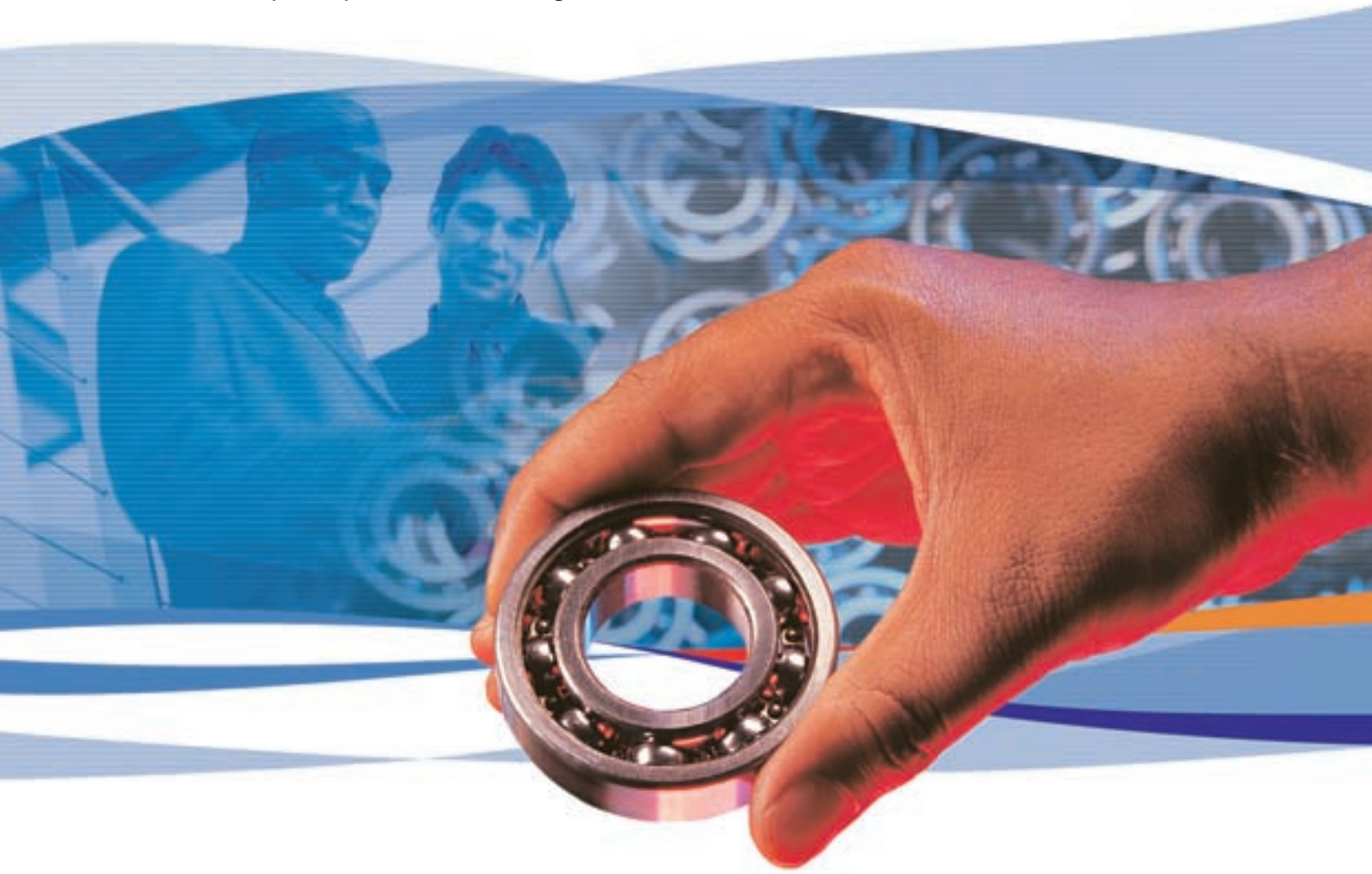


Product Lifecycle Management Solutions for Industrial and Consumer Goods Product Manufacturers

Part of IBM's express portfolio of offerings for medium-sized businesses



Product Lifecycle Management (PLM)

A strategic approach to create and manage a company's product-related intellectual capital, from initial conception to end of life. A business solution invented by IBM and Dassault Systemes to improve product development processes and their ability to use product-related information to make better business decisions.

