbers used in smokestacks.

The equipment must be purchased and used by a manufacturer to be exempt from tax.

The exemption does **not** include:

1. Noise pollution equipment
2. Equipment used only for worker safety, such as a gas mask.
3. The sale or rental of industrial machinery, equipment, or computers, including pollution control equipment, to public and private utilities

DIRECTLY AND PRIMARILY

To be exempt, machinery, equipment and computers must not only be used in processing, but must be used *directly and primarily* in processing.

Property is *directly* used only if it is used to initiate, sustain, or terminate the transformation of any activity. *Primarily* means simply first importance.

In determining whether any property is directly and primarily used, consideration should be given to the following factors:

- The physical proximity of the property in question to the activity in which it is used;
- The proximity of the time of use of the property in question to the time of use of other property used before and after it in the activity involved; and
- The active causal relationship between the use of the property in question and the activity involved. The fact that a particular piece of property may be essential to the conduct of the activity because its use is required either by law or practical necessity does not, of itself, mean that the property is directly used.

PROCESSING FOR MANUFACTURERS

The definition of processing for manufacturers was expanded July 1, 1997.

This new definition is sometimes referred to as “door-to-door processing.” In general, processing begins with receiving or producing raw materials. It ends at the point the products are delivered for shipment or transferred from the manufacturer.

Receipt or producing of raw materials means activities performed upon tangible personal property only. Activities performed on real property are not exempt.

Processing includes, but is not limited to, the following:

- refinement or purification of materials
- treatment of materials to change their form, context or condition
- maintenance of the quality or integrity of materials, components, or products
- maintenance of environmental conditions necessary for materials, components or products
- quality control activities
- construction of packaging and shipping devices

- placement into shipping containers or any type of shipping device or medium
- movement of materials, components or products until shipment from the manufacturer

Examples

1. Processing begins.

Company A manufactures fine furniture. It owns a grove of walnut trees which it uses as raw material. Employees cut the trees, transport the logs to the factory, offload them there, and store the logs in a warehouse to begin curing the wood before taking it to the sawmill.

“Processing” begins when the logs are placed on vehicles other than vehicles subject to registration for transport to the factory.

2. Processing begins.

The same company also buys mahogany logs from a supplier in Honduras. Company A uses its own equipment to offload the logs from railroad cars at its manufacturing facility. It then transports, stores, and saws the logs as described in Example 1.

Processing begins when Company A offloads the logs from the railroad cars.

3. Middle stages of processing.

Company C is a microbrewery. It uses a variety of kettles, vats, tanks, tubs, and other containers to mix, cook, ferment, settle, age, and store the beer it brews. It also uses a variety of pipes and pumps to move the beer among the various containers involved in the activity of brewing.

All stages of this brewing are part of processing. Transforming the raw materials from one state to another, such as fermenting and aging, is part of processing. Simply holding the materials in an existing state, such as storage of hops in a bin or storage of beer prior to bottling, is also a part of processing. Any movement of the beer between containers is an activity which is a part of processing, whether this movement is an “integral part” of the production of beer or not.

4. End of processing.

After the brewing process is complete, Company C places its beer in various containers, stores it, and moves it to its customers by a common carrier who picks up the beer at the brewery. The following are still part of processing: C’s activities of placing the beer into bottles, cans, and kegs; storing it after packaging; and moving the beer by use of a forklift to the common carrier’s pickup site.

REPLACEMENT PARTS

A replacement part is any machinery or equipment part which is substituted for another part that has broken, become worn out or obsolete, or is otherwise unable to perform its intended function. The part must materially add to the value of industrial machinery and equipment or appreciably prolong their lives or keep them in their ordinarily efficient operating condition. A replacement part must have a useful life of one year or more.

Supplies are not replacement parts and are taxable.

The following are examples of supplies, not replacement parts, and are taxable:

- drill bits
- grinding wheels
- punches
- taps
- reamers
- saw blades
- lubricants
- coolants
- sanding discs
- sanding belts
- air filters

FUEL USED IN PROCESSING

Fuel consumed in processing is exempt from Iowa sales and use tax. If the machinery, equipment, or computer is exempt to a manufacturer, the fuel used to operate or run the machinery, equipment, or computer is also exempt.

