

R&E Tax Credit: U.S. Tax Savings for U.S. Innovation

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Introduction

One of the most under-utilized tax savings opportunities for manufacturers is the U.S. Credit for Increasing Research Activities (R&D tax credit). The R&D tax credit rewards companies who invest resources in innovation; product development; new technologies; new materials, and process development/improvement activities. In addition to Federal tax savings, several states have a similar program that rewards companies for the development or improvement of its products or processes. This article will discuss the following:

- The types of activities that may qualify for the R&D tax credit**
- The types of expenditures that are eligible for the R&D tax credit**
- The different methodologies for calculating the R&D tax credit**
- The types of documentation necessary to substantiate an R&D tax credit claim**
- New, taxpayer-friendly legislation**
- New, taxpayer-friendly treasury regulations**

What is the R&E Tax Credit?

Enacted in 1981 by the Economic Recovery Tax Act, the United States Credit for Increasing Research Activities [also known as the Research & Experimentation (R&E) or Research & Development (R&D) tax credit] rewards companies for the development or improvement of its products, processes, techniques, formulas, inventions, or software applications.

Almost 17,000 taxpayers claimed the U.S. R&D tax credit in 2013 (the last tax year the IRS has published data with respect to the credit), with the manufacturing sector claiming approximately 60% of the \$11.3 billion in R&D tax credits claimed.

The R&D tax credit is a dollar-for-dollar credit against the taxpayer's federal income tax liability. Taxpayers benefit from the deduction in the year the expenditure is paid or incurred (or subsequent amortization expenditure in the event the taxpayer elects to capitalize its research costs for federal income tax purposes) and by claiming the credit.

Approximately 35 states also have incentives for research and development, based upon the federal definition of qualified research. The various state R&D tax credits range from 1.5% to 24% of the eligible research expenditures, with some states requiring taxable income as a prerequisite for utilizing the credit and others refunding any unused credit to the taxpayer irrespective of the existence of taxable income. Each state has its own requirements, and state credits are only eligible for research conducted within the respective state.

The R&D tax credit is calculated based upon the expenditures attributed to a taxpayer's qualified research activities. Numerous sub-sectors within the manufacturing industry perform qualified research. For instance, a proprietary products taxpayer may be developing the next generation of products, a new technology, or a patentable process; or a custom injection molder may be developing new injection molds, part-specific manufacturing processes or new automation capabilities.

Qualified Research Activities - Four Requirements

There are four basic requirements to a qualified research activity. The activities outlined below go beyond the laboratory and R&D departments and demonstrate how companies' engineering, quality and production departments engage in or directly support qualified research activities. The following overview discusses the requirements and how these activities can be applicable.



Business Component

In order for an activity to qualify, taxpayers must be developing a new business component or improving an existing business component that is held for sale, lease, or license, or used by the taxpayer in its trade or business. Business components are defined as products, processes, techniques, formulas, inventions, or software applications. In order for a research activity to qualify, the research must relate to new or improved functionality, performance, reliability, or quality.

Commentary

Manufacturers, whether proprietary or custom, are in the trade or business of manufacturing parts to meet their customers' specifications or needs. To compete, manufacturers are regularly designing and developing new products; improving their existing products; developing new formulas; improving production processes; implementing new automation techniques; or inventing new technologies; and frequently, these activities are aimed at the functionality, performance, reliability or quality of the business component being developed.



Elimination of Uncertainty

In order for an activity to qualify, the research must be undertaken for the purpose of eliminating technological uncertainty concerning the development or improvement of a business component.

Uncertainty exists if the information available to the taxpayer does not establish the capability of developing or improving the business component, the methodology of developing or improving the business component, or the appropriate design of the business component.

Commentary

Many times, we find that companies know that they are capable of developing or improving a product or process and likely have a methodology in place for doing so. However, we have found that the design of the business component is often uncertain at the outset of the activity.



Technological in Nature

The information sought must be technological in nature. That is, the process of experimentation to eliminate the technological uncertainty must fundamentally rely upon the principles of physical, biological, engineering, or computer science. Taxpayers are not required to be seeking information that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of science or engineering in which the taxpayer is performing the research. That is, taxpayers may rely upon existing engineering principles in order to solve the technological uncertainty. Thus, multiple design alternatives may establish the uncertainty required.

