
State of South Carolina
Department of Revenue
301 Gervais Street, P.O. Box 125, Columbia, South Carolina 29214

SC REVENUE RULING #98-19

SUBJECT: Computer Aided Designs Systems and Computer Aided Manufacturing Systems
(Sales and Use Tax)

EFFECTIVE DATE: Applies to all periods open under the statute.

SUPERSEDES: All previous documents and any oral directives in conflict herewith.

REFERENCES: S. C. Code Ann. Section 12-36-2120(17) (Supp. 1997)

AUTHORITY: S. C. Code Ann. Section 12-4-320 (Supp. 1997)
SC Revenue Procedure #97-8

SCOPE: A Revenue Ruling is the Department of Revenue's official advisory opinion of how laws administered by the Department are to be applied to a specific issue or a specific set of facts, and is provided as guidance for all persons or a particular group. It is valid and remains in effect until superseded or modified by a change in the statute or regulations or a subsequent court decision, Revenue Ruling or Revenue Procedure.

Questions:

1. Are the sales or purchases of computers and machines to be used by a manufacturer in a computer aided design system subject to the sales and use tax?
2. Are the sales or purchases of computers and machines to be used by a manufacturer in a computer aided manufacturing system subject to the sales and use tax?
3. Are the sales or purchases of computers and machines to be used by a manufacturer in an integrated computer system, one that employs computers and machines in computer aided design and computer aided manufacturing, subject to the sales and use tax?
4. Is the sale or purchase of a computer or machine to be used by a manufacturer in both computer aided design and computer aided manufacturing subject to the sales and use tax?

Conclusion:

1. Sales or purchases of computers and machines to be used by a manufacturer in a computer aided design system are subject to the sales and use tax since such computers and machines will be "employed in operations preliminary or preparatory to the production of the

marketable product.” See Discussion - Bird & Son, Inc. v. Limbach, 45 Ohio St. 3d 76, 543 N.E.2d 1161 (1989).

2. Sales or purchases of computers and machines to be used by a manufacturer in a computer aided manufacturing system are exempt from the sales and use tax under Code Section 12-36-2120(17) since such computers and machines are “used in manufacturing ... tangible personal property for sale.”
3. Sales or purchases of computers and machines to be used by a manufacturer in an integrated computer system, one that employs computers and machines in computer aided design and computer aided manufacturing, are:
 - (a) subject to the sales and use tax for computers and machines in the integrated system used in designing a product since such computers and machines are “employed in operations preliminary or preparatory to the production of the marketable product”; and
 - (b) exempt from the sales and use tax under Code Section 12-36-2120(17) for computers and machines in the integrated system since such computers and machines are “used in manufacturing ... tangible personal property for sale.”

With respect to an integrated computer system, it must be determined where the computer aided design part of the system ends and where the computer aided manufacturing part of the system begins. **This determination “depend[s] largely upon the peculiarities of the taxpayer's operations, so as to be essentially a question of fact in each case.”** 30 A. L. R. 2d 1449 (1953). It must be determined whether particular computers and machines are “employed in operations preliminary or preparatory to the production of the marketable product” or are employed in the production of the marketable product.

4. The sale or purchase of a computer or machine to be used by a manufacturer in both computer aided design and computer aided manufacturing is exempt from the sales and use tax under Code Section 12-36-2120(17) if it is used substantially (not merely incidentally) in the “manufacturing tangible personal property for sale.” (See Hercules Contractors and Engineers, Inc. v. South Carolina Tax Commission, 280 S.C. 426, 313 S.E. 2d 300 (1984).)

Facts:

Recently, questions have arisen as to the taxability for sales and use tax purposes of computers and other machines used within a computer aided design system (CAD) or computer aided manufacturing system (CAM). For purposes of this advisory opinion, the following definitions will be used:

Computer Aided Design Systems - a system of computers and other machines used by a manufacturer to design products, often to meet the specific needs of a customer. For example, a manufacturer of towels may manufacture towels of specific sizes; however, the design on the towel will be designed for the specific customer who may want the design to reflect a college mascot, a local landmark, a specific emblem, etc.

Computer Aided Manufacturing Systems - a system of computers and other machines that operate and monitor the production machines that directly manufacture the tangible personal property for sale.

Discussion:

Code Section 12-36-2120(17) exempts from sales and use tax:

...the gross proceeds of sales of...machines used in ... manufacturing...tangible personal property for sale. 'Machines' include the parts of machines, attachments, and replacements used...in the operation of the machines and which are necessary to the operation of the machines...