“Fuel” includes, but is not limited to, heat, steam, electricity, gas, water or any other tangible personal property consumed in creating heat, power, steam, or for generating electric current.

“Fuel consumed in processing” means fuel that creates heat that is directly applied in the actual processing of tangible personal property.

Fuel used for the purpose of heating buildings – even if the buildings are warehouses, processing plants, or office – is taxable. Fuel used for lighting the premises, ventilating a building, and any other use than that of direct processing is taxable.

When practical, electricity consumed as power or used directly in processing must be separately metered and separately billed by the supplier. The manufacturer must give the supplier an exemption certificate.

If it is impractical to separately meter and bill the fuel, the manufacturer must give the supplier an exemption certificate which shows what percentage of the fuel is exempt. The exemption certificate must be supported by a study showing how the percentage was developed. The study must show the taxable use and the nontaxable use to correctly report the exempt percentage.

See Appendix A for information on how to calculate a fuel exemption.

LEASE AND RENTAL

The lease of industrial machinery and equipment is exempt if their purchase is exempt.

QUARRYING OR MINING

Beginning July 1, 1998, quarrying and mining businesses are considered manufacturers with respect to activities in which it engages after it severs the raw materials from the ground. These subsequent activities include, but are not limited to, crushing, washing, sizing, and blending of aggregate materials.

Example:

Company A owns and operates a gravel pit. It sells the gravel extracted from the pit to others who use the gravel for surfacing roads and as an ingredient in concrete. Company A removes overlay and raw gravel from the pit. It then transports the gravel to a plant where washing and sizing of the gravel takes place. Company A is a manufacturer, but only with respect to those activities which occur after it severs the gravel from the ground.

RECYCLING OR REPROCESSING WASTE PRODUCTS

The sale or rental of machinery, equipment, computers, and their replacement parts are exempt from tax if they are used directly and primarily in the recycling or reprocessing of waste products. This includes equipment used in the movement of property which is integral to recycling or reprocessing.

“Recycling” means any process by which waste – or materials which would otherwise become waste – are collected, separated or processed and revised or returned for use in the form of raw materials or products. The term includes, but is not limited to, the composting of yard waste. Recycling does not include any form of reprocessing or energy recycling.

Recycling or reprocessing ends when waste or a material which would become waste is in the form of a raw material or in the form of a product.

Machinery and Equipment

Machinery and equipment which may be exempt if used directly and primarily in the recycling or reprocessing of waste products includes, but is not limited to...

- compactors
- grinders
- forklifts
- balers
- cutters
- trucks
- crushers
- shears
- endloaders
- other moving devices

Note: The sale of a bin which is only for storage ordinarily is taxable.

The Process

1. Recycling or reprocessing begins when waste or material which will become waste is collected or separated.

Example

A vehicle used directly and primarily for collecting waste could be a vehicle used for an exempt purpose. Thus, the purchaser of a garbage truck could claim this exemption if the truck were directly and primarily used in recycling and not, for instance, in hauling garbage

to a landfill. Machinery or equipment used to segregate waste from material to be recycled or reprocessed or used to separate various forms of materials which will be reprocessed (glass and aluminum) can also be used at the beginning of recycling or reprocessing.

2. An operation or series of operations which do not actually recycle or reprocess waste may be exempt.

Example

For example, an endless belt which moves aluminum cans from a machine where they are shredded to a machine where the shredded aluminum is crushed into blocks is not taxable.

3. Any equipment used after the recycling or reprocessing ends is taxable.

Example

For instance, a corporation purchases a machine which grinds logs, stumps, pallets, crates and other waste wood into wood chips. After grinding, the wood chips are sold and transported to purchasers to various sites where the chips are dumped and spread out over the ground for use in erosion control. The machine which grinds the wood chips is a machine used in recycling. The truck which transports the wood chips from the machine to the sites is not used in reprocessing because, at the time the chips are placed in the truck, they are in the form in which they will be sold for use other than as a raw material in manufacturing, so recycling has ended.