Commentary

We have found that most manufacturers rely upon chemistry, physical sciences or engineering principles in order to solve product development and process improvement challenges.



Process of Experimentation

In order for an activity to qualify, a taxpayer must eliminate technological uncertainty by engaging in a process of experimentation. A process of experimentation is an evaluative process and should be capable of evaluating more than one alternative. Treasury regulations define a process of experimentation as modeling, simulation, or systematic trial and error.

Commentary

Frequently, manufacturers create prototypes or pilot models and rely upon CAD modeling, simulation software, and systematic trial and error, often in the form of prototype (PPAP or First Article) construction and testing. These activities regularly qualify for the R&D tax credit.

Qualified Research Activities

The types of activities that may qualify for the R&D tax credit include, but are not limited to the following:

- Developing new product designs
- Improving functionality or reliability of existing products
- Designing new prototypes or prototype tooling
- Developing new pilot models
- Experimenting with processing variables to improve processes
- Improving the functionality or performance of a production process
- Improving manufacturing processes through automation
- Experimenting with new materials, resins or alloys
- Performing PPAP or First Article inspections on new parts to test designs

Non-Qualified Activities

It is important to note that while Congress wished to reward companies for investing in research and development, it did not intend on all activities associated with its research to be credit-eligible activities. Therefore, the Internal Revenue Code and its regulations disallow the following activities:

- Research after commercial production;
- Adaptation of an existing business component to a particular customer's requirement or need where the research is not aimed at improving the business component's functionality, quality, performance, or reliability;
- Duplication or reverse engineering of an existing business component;
- Surveys, studies, market research, routine data collection, or routine quality control;
- Research conducted outside of the United States;
- Research in the social sciences, arts, or humanities; and
- Research funded by grants, contracts, or otherwise by another person

Recent Treasury Regulations

In July of 2014, the Treasury Department finalized treasury regulations clarifying numerous concepts related to research and experimental expenditures. The most notable clarification provides that if expenditures qualify as research or experimental expenditures, it is irrelevant whether a resulting product is ultimately sold or used in the taxpayer's trade or business. This provision may have tremendous impact for custom manufacturers or those that are developing their own production equipment in conjunction with the development of a new manufacturing process.

Qualified Research Expenditures

The expenditures eligible for the R&D tax credit are limited to in-house research expenses and contract research expenses.

In-house research expenditures include:

- Any wages paid or incurred for the performance of qualified services;
- Any amount paid or incurred for supplies used in the conduct of qualified research; and
- Any amount paid or incurred for the right to use computers in the conduct of qualified research.

Qualified services include employees engaging in, directly supporting, or directly supervising qualified research. For example, an engineer may spend time developing alternative designs for a new product; a machinist may spend time producing a prototype part; or an engineering manager may review the results of a first article inspection to determine whether a subordinate's design met the required specifications.

Taxpayers that use supplies in the conduct of research may be able to include these amounts in the calculation of qualified research. The supplies must be tangible, used directly in the performance of qualified services, and not capital expenditures. Examples may include: raw materials used to produce prototypes; prototype tooling; 3-D printed parts; experimental materials; and laboratory supplies.

Taxpayers may also include lease payments for the right to use computers for the performance of qualified research. The treasury regulations require, however, that the computer be leased from a third-party from a location other than that of the taxpayer, making this eligible expenditure a rarity.

In addition to in-house research expenditures, taxpayers may include 65% of eligible contract research. Contract research includes payments to third parties for the performance of research on the taxpayer's behalf. The taxpayer must own substantial rights to the research results and must bear the economic risk regardless of whether the research is successful.

Two Methods

The Internal Revenue Code allows for two methods of computing the R&D tax credit: the traditional credit and the Alternative Simplified Credit (ASC).

1. Traditional Credit

The traditional credit equals 20% of a taxpayer's qualified research expenditures in excess of its base amount. The base amount is the greater of 50% of the current year research expenditures or the product of the average gross receipts from the prior four tax years and the fixed-base percentage. The fixed-base percentage equals the aggregate qualified research expenditures over the aggregate gross receipts during the base period. The base period is determined based upon when the taxpayer first incurred qualified research expenditures.

