

New York State Department of Taxation and Finance
Taxpayer Services Division
Technical Services Bureau

TSB-A-92 (10)S
Sales Tax
February 19, 1992

STATE OF NEW YORK
COMMISSIONER OF TAXATION AND FINANCE

ADVISORY OPINION

PETITION NO. S910805B

On August 5, 1991 a Petition for Advisory Opinion was received from Peerless-Winsmith, Inc., 1301 W. Sandusky Avenue, Bellefontaine, Ohio 43311.

The issue raised by Petitioner, Peerless-Winsmith, Inc., is whether its lease of a CAD/CAM software and hardware system used partially for research and development and partially for redesign of existing products to fit a customer's application is subject to sales tax.

In particular Petitioner asks if the following uses qualify the CAD/CAM for exemption under Section 1115(a)(10) of the Tax Law.

- 1) Research and development.
- 2) development of new products,
- 3) expansion of a product line into market driven areas
- 4) design and development of a product solely for one customer
- 5) design and development of a product for one customer then adding that product to Petitioner's catalog
- 6) design and development of a product but only the design is sold
- 7) redesign of a product to fit a customer's application
- 8) redesign of an existing product to fit a customer's application where its redesign requires calculations to insure proper alignment and operation.
- 9) design and development of a product which will be used outside of New York State

In addition, Petitioner asks if the following equipment qualifies for exemption under Section 1115(a)(12) of the Tax Law.

- 10) equipment used to create CAM tapes for CNC manufacturing equipment
- 11) CRT's located in a manufacturing area to provide CAD/CAM information to manufacturing personnel
- 12) software used exclusively to create CAM tapes for CNC manufacturing equipment

Finally Petitioner asks the following:

- 13) As the CAD/CAM is on a lease, and the sales/use tax is due on a monthly basis, is the determination for taxable use versus exempt use made on a monthly basis or some other period of time.
- 14) Is the use of CAD for design of tools and fixturing for research and development projects subject to sales tax.
- 15) Is its use of the CAD for design of tools and fixtures for customer driven development projects subject to tax.
- 16) Is the use of the CAD for design or redesign of tools and fixtures for existing products subject to tax.
- 17) What type of documentation is required to support taxable versus exempt use.

Petitioner is a manufacturer of power transmission equipment (speed reducers) electric motors, fans and blowers. Petitioner has plants in New York as well as outside New York.

Petitioner is leasing a CAD/CAM which will be used in New York in the following manner:

- 1) Aid in the design of new products;
- 2) Aid in the design of fixtures and tool;
- 3) Aid in the redesign of existing products both to improve the product and to conform to customer requests,
- 4) Provide three dimensional graphic models on the CAD/CAM for trial and error use; and,
- 5) Directly generate numerical control machine tapes that are used to operate CNC manufacturing equipment.

Petitioner's CAD/CAM is used in product design for both new and existing products. In this application, Petitioner designs the product for overall dimensions and configurations. With a new product, the system is used to view the entire product and review angles for proper operation. With existing products, the system is used to: (1) Customize the product to a customer's needs, or (2) to expand the product line, into market driven areas.

The CAD/CAM is used for tooling and fixture design for new and existing products. These toolings and fixtures are necessary for the manufacturing of new products or to improve the manufacturing process of existing products. Tooling and fixtures designed by the CAD/CAM are used directly in the manufacturing process.

The three dimensional graphic models on the CAD/CAM are for trial and error purposes. The CAD/CAM performs scientific calculations in order to produce a three dimensional graphic model which can be examined on a CRT (Cathode Ray Tube) from numerous angles as a whole and from cutaway view points. From this model, calculations are then made by the CAD/CAM to determine if performance, function and reliability requirements can be met. If these requirements are met, it is then determined if the design is economically feasible for commercial production. If not, the product is redesigned on the CAD/CAM.

The numerical control tapes are used to provide operating instructions for CNC manufacturing equipment. The tapes provide instructional information to programmable manufacturing equipment, thereby, insuring consistent manufacturing and reducing scrap due to human error.

Section 1115(a)(10) of the Tax Law provides an exemption from sales and use tax for:

Tangible personal property purchased for use or consumption directly and predominantly in research and development in the experimental or laboratory sense. Such research and development shall not be deemed to include the ordinary testing or inspection of materials or products for quality control, efficiency surveys, management studies, consumer surveys, advertising, promotions or research in connection with literary, historical or similar projects.

Section 1115(a)(12) of the Tax Law provides in part for an exemption from sales and use tax for:

Machinery or equipment for use or consumption directly and predominantly in the production of tangible personal property, . . .for sale, by manufacturing, processing, generating, assembling, refining, mining or extracting, . . .but not including parts with a useful life of one year or less or tools or supplies used in connection with such machinery, equipment or apparatus. . . .