RESEARCH AND DEVELOPMENT

The sale or rental of machinery, equipment and computers used in research and development is exempt from tax.

“Research and development” means experimental or laboratory activity which has as its ultimate goal the development of new products, processes of manufacturing, refining, purifying, combining of different materials, or meat packing. The ultimate goal of research and development must be to add value to products. It does not include testing or inspection for quality control purposes, efficiency surveys, management studies, consumer surveys, advertising, promotions, or research in connection with literary, historical, or similar projects.

Machinery, equipment, computers

Machinery, equipment, and computers are used directly in research and development only if they are used in actual experimental or laboratory activity that qualifies as research and development. In this case, the purchase of machinery, equipment and computers is exempt.

Example

Frontier Hybrid, Inc., maintains a research and development laboratory to develop a corn plant. It purchases the following items: a computer which will process data relating to the genetic structure of the various corn plants which Frontier Hybrid is testing, an electron microscope for examining the structure of corn plant genes, a steam cleaner for cleaning rugs in the laboratory offices, and a typewriter for use by the laboratory director’s secretary. The computer and the microscope are directly used in the research; the steam cleaner and the typewriter only indirectly used. Therefore, purchase of the computer

and microscope is exempt from tax; purchase of the steam cleaner and typewriter is taxable.

ITEMS THAT DO NOT QUALIFY

Machinery, equipment, and computers purchased by a business that is centrally assessed by the department. Examples of this type of business include electric, gas and water companies, railroad, telephone, pipeline, and electric transmission line companies.

Hand tools: Tools which can be held in the hand or hands and are powered by human efforts.

Point-of-sale equipment: Input, output, and processing equipment used to consummate a sale and to record or process information pertaining to a sale transaction at the time the sale takes place and is normally located at a counter, desk or other specific point where a sale transaction occurs.

Vehicles subject to registration: Vehicles are subject to a motor vehicle use tax and are taxable unless directly and primarily used in recycling or reprocessing of waste products.

Not a manufacturer: A business may be engaged in processing, but is not a manufacturer. Examples include restaurants, retail bakeries, food stores and blacksmith shops.

Supplies: See "Replacement Parts."

Other examples of non-qualified items can be found in the "Industrial Machinery and Equipment" section.

DESIGN AND INSTALLATION

The services of design and installation of new industrial machinery and equipment are exempt from sales tax. All installation charges are exempt from the sales tax if the following criteria are met:

- A. The industrial equipment and machinery are new, not used, AND
- B. The industrial equipment and machinery are used in processing by a manufacturer.

New machinery and equipment designed or installed for rental as well as for sale are exempt. The gross receipts from design or installation must be separately identified, charged separately, and reasonable in amount for the exemption to apply.

"New" means never having been used or consumed by anyone. Installation of reconstructed, rebuilt, or repaired or previously owned machinery or equipment is taxable.

A computer is not considered to be machinery or equipment, and its installation or design is taxable.

The following services are taxable unless they meet the criteria above: electrical, plumbing, welding, and pipe fitting.

FOOD MANUFACTURERS

The exemptions listed for industrial machinery, equipment and computers also apply to manufacturers

that create food products for human consumption. (Note that bakeries and restaurants are not manufacturers.) Food manufacturers are also entitled to certain exemptions not available to other manufacturers. The law specifically addresses the following items.

Fuel

Carbon dioxide (liquid, solid or gas), electricity, or steam is exempt when used in:

- Treatment of material to change its form, context, or condition in order to produce a marketable food product

Examples include washing, sorting, and grading of fruits, vegetables and eggs; mixing and agitation of liquids; sterilization

- Cooling or heating to...
 - maintain the quality or integrity of the food
 - avoid spoilage of the food
 - keep the food in marketable condition
 - maintaining environmental conditions necessary for safe or efficient use of machinery or material to produce the food.

For example, electricity used to air condition a room in which meat is stored to maintain the meat in a condition in which it is easy to slice.