Furthermore, Regulation 117-174.120 provides an interpretation of the term "machines" and reads, in part:

The terms "...parts of such machines" are restricted to the following: (a) they must be used or manufactured for use, on or in the operation of such machines; (b) necessary to the operation of such machines and (c) customarily so used. These restrictions are interpreted to mean that the part or attachment must be purchased in the form in which it will be used by the manufacturer without any fabrication or alteration by him, except the usual and customary minor adjustment (except as stated at 117-174.123) and that it is a standard part or attachment customarily used and, further, that the machine or machinery on which it is used would not do the work for which it was designed if it were not used.

This, of course, exempts all parts and attachments without which the machine would do no work, and, in addition, it exempts parts and attachments designed to increase the efficiency of the machine.

The law, therefore, provides that machines, their parts and attachments, subject to certain restrictions, that are used in manufacturing tangible personal property for sale qualify for the exemption found in Code Section 12-36-2120(17). However, as a general rule, tax exemption statutes are strictly construed against the taxpayer. Owen Industrial Products, Inc. v. Sharpe, 274 SC 193, 262 S.E. 2d 33 (1980), Hollingsworth on Wheels, Inc. v. Greenville County Treasurer et al, 276 S.C. 314, 278 S.E. 2d 340 (1981). This rule of strict construction simply means that constitutional and statutory language will not be strained or liberally construed in the taxpayer's favor. York County Fair Association v. SC Tax Commission, 249 S.C. 337, 154 S.E. 2d 361 (1967).

In order to determine whether machines and attachments are exempt from the tax, it is essential to ascertain the points at which manufacturing begins and ends. American Law Reports Annotated 2d suggests the following in making this determination and reads:

While the determination of whether the use is a taxable one or not appears to depend largely upon the peculiarities of the taxpayer's operations, so as to be essentially a question of fact in each case, it seems that the tax will be imposed where the transportation or storage is clearly of raw materials prior to the start of manufacturing or processing, or of the completed product after such operations have clearly terminated,

but that the handling and storage intermediate to the various manufacturing or processing operations may be regarded as a part of those operations, and so free from the tax. Annot., 30 A. L. R. 2d 1449 (1953).

Also, in Bird & Son, Inc. v. Limbach, 45 Ohio St. 3d 76, 543 N.E.2d 1161 (1989), the Ohio Supreme Court concluded that "tangible personal property which is employed in operations preliminary or preparatory to the production of the marketable product,..., or employed subsequent to the completion of the manufacturing process,..., is not exempt" (emphasis added).

Based on the above, computers and other machines used as part of a computer aided design system are used in designing a product and are not "used in manufacturing ... tangible personal property for sale" since such computers and machines are "employed in operations preliminary or preparatory to the production of the marketable product."

Computers and other machines used as part of a computer aided manufacturing system are "used in manufacturing ... tangible personal property for sale" provided such computers and machines are not "employed in operations preliminary or preparatory to the production of the marketable product,..., or employed subsequent to the completion of the manufacturing process."

Sometimes a computer aided design system is integrated with a computer aided manufacturing system. "[T]he **determination of whether the use is a taxable one or not appears to depend largely upon the peculiarities of the taxpayer's operations, so as to be essentially a question of fact in each case.**" 30 A. L. R. 2d 1449 (1953). Therefore, based on the facts in each case, it must be determined where the computer aided design system ends and where the computer aided manufacturing system begins. This is not always an easy determination and is essentially a determination as to whether the computers and machines are "employed in operations preliminary or preparatory to the production of the marketable product" or are employed in the production of the marketable product.

Finally, it should be noted that, in accordance with the South Carolina Court of Appeals in Hercules Contractors and Engineers, Inc. v. South Carolina Tax Commission, 280 S.C. 426, 313 S.E. 2d 300 (1984), a machine must be substantially used for a manufacturing purpose in order to qualify for the exemption. As such, if a machine is used for both manufacturing (employed in the production of the marketable product) and design ("employed in operations preliminary or preparatory to the production of the marketable product") purposes, then the sale or purchase of the machine is exempt from the sales and use tax if it is used substantially (not merely incidentally) in the "manufacturing tangible personal property for sale."

SOUTH CAROLINA DEPARTMENT OF REVENUE

s/Burnet R. Maybank III

Burnet R. Maybank, III, Director

Columbia, South Carolina
September 9 , 1998