

Mathcad versus Spreadsheets

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ABSTRACT

For a wide range of global organizations in today's competitive marketplace, faster time to market, improved product quality and continuous regulatory compliance remain primary objectives-all while fostering continuous innovation. Engineering-driven organizations-from aerospace to automotive to pharmaceutical companies-also share these objectives, but the stakes are arguably much higher as they strive to successfully manage their business-critical information. The failure to manage engineering calculation information poses a tremendous risk, as a single mistake can bring down an entire multi-million dollar project-and even jeopardize lives and property. With engineering driving the success of so many Global 1000 companies today in an increasingly technical economy, organizations are waking up to the need to put their business-critical calculations under management. Whether computing critical product parameters to gauge the impact of obtaining steel from a new supplier, analyzing test data to verify circuitry for a new semiconductor or predicting product performance to determine the elasticity of diapers, applied math calculations form the backbone of design engineering projects. Numerous calculations inform virtually every design decision during each step of product development.

Keywords: MATHCAD, CAD MODELS, CALCULATION, SPREADSHEETS, MANAGEMENT

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