- Sanitation and quality control activities

Examples:

- Fuel used in pH meters, microbiology counters, and incubators to test the purity or sanitary nature of a food product.
- Electricity used in egg-candling lights.
- Electricity used to power refrigerators used to store food samples for testing.
- Electricity used to power “bug lights” or other insect-killing equipment used where food is manufactured or stored.

- Formation of packaging

For example, electricity used by a food manufacturer in plastic-bottle-forming machines is exempt if the bottles will be used to hold a marketable food product such as milk.

- Placement of food into shipping containers

For instance, electricity used by a food manufacturer to run machines that place food products into packing cases, pallets, crates, shipping cases or other similar receptacles.

Other exempt processes

Fuel used in the following activities is exempt from sales tax. This list is not complete.

- manufacturing ice
- refrigerating cheese to age it from “green” to edible
- refrigerating eggs to change their flavor
- pasteurizing and subsequent refrigeration of milk
- “hard” freezing of meat and butter for aging
- canning vegetables
- cooking foodstuffs
- moving material or food product by conveyors, forklifts and freight elevators
- moving material or food products to a loading dock

See Appendix A for information on how to calculate a fuel exemption.

CHEMICALS USED IN PROCESSING

Chemicals, solvents, sorbents, and reagents are exempt from tax if the following apply:

- It must be directly used and consumed, dissipated, or depleted during processing.
- The processing must be performed on tangible personal property intended to be sold ultimately at retail.

The chemical, solvent, sorbent, or reagent does not need to become an integral or component part of the processed tangible personal property.

“Chemical” is a substance which is primarily used for producing a chemical effect. A chemical effect results from a chemical process wherein the number and kind of atoms in a molecule are changed in form; for example, when oxygen and hydrogen are combined to make water. A chemical process is distinct from a physical process wherein only the state of matter changes; for example, when water is frozen into ice or heated into steam.

“Solvent” is a substance, usually liquid, primarily used in dissolving something. For example, water is a solvent of most salts; alcohol of resins; ether of fats.

“Sorbent” is a substance which takes up and holds either by adsorption or absorption. To be exempt, the sorbent must be a substance that is primarily used as a sorbent.

“Reagent” is a substance used for various purposes which takes part in one or more chemical reactions or biological processes. Examples include using a reagent in detecting, examining, or measuring other substances, in preparing materials, and in developing photographs. A reagent is also a substance used to convert one substance into another by means of the reaction it causes. To be exempt, the reagent must be a substance that is primarily used as a reagent.

“Catalyst” is considered to be a chemical, solvent, sorbent, or reagent. A catalyst is a substance which promotes or initiates a chemical reaction. It is exempt if it is consumed, dissipated, or depleted during processing of tangible personal property which is intended to be ultimately sold at retail.

Note: The chemical, solvent, sorbent, and reagent exemption only applies during processing. The definition of processing is limited for this exemption. Processing means a change to the form, context, or condition of tangible personal property. There must be a change occurring during the chemical activity before this exemption applies. See Rule 701-18.29. The definition of processing for a manufacturer under the machinery, equipment, and computer exemption does not apply.

CHEMICALS USED TO TREAT WATER

Chemical compounds placed in water are exempt from tax if:

The water is ultimately sold at retail, or

The water that is directly used in processing, or

The water is consumed during processing.

Special boiler compounds used when live steam is injected into mash or another substance are exempt from tax because it liquefies and becomes an integral part of the product. The product must be ultimately sold at retail.

Note: The chemical, solvent, sorbent, and reagent exemption only applies during processing. The definition of processing is limited for this exemption. Processing means a change to the form, context, or condition of tangible personal property. There must be a change occurring during the chemical activity before this exemption applies. See Rule 701-18.29. The definition of processing for a manufacturer under the machinery, equipment, and computer exemption does not apply.

REPAIR

The repair of machines of all kinds is taxable. Qualifying replacement parts are exempt if itemized separately. Labor charges are taxable. There is no exemption for labor used to repair machines. If there is a lump sum billing for both labor and material, the entire amount will be subject to the tax.