Section 528.11 of the Sales and Use Tax Regulations provides that:

(a) Exemption. (1) The sale of tangible personal property purchased for use or consumption directly and predominantly in research and development in the experimental or laboratory sense is exempt from the sales and use tax.

(2) The exemption does not extend to installation and repair services for such property.

(3) An exemption is allowed for the sale of gas, electricity, refrigeration and steam, and gas, electric, refrigeration and steam service of whatever nature for use or consumption directly or exclusively in research and development in, the experimental or laboratory sense.

(4) An Exempt use Certificate (form ST-121) is used to make purchases eligible for this exemption, without payment of sales tax. (See section 532.4[e] of this Title.)

(b) Research and development. (1) Research and development, in the experimental or laboratory sense, means research which has as its ultimate goal:

- (i) basic research in a scientific or technical field of endeavor;
- (ii) advancing the technology in a scientific or technical field of endeavor;
- (iii) the development of new products;
- (iv) the improvement of existing products; and
- (v) the development of new uses for existing products.

(2) Research and development in the experimental or laboratory sense does not include:

- (i) testing or inspection of materials or products for quality control (for machinery and equipment used for quality control in the production of products for sale, see section 528.13 of this Part);
- (ii) efficiency surveys;
- (iii) management studies;
- (iv) consumer surveys, advertising and promotions; and
- (v) research in connection with literary, historical or similar projects.

(c) Directly, predominantly, exclusively. (1) Direct use in research and development means actual use in the research and development operation. Tangible personal property for direct use would broadly include materials worked on, and machinery, equipment and supplies used to perform the actual research and development work. Usage in activities collateral to the actual research and development process is not deemed to be used directly in research and development.

(2) Tangible personal property is used predominantly in research and development if over 50 percent of the time it is used in such function.

(3) Tangible personal property is exempt only if it meets the tests of direct and predominant use.

Section 528.13(a) of the Sales and Use Tax Regulations provides that:

(1) An exemption is allowed from the tax imposed under section 1105(a) of the Tax Law, and from the compensating use tax imposed under section 1110 of the Tax Law, for receipts from sales of:

(i) machinery or equipment used or consumed directly and predominantly in the production for sale of tangible personal property, gas, electricity, refrigeration or steam, by manufacturing, processing, generating, assembling, refining, mining or extracting; and

(ii) telephone central office equipment or station apparatus, or comparable telegraph equipment for use directly and predominantly in receiving at destination or initiating and switching telephone or telegraph communication.

With the exception of Items "3" and "6", the use by Petitioner of its CAD/CAM as set forth in Items "1" thru "9" to develop power transmission equipment (speed reducers), electric motors, fans and blowers qualifies as use in research and development. The expansion of a product into market driven areas as set forth in Item "3" is administrative in nature and does not meet the "direct" test of the statute.

Equipment used to produce numerical control tapes as set forth in Item "10" qualifies for the exemption under Section 1115(a)(12) (See: Buffalo Forge TSB-A-86(26)S).

CRTs located in a manufacturing area which provide manufacturing personnel with information as set forth in Item "11" do not meet the direct test of Section 1115(a)(12) and therefore do not qualify for exemption.

The use of the CAD for design or redesign of tools and fixtures which are used for research and development or manufacturing as set forth in Items "14", "15" and "16" does not qualify for the exemptions provided by Sections 1115(a)(10) or (12) of the Tax Law since its use does not meet the "direct" test required by the statute.

Where CAD/CAM is on a lease as set forth in Item "13", the amount of time it is used in an exempt manner within the billing period versus the amount of time it is used in a taxable manner determines whether or not a tax is due for that period.

As to what type of documentation is required to support taxable versus exempt use, Section 533.2(c) sets forth general guidelines as to what kind of records must be maintained in order to prove exempt purchases as follows:

(c) Purchase records. Every purchaser must maintain documentation to substantiate any exemption, exclusion or exception claimed on the purchase of any tangible personal property or service. The purchase records must provide sufficient detail to independently determine the taxable status of each purchase and the amount of tax due, paid or remitted thereon. Purchase documents should be categorized as follows:

- (1) purchases that are subject to all taxes;
- (2) purchases exempt from all taxes because for resale (inventory and raw materials);
- (3) purchases that are exempt from all taxes for reasons other than for resale; e.g., purchases from an organization exempt from tax pursuant to section 1116(a)(4) of the Tax Law;
- (4) purchases that are subject only to the statewide sales tax or the New York City sales tax, or a local tax; e.g., production machinery and equipment purchased in New York City is exempt from the statewide tax but subject to the New York City sales tax.

Neither the Tax Law or regulations mandate specific types of records to be kept, only that the records kept must be able to prove any exemption claimed or that the tax was paid.

DATED: February 19, 1992

s/PAUL B. COBURN
Deputy Director
Taxpayer Services Division

NOTE: The opinions expressed in Advisory Opinions are limited to the facts set forth therein.