2. Alternative Simplified Credit (ASC)

At the taxpayer's election, companies may claim the ASC. The ASC is equal to 14% of a taxpayer's qualified research expenditures in excess of its base amount. The base amount is equal to 50% of the average of qualified research expenditures paid or incurred in the prior three years.

If a company has not claimed the R&D tax credit in a particular tax year and the statute of limitations for assessment is still open, it may make an election on an amended tax return claiming the credit.

Documentation

In order to substantiate an R&D credit claim, taxpayers must capture the information necessary to prove that qualified research is taking place, while connecting the employees performing the qualified research to the activities themselves.

Further, for employees that perform both qualified and non-qualified services, employees must bifurcate their time between qualified research and time spent on non-qualified services, such as administrative duties, production, and travel time.

Business documents that many taxpayers already prepare as part of their engineering or reporting systems are the best place to begin. Many times, these documents include, but are not limited to, drawings, designs, pictures, research notes, emails, and meeting minutes creating nexus to the employees performing the qualified research.

By developing documentation procedures to amalgamate with existing engineering documentation, R&D tax credit documentation may be introduced to an organization with little interruption to existing practices.

Utilizing the R&D Tax Credit

There are three limitations to taxpayers utilizing the R&D tax credit: the income limitation, the alternative minimum tax (AMT), and the 25% test (an amount equal to 25% of the taxpayer's regular tax liability in excess of \$25,000).

That is, the federal R&D tax credit is not refundable. A taxpayer must have taxable income in order to utilize the R&D tax credit. Further, taxpayers may not offset the AMT, except in certain circumstances.

The R&D tax credit is a general business credit, thus carrying with it specific tax attributes. For instance, any unused credit may be carried back one year or forward for twenty years.

New Legislation

Recent legislation has made the credit permanent and enhanced its application, removing past limitations for certain taxpayers. The Protecting Americans from Tax Hikes Act (The PATH Act) allows for eligible small businesses, defined as those with average sales of less than \$50 million over the prior three tax years, to use the credits to offset the Alternative Minimum Tax (AMT) using credits generated in tax years beginning after December 31, 2015.

Moreover, the PATH Act allows a qualified small business to apply up to \$250,000 of its research credit against its payroll tax liability (the employer's portion of FICA). In order to offset FICA, the business must have had gross receipts of less than \$5 million in the current year and could not have had gross receipts for any taxable year preceding the 5-taxable-year period ending with the current tax year (e.g., for tax year 2016, the taxpayer may not have had gross receipts in 2011 or earlier). Both changes are effective for beginning after December 31, 2015 and thereafter.

Conclusion

The R&D tax credit may provide a competitive edge to companies investing significant resources in the development or improvement of its products or processes. Taxpayers that have not claimed the credit in the past should review prior years' tax returns to determine whether amending its U.S. income tax return is warranted. Taxpayers already claiming the credit should periodically review their credit methodology, documentation supporting the research expenditures, and the underlying activities to ensure they are claiming the proper amount of R&D tax credit. This approach is prudent to ensure that taxpayers are in line with the IRS' documentation requirements, recent court cases, and ever-changing treasury regulations.

To find out if you qualify for the R&E Tax Credit, or any other available tax incentives, contact:

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About the Author



Michael Devereux II, CPA, CMP is a partner and director of manufacturing, distribution and plastics industry services at Mueller Prost CPAs + Business Advisors. As an energetic and ambitious CPA with an outstanding passion for tax, Mike has identified millions of dollars in tax incentives for the firm's manufacturing clients, has led hundreds of R&D Tax Credit study engagements, and has demonstrated leadership and exceptional judgment in the tax structuring of various acquisitions. He speaks nationally to various professional and industry trade organizations and associations about opportunities to reduce federal and state tax liabilities and has written dozens of articles for trade publications.

Michael has a Bachelor of Science degree in accounting from Missouri State University. He is also a Certified Public Accountant in Missouri and a Certified Manufacturing Professional.



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