CONTAINERS

Containers, including packing cases, shipping cases, wrapping materials and similar items are exempt from tax when purchased for the purpose of packaging or facilitating the transportation of tangible personal property to be sold at retail or resale.

PALLETS

Pallets purchased by manufacturers to package or facilitate the transportation of tangible personal property to be sold at retail are exempt from tax.

WARRANTIES AND MAINTENANCE CONTRACTS

“Mandatory warranty” is when the buyer, as a condition of the sale, is required to purchase the warranty or guarantee contract from the seller. The cost of the warranty is part of the cost of the item. Therefore, the sale of a mandatory warranty is taxable only if the item is taxable. Sales of replacement parts and materials to the seller furnishing them is a sale for resale and not taxable. Labor performed under a mandatory warranty is exempt, even if performed with a taxable service.

“Optional warranty” is when the buyer is not required to purchase the warranty or guarantee contract from the seller. The price of the optional warranty is taxable.

A preventive maintenance contract is a contract which requires only the visual inspection of equipment

and no repair is or will be included. The gross receipts from the sale of a preventive maintenance contract are not subject to tax.

Additional charges for parts and labor furnished in addition to what is covered by a warranty or maintenance contract are taxable if the service is taxable. Only parts (not labor) are subject to tax when a nontaxable service is performed, but the labor charge must be separately stated.

SALES TAX EXEMPTION CERTIFICATES

Manufacturers must use exemption certificates under two circumstances:

(1) To purchase machinery, equipment, computers and other materials used in the manufacturing process.

Suppliers usually require manufacturers to complete exemption certificates in order to buy materials free of tax. Permits and permit numbers are not necessary to do this.

Most suppliers have exemption certificates; manufacturers may wish to keep a supply on hand and may obtain them through one of the department's forms order services.

Manufacturers who repeatedly make the same purchase from the same supplier may give the supplier a single exemption certificate to cover multiple transactions. Called a "blanket certificate," it should be updated as needed so that it remains accurate and complete.

Both supplier and manufacturer should keep copies of exemption certificates in case of an audit.

Exemption certificates not obtained through the department must have the following information: seller's name; buyer's name, address, nature of business (wholesaler, manufacturer, retailer, etc.); reason for purchasing tax exempt (resale or processing); general description of products purchased; state sales tax or I.D. registration number, if applicable; buyer signature and date of signing.

When a manufacturer buys tangible personal property tax free and then removes it from inventory for uses other than resale and processing, the manufacturer is responsible for reporting and paying the tax to the department.

(2) Manufacturers who also sell the tangible personal property they produce must ask for exemption certificates when selling their products to other businesses who will then resell them. The information given above about suppliers selling to manufacturers also applies in this situation.

Sales Tax Exemption Certificate Instructions

The exemption certificate is to be completed by the purchaser claiming exemption from tax and given to the seller. The seller must retain this certificate as proof that exemption has been properly claimed. The certificate must be complete to be accepted by the seller. The seller can accept an exemption certificate only on property that is qualified (see the exemptions below) or based on the nature of the buyer. If property or services purchased for resale or processing are used or disposed of by the purchaser in a nonexempt manner, the purchaser is then responsible for the tax.

Exemptions:

Resale: Any person in the business of selling who is purchasing items to resell may claim this exemption. The purchaser can be acting as either a retailer or wholesaler and may not be required to have a sales tax permit. Retailers who do have a sales tax permit number must enter it in the space provided.

Processing: Exempt purchases for processing include tangible personal property which by means of fabrication, compounding, manufacturing or germination becomes an integral part of other tangible personal property ultimately sold at retail; chemicals, solvents, sorbents or reagents used, consumed, dissipated or depleted in processing personal property intended to be sold ultimately at retail; fuel used to create heat, power or steam for processing or used to generate electric current; and chemicals used in the production of free newspapers and shoppers.

Lease and Rental of tangible personal property: Beginning July 1, 2004, if tangible personal property is purchased for leasing, the purchase is exempt from tax.

