Winning in today's global marketplace requires more than just creating innovative product designs. To succeed, you must also focus on product quality, manufacturability, development time and costs. On a global average, 30 percent of engineering effort is spent on rework due to late design changes occurring because of downstream manufacturability and assembly issues.

DFMPro, a best practice driven design for manufacturing software, enables engineering executives to make informed design decisions by identifying and addressing downstream manufacturability, assembly, quality, serviceability (DFx) related issues upfront and reducing unnecessary rework and engineering changes.

**DFMPro Success Stories**

**Motorola Solutions Inc.**

"Geometric Limited has quick, test-driven analysis tools – DFMPro and GeomCaliper. They are indeed simply integrated, intuitive and seamless in Creo (Pro/Engineer). The results of tool aid us in improving our design and reducing issues in downstream."

Paul Lalinde
Engineer Mechanical Staff Principal Motorola Solutions Inc.

**Toshiba Corporation**

"Now 3D design data of our products are checked by the DFMPro in the design process. Our conventional checking process by designers was highly time-consuming. In contrast, the DFMPro checking is truly fast and reliable in searching the parts to be redesigned or corrected, and the checking criteria can be customized for the appropriate checking of our own products. As a result, we successfully reduced 75% of the checking time of the wall thickness to enhance the efficiency and effectiveness of our design improvement before the release of drawings."

Kaoru Mizoroki
Group Manager Toshiba Corporation

**Whirlpool Corporation**

"DFMPro helps our designers quickly identify the issues which are otherwise difficult to capture at the design stage. These issues include things like mold wall thickness and undercuts in plastic parts, incorrect bends in sheet metal parts which cause problems downstream. This tool helps our design teams understand the processes involved in manufacturing. In other words, helps them understand how to Design for Manufacturing. This leads to a significant reduction in design iterations due to issues with manufacturability and a reduction in design checking time. Our aim is to get designs right the first time and this tool helps us achieve this goal."

SK Pradeep Kumar
Director – E&T Capabilities
George Angelov
Director – Global Prototyping & Planning Whirlpool

**About Geometric**

Geometric is a specialist in the domain of engineering solutions, services and technologies. Its Geometry Technology Solutions (GTS) business unit develops cutting-edge point productivity solutions that enhance design and improve manufacturing operations. The end-user products from Geometric include CAMWorks®, eDrawings® Publisher, DFMPro®, GeomCaliper®, 3DPaintBrush™, CAMWorksXpress® and Glovius®. The key technologies from Geometric are NestLib®, Feature Recognition (FR), GeoemDiff and 3DSearchIT®. Geometric licenses these technologies to OEM partners and also designs and implements customized process solutions using these technologies for industrial customers.

For further details about Geometric's GTS business unit, please visit www.geometricglobal.com/products

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Faster and Smarter Innovation with First Time Right Design

DFMPro automates and formalizes the design review process Seamslessly integrated inside PTC CREO Parametric™, Siemens NX™ and SOLIDWORKS®
Facilitates corrections on designs without leaving the familiar CAD environment
Eliminates time-consuming file transfers using standard formats such as IGES and STEP
Provides a mechanism for capturing best practice knowledge and brings in standardization across the organization

Easy and Powerful DFM Software to Drive Measurable Results Fast

Reduces rework and improves productivity by as much as 15%
- DFMPro validates upstream manufacturability, identifying design areas that are difficult, expensive or impossible to manufacture
- Automates and formalizes the design review process using best-practice handbooks and industry associations
- Evaluates design models for manufacturing and assembly and suggests corrective actions based on library of 100+ design rules for core manufacturing processes
- Provides a mechanism for capturing best practice knowledge and brings in standardization across the organization

Key Benefits
- Automates in-house DFM practices incorporated in organization’s standard operating procedures
- Captures design errors early in the design stage and ensures past mistakes are not repeated
- Leverages and reuses experience of experts
- Facilitates on-the-job training of design engineers

Run DFM analysis in familiar CREO Parametric® interface

Capture best practices knowledge

Detailed reports enables design engineers to make informed decisions and explore design alternatives to develop a more robust, cost-effective and producible design
Generates interactive 3D & 2D reports in multiple formats (HTML, Excel and eDrawings® Publisher) for easier analysis and interpretation
Improves design collaboration between departments, suppliers and vendors

Improve Time to Market Reduce Rework
Reduce Learning Curve Reduce Product Costs

Design Engineers Organization Manufacturing Engineers

Informed Decision Making with Comprehensive 2D and 3D Reports

Using DFMPro, companies are able to significantly reduce rework and engineering change orders (ECOs), and reap immediate benefits by reducing defects, costs and delays

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Using DFMPro you can maximize engineering productivity by 15%

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