

# The Research Tax Credit for the Tooling and Machining Industry

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The Credit for Increasing Research Activities, also known as the Research & Experimentation (R&E) Tax Credit or Research & Development (R&D) Tax Credit, is a rewarding program of which that companies in the tooling and machining industry industries may take advantage of to reduce their Federal and Indiana State income tax liabilities by investing in the development or improvement of their parts products or manufacturing processes.

## About the R&E Tax Credit

The R&E Tax Credit is a wage-based tax credit rewarding companies for the development or improvement of products, processes, techniques, formulas, inventions, or software applications. In addition to qualified wages, companies may capture supply costs for prototypes, as well as 65 percent of contracted labor used during the development process. Companies may benefit by both deducting the research expenditures and by claiming the credit. While the research expenditures are a reduction of taxable income, the R&E tax credit is a dollar-for-dollar reduction of tax. Companies must first use the credit to offset tax for the year the credit is generated. However, if additional credit remains, the company may carry the credit back one previous tax year or forward the next 20 years.

## Requirements

There are four basic requirements for an activity to qualify for a tax credit.

1. Qualified research activities are defined as the development or improvement to a business component, which is defined as a product, process, technique, formula, invention, or software application. Machinists and tool designers are continually developing or designing custom parts, fixtures and tools to meet customer specifications. Most tools are unique products for the company and constitute a business component.
2. The research must be technological in nature. That is, the activities performed must fundamentally rely upon the physical or biological sciences, engineering or computer science. Furthermore, companies may use existing technologies and principles to satisfy this requirement. Machinists and tool designers rely heavily on the principles of the physical and engineering sciences to develop or improve their products or processes.
3. The research activity must be intended to eliminate uncertainty concerning the development or improvement of a business component. Uncertainty exists if the capability or method for developing the business component is unknown, or if the appropriate design of the business component is unknown at the outset of the activity. Machinists and tool designers are constantly searching for more efficient and effective ways to design or build parts. There is an endless number of design specifications and variables to be considered in designing new parts, improving existing parts, or developing manufacturing processes – adhering to tight tolerances, special fixturing requirements, CNC programming, experimenting with different types of alloys or materials, maintaining uniform radii in the lathing process, development of prototype tooling, eliminating or minimizing warpage in the welding and fabrication processes, and maintaining speed of milling process without breakage, maximizing feeds and speeds while maintaining the quality and integrity of the part – all of which are uncertain at the outset of the part design and manufacturing process.
4. Taxpayers must eliminate the uncertainty through a process of experimentation. A process of experimentation is defined as modeling, simulation, or systematic trial and error. In order to eliminate method or design uncertainty, machinists and tool designers typically engage in systematic trial and error, CAD modeling, or and CAM simulation activities.



## Substantiating Research Credit Claims

In recent years, smaller and mid-size Taxpayers have faced new challenges claiming and defending the R&E tax credit. These challenges have not been solely focused on the qualified nature of the activities for which credit is claimed, but rather the documentation supporting the qualified activities.

Companies claiming the R&E tax credit should develop sound record-keeping procedures in order to ensure success upon an IRS or State Taxing Authority examination. By developing these procedures to amalgamate with existing engineering documentation, R&E tax credit documentation procedures may be introduced to an organization with little interruption to existing practices. Taxpayers who are creating documentation procedures must capture the information necessary to prove that qualified research is taking place, while connecting the employees that perform the qualified research to the activities themselves.

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 – including, but not limited to drawings, CAD models, design proposals, pictures, engineering changes notices (ECNs), notes, emails and meeting minutes – create nexus to the employees performing the qualified research.

## The Indiana Research Tax Credit

Companies performing research within the State of Indiana may also be eligible for a tax credit to offset Indiana income tax. The Indiana Research Tax Credit is based upon the Federal definition of qualified research, but limited to those activities occurring within the State.

## Conclusion

The R&E tax credit is an excellent instrument to retain cash in a company. As a company in an ever-evolving industry, the tax credit provides an opportunity to offset some risk assumed by the company and encourages constant innovation.

### About the Authors

Michael J. Devereux II and Adam J. Herman, CPA/ABV/CFF, CVA, ASA are members of MPP&W, P.C.'s Research Tax Credit Group, a division of regional, St. Louis-based CPA and business advisory firm. The Research Tax Credit Group specializes in assisting manufacturers and their advisors to maximize the R&E tax credit. For more details, visit [www.mppw.com/RE](http://www.mppw.com/RE).