Qualifying Farm Machinery/Equipment: The farm machinery or equipment must be directly and primarily used in agricultural production; and must be:

1. a self-propelled implement such as a tractor
2. a grain dryer (heater and blower only)
3. an implement customarily drawn or attached to a self-propelled implement in the performance of its function, such as a plow
4. auxiliary equipment improving safety, maintenance and efficiency of items 1, 2, 3
5. tangible personal property that does not become a part of real property used directly and primarily in dairy and livestock operations
6. an essential replacement part for 1, 2, 3, 4, 5
7. baling wire, twine, wrapping and other similar items used in agricultural, livestock or dairy production
8. auger systems, curtains, curtain systems, drip systems, fan and fan systems, shutters, inlets and shutter or inlet systems and refrigerators used in livestock or dairy production, aquaculture production, or the production of flowering, ornamental, or vegetable plants.

Qualifying Industrial Machinery/Equipment: This machinery or equipment must be:

- used by a manufacturer
- directly and primarily used in processing tangible personal property or certain other research activities
- certain replacement parts for the above; this does not include supplies

Qualifying Computers:

- sold to commercial enterprise, insurance company, or financial institution
- certain replacement parts; this does not include supplies

Direct Pay: Businesses and individuals who pay their taxes directly to the department rather than to the seller must enter their Direct Pay permit number in the space provided.

Private Nonprofit Educational Institutions: Purchases made by private nonprofit educational institutions

used for educational purposes are exempt.

NOT EXEMPT from sales tax are purchases by most other private nonprofit organizations such as churches, fraternal organizations, etc., for use by those organizations.

Fuel used in processing

The regular exemption certificate is available for fuel used in processing. The fuel exemption certificate is completed and given directly to the seller of utilities. The forms are available through the department.

Basic guidelines for exemption for fuel is found in Appendix A of this booklet.

URBAN REVITALIZATION

Urban revitalization property and industrial machinery may also be exempt from tax. This property must meet other requirements in order to be exempt. Contact the Iowa Department of Economic Development at 1-800-532-1216 for more information about the type of property and the qualifications. For tax information, contact the Iowa Department of Revenue.

ELECTRICITY - APPENDIX A

Electricity: Determine the percentage used in processing

The following method with its alternative table may be used to determine the percentage of electricity used in processing. It is suggested that conservative exempt estimates be made to avoid future liability for sales tax.

To calculate use for a new business, an existing similar business may be willing to share its information if not in direct competition with your business.

First, the base period for the calculations must be selected.

Ordinarily, 12 prior months are used as the base period. However, individual circumstances can dictate that a shorter or longer period should be used or that some 12-month period other than that immediately prior should be used.

Examples:

Company A manufactures its product in a factory that has no windows and is heavily insulated. The factory always runs 40 hours per week, 52 weeks per year. Because of these and other circumstances, Company A's electrical usage does not vary significantly from month to month, and it is easy to document this. Company A can calculate its percentage of exempt use based on a one-month period rather than a 12-month period.

Company B manufactures widgets. The "economic cycle" for widget production is, on the average, 36 months long. During this time there are times when, for months at a time, the plant will operate three shifts. At other times, for weeks at a time, the entire factory will shut down and its personnel will be laid off. The only accurate way to determine the exempt percentage of electricity used is to calculate the use over the entire economic cycle. Therefore, 36 months, rather than 12 months, would be the base period.

Second, calculate kilowatts used per hour by each electrical device.

Kilowatts consumed per hour may be listed on the device itself. If not, formulas can be used to determine this information.

Lights

For *incandescent* bulbs, add rated wattages and divide by 1,000. Multiply by the total number of hours which the light is used during the base period.

$$\text{Watts divided by 1,000} = \text{Kilowatts per hour} \times \text{hours operated in base period} = \text{Total}$$

For *fluorescent* lights, add rated wattages plus an additional 20 percent of rated wattages and divide by 1,000. Multiply by the total number of hours which the light is used during the base period.

$$\text{Watts} + .20 \text{ of Watts divided by 1,000} = \text{Kilowatts per hour} \times \text{hours operated in base period} = \text{Total}$$

Devices other than lights

For these devices, use the wattage rating given by the manufacturer and divide by 1,000. Multiply by the total number of hours which the device is used during the base period.

$$\text{Watts divided by 1,000} = \text{Kilowatts per hour} \times \text{hours operated in base period} = \text{Total}$$

Examples:

1. A machine used in processing consumes 20,000 watts per hour of operation. It is operated 40 hours per week for 50 weeks during a 12-month period. The machine does not operate when the factory closes for two weeks for employee vacation.

