



A Reputation For Excellence Using Dynaform

In Today's Tool & Die sector the rules are forever changing. As Automotive Manufacturers design and build new vehicles, they search for more efficient means to build a better, more cost effective product. Recent years have seen the introduction of new, higher strength materials, the forming characteristics of which many companies are unfamiliar with. Paralleling this has been an associated reduction in timelines and tolerances, allowing no room for mistakes.

The process from Data to Steel is constantly being re-evaluated. Keeping up with the competition (both over seas and next door) requires a competitive edge. Dynaform-PC gives designers the ability to run 'virtual tryouts' on forming tools, giving a detailed understanding of part formability before building a tool. This allows designers and tool-room managers to find errors in designs, before hitting any parts. Not only can this analysis be applied to single forming stations, but Dynaform-PC can also simulate multi stage tooling, carrying stress and strain data into successive forming operations. Perhaps the most attractive feature of Dynaform-PC is that it offers peace of mind, allowing designers and builders to proceed confidently through each stage of tool development.

Canadian Engineering & Tool (CET), based out of Windsor Ontario, is recognized globally as tool & die facility on the foremost cutting edge. CET, with the implementation of Dynaform-PC into their design process, now simulates each design before die construction begins.

"Press time is usually one of the most expensive rates in the shop. By minimizing tryout though forming simulations & development, time can be greatly reduced, again, maximizing efficiency" John Laporte, CET

With Dynaform-PC successfully implemented, CET can offer their customers the best "Leading Edge Technology" available for design.

"Dynaform has been a welcome addition to our software solutions. We can accurately predict the success of each tool at the design stage, and we are able to catch costly errors and test multiple processes to find the one that works! The industry has to embrace new technology like Dynaform-Pc in order to stay competitive in today's market" John Laporte, in an interview at a Dynaform-PC benchmark earlier this year. *"My quoting process with the accurate blank estimator is quick and painless. In a few short minutes I have an accurate blank outline to quote from. As well I can use the outline to start my design once we receive the job"*



Client	Canadian Engineering & Tool
Location	Windsor, ON. CAN
Product/Service	Tool & Die (Metal Stamping)
Market	Automotive, Commercial Products



About C.E.T.



CET's facility is state of the art, and has helped to develop and maintain a profitable growing business by providing exceptional service to a large and loyal customer base. CET will always welcome the opportunity to quote on Tooling from new suppliers. With Dynaform-PC in their corner, CET can ensure that their dies are built right the first time.

CET has also seen the accuracy of their quotes increase by running quick forming simulations on the part in question. This gives the design team an understanding of just how many forming stations will be required to produce the finished part, potentially saving their customers tens of thousands of dollars from the cost of building the stamping die, and scrap material from failed, in-press tryouts.

Dynaform defines the blank (or stock) material using a combination of mechanical properties. These properties can include the following:

Mass Density (ρ)	(T/mm ³)
Young's Modulus (E)	(MPa)
Poisson ratio (ν)	no units
Strain Hardening Modulus (K)	(MPa)
Strain Hardening Exponent (n)	no units
Plastic Strain ratios (r00, r45, r90)	no units

Other factors that affect forming results in Dynaform include tool velocities, lubrication, carrier and stretch-web design, as well as the tooling surfaces themselves.



We welcome C.E.T. to our elite group of users world wide. Dynaform-PC support (available by telephone, online, or web-based) is award winning and will do whatever it takes to insure success in using the product.

"Imagine having the ability to try out your tool design before you begin to build the tool. With Dynaform you can do just that."
John LaPorte February 20, 2003

Canadian Engineering, located at 2265 South Cameron Blvd. in Windsor, Ontario, Canada, was incorporated in 1922, and designs and builds metal stamping dies, including stage, progressive and transfer dies, primarily for the automotive industry. Our customer base currently includes companies in Canada, U.S.A., Mexico and China.

Located in a modern 67,745 square foot facility, Canadian Engineering employees 90 people, including 65 toolmakers and machinists, and features a fully networked Engineering department that uses Dynaform, DieQuoter, BlankNest, Catia, Autodesk - Mechanical Desktop, Camax, Powershape, Smartcam, Powermill, and SDRC to provide an impressive array of services. In house design is done in Catia solids for ease of design review. Our tryout capabilities include tryout presses up to 1000 tons and 100 x 180 bed size.



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