Accurate cost calculation with Teamcenter Tool Costing and NX Feature2Cost for toolmakers

**Benefits**
- Reduce RFQ processing time with increased calculation speed
- Automatic, accurate and less error-prone tool cost calculations
- Eliminate budget overruns with more accurate tool costing
- Increase automation and systematization via integrated environment

**Features**
- Automatically identify features on molded or stamped parts
- Opportunity to manually modify the resulting cost drivers
- Seamless integration between Teamcenter and NX
- Calculation based on standardized commercial terms such as exchange rates

**Provide the best price in the shortest time with highest quality**
Tooling companies need to deliver high-quality mold and stamping tools and at the same time reduce production costs and shorten delivery times. Cost calculation in tool and mold making is an important basis for competitiveness and is an extreme challenge for the lot size of one. Since toolmaking companies are characterized by a one-off production, the challenges are even higher. Many toolmakers use rough calculations, including estimates by experienced staff, as a common costing support. The goal should be to significantly reduce deviations from the budget and to eliminate large fluctuations to close life-threatening financing gaps. Ultimately the tooling industry is striving to pull together the multiple pieces of the tooling process and integrate within their landscape. Of great importance is the seamless integration between software solutions to support the execution of the calculation in short time, based on a valid and accurate data.

**Automatic feature recognition for an efficient tool cost calculation**
Tooling manufacturers can now automatically and accurately determine tooling production costs using the integrated capabilities of Siemens Digital Industries Software solutions. The digitalized process, from quotation calculation to tooling manufacturing, can replace time-consuming manual job tasks. This process gives tool manufacturers a unique advantage in a highly competitive industry.

Siemens offers the solution NX Feature2Cost, which is an integrated application for tool cost calculation in NX™ software. NX Feature2Cost can automatically identify features on molded or stamped parts using the robust feature recognition capability. NX Feature2Cost supports tool cost calculation primarily in connection with Teamcenter® Tool Costing, which is a database-powered application. With Teamcenter Tool Costing, you can create timely and reliable cost estimates for quotation and tool cost analysis.

Calculation of tool costs in Teamcenter Tool Costing requires geometrical information. Instead of entering values and features manually, NX Feature2Cost can be used to analyze the part and extract cost-driving features like general product information, undercuts, ribs and openings.

3D models designed in NX or imported from other CAD systems are analyzed in NX Feature2Cost to automatically recognize part features such as:

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- For plastic parts: wall thickness, ribs, openings, undercuts, etc.
- For sheet metal parts: bends, cutting, drawing, embossing areas, etc.

In the example above, two of the three undercuts visible on the part will drive the need for sliders to pull away before the tool can open. The resultant effect of these sliders will increase the tool size and possibly the injection molding machine size and the cycle time. Giving the design engineer the ability to assess and reduce these cost drivers a huge benefit.

The complete set of recognized features along with their parameters is seamlessly transferred to Teamcenter Tool Costing. After providing additional information, such as the production site and machines, the system can precisely calculate the tooling cost.

Success factors with innovative and advanced feature recognition

Tooling manufacturers are positioned to win more orders and increase their profitability with the ability to quickly provide accurate quotations. Within the NX Feature2Cost and following the full analysis, tool shops obtain a list of features/characteristics that are cost drivers impacting tool and piece price. NX Feature2Cost includes interfaces for additional data formats including JT™, Parasolid®, STEP and IGES. Existing NX translators can be leveraged for other native CAD data formats (for example CATIA® and Creo®).

NX Feature2Cost helps your business with innovative and advanced feature recognition to always stay ahead of your competition. Don’t let mold and stamping quoting get between you and your success. With NX Feature2Cost you’ll be able to process as many as 40 percent more quotes in the same amount of time – the days of spending a fortune on tool cost estimations are finally over.