(1) $20,000 \text{ watts divided by } 1,000 = 20 \text{ kilowatts}$

(2) $20 \text{ times } 40 \text{ hours per week} = 800 \text{ kilowatts per week}$

(3) $800 \text{ times } 50 \text{ weeks per } 12 \text{ months} = 40,000 \text{ kilowatts per } 12\text{-month period}$

(4) 40,000 kilowatts are exempt for the 12-month period for this machine

2. Assume that a machine uses 30 kilowatts per hour of operation. During a 12-month base period, the machine is used in processing 200 hours per month for three months. The calculation for a 12-month period is as follows:

(1) $30 \text{ kilowatts per hour times } 200 \text{ hours per month} = 6,000$

(2) $6,000 \text{ times } 3 \text{ months} = 18,000$

(3) 18,000 kilowatts are exempt for the 12-month period for this machine

3. The following is a very simplified example of a worksheet for determining the percentage of exempt

electricity when a single meter records both exempt and taxable use. Assume that all items are active 100 hours a week for 50 weeks in a 12-month period.

Items	k per hr.	hrs./wk.	wks./period	Total
ALL EXEMPT				
Machine 1	10	1,000	50,000	50,000
Machine 2	20	2,000	100,000	100,000
Other	10	1,000	50,000	50,000
			Total Exempt:	200,000
ALL TAXABLE				
Air Conditioners	10	3,000	30,000	30,000
General Lighting	15	1,500	75,000	75,000
Office Equipment	10	3,000	30,000	30,000
Space Heaters	5	1,500	15,000	15,000
Other	10	1,000	50,000	50,000
			Total Taxable	180,000
			Total All Usages	380,000

To determine the exempt percentage of total usage, divide 200,000 by 380,000, which equals 53%.

Once the precise percentage of exemption has been calculated, that percentage must be applied during any period for which a purchaser is requesting exemption. The percentage should be recomputed if a substantial and permanent change in the amount of electricity consumed occurs or if the proportion of exempt to nonexempt changes.

Alternatives to the previous method of determining exempt usage of electricity

If currently only one meter measures both exempt and nonexempt use of electricity, the manufacturer should seriously consider separate meters. This choice is especially practical if all exempt use results from the activities of one machine.

If separate metering is impossible or impractical, it may be useful to employ the services of an energy consultant.

If using a consultant is not possible, contact the manufacturer of the machine used in processing. Often, the manufacturer has available a study which gives a more accurate measure of the machine's use of electricity than the formulas. This is especially true in regard to large electric motors.

Fuel exemption certificate

A fuel exemption certificate is given by a buyer to a seller when making tax free purchases. It is the same certificate used for other sales tax exempt purchases.

The department provides these upon request to buyers and sellers. However, any document is acceptable as long as it contains the following information: seller's name and address; purchaser's name and address; type of fuel purchased, such as electricity, propane; description of the purchaser's business, such as manufacturer of steel products, food processor; general description of the type of processing in which the fuel is consumed, such as generating electricity, manufacturing tangible personal property; and the percentage of fuel that is exempt. The purchaser must sign and date the certificate.

The seller has the right to demand additional documentation attached to the certificate, as long as it is reasonably necessary to support the claim of exemption. This could be an electrical consultant's survey or a document prepared by the purchaser.

The purchaser does not have to file a certificate or attach documentation every time a transaction takes place unless a substantial change in the operation has occurred. "Substantial change" means a change that would cause the purchaser to pay less than 90% of the sales tax on taxable fuel.

A buyer who makes tax-free purchases and then uses or otherwise disposes of the fuel in a taxable manner is liable for the sales tax and must remit that tax directly to the department.

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