Product Lifecycle Management express portfolio of offerings for medium-sized businesses

PLM packaged and priced for you

As a designer and manufacturer of industrial products or consumer goods, your enterprise has many of the same challenges as larger manufacturers, including:

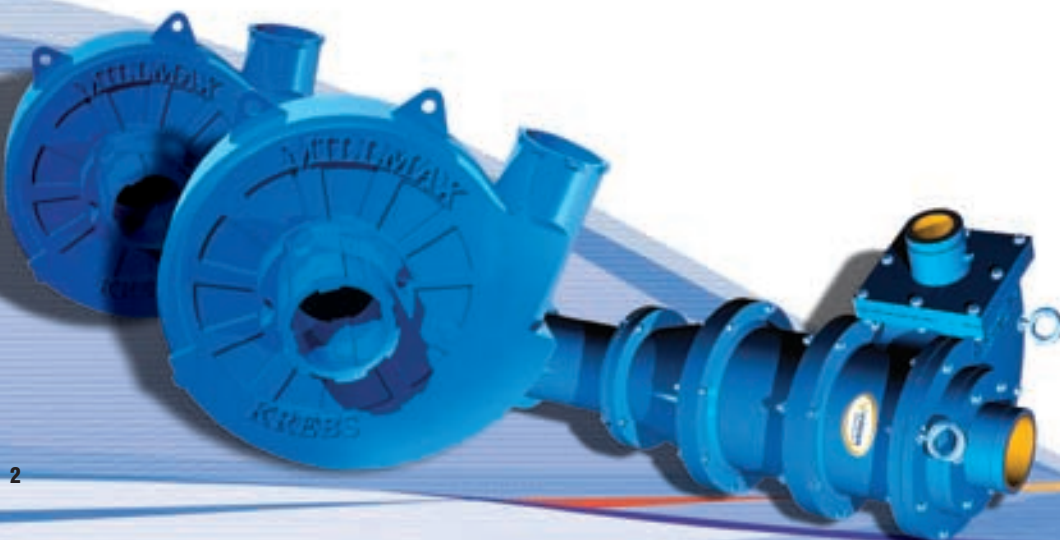
- *The need to anticipate and respond to marketplace and customer requirements quickly and accurately*
- *Increased dependency on teaming and partnering with customers and other supply chain members without compromising intellectual capital and computing infrastructure*
- *Increased product complexity and variations, further complicated by the need to adhere to international standards.*

Major manufacturers are overcoming these challenges – and many more with PLM. The small and medium size companies quoted in this brochure are seeing the benefits of IBM PLM Solutions, which include industry-leading software tools CATIA Version 5 and SMARTEAM. Also consider the following documented results being achieved with PLM:

PLM Best Practices

Challenge	Result with PLM
Engineering change	90% faster
Material sourcing	2%-5% materials savings
RFQ response	60% faster
CTO/ETO order errors	90% lower
Documentation	80% cost reductions
R&D waste	2% of total R&D spend

Source: Kevin O'Marah, The AMR Research Report, 24 April 2003.



Heard about IBM PLM Solutions?

"The potential of CATIA V5 is endless; we discover each day new capabilities... We knew that CATIA is popular in large companies. Our experience with V5 proved that it is also perfect for mid-range companies."

Michael Tranberg

*Technical Manager, Motoman Robotics
Maker of turnkey robot cells that integrate fixturing systems.*

"Perhaps what's most amazing is we are using solutions that until recently only mega-corporations with huge budgets could afford to buy and implement... But with SMARTEAM, we implemented and performed our legacy data conversion literally overnight."

Mark Holmberg

*Engineering Process Manager, Krebs Engineers
Developer and manufacturer of cyclone separation equipment.*

And now, industry specific PLM solutions from IBM and Dassault Systèmes, the world leaders in Product Lifecycle Management solutions, can help you achieve these benefits.

These PLM solutions include the specific functionality medium-sized business customers have told us they need, priced to deliver maximum value and designed to grow as your business grows. They also work seamlessly with other components of the IBM express portfolio of offerings, including IBM WebSphere Application Server Express for secure collaboration over the Internet.

PLM Solutions for Industrial and Consumer Goods Product Manufacturers are easy to buy, install, learn and maintain, offering five new pre-engineered bundles designed to meet the specific needs of various industry segments. Each bundle includes CATIA and SMARTEAM modules specifically chosen for your industry segment, plus your choice of all the hardware, service and support needed to get you going and keep you running. All bundles are available directly from IBM or through your local IBM Business Partner. Either way, you are assured of skilled support from a knowledgeable resource who understands your industry's unique needs. So why not have the best CAD and PDM applications on the best hardware backed by the best service and support in the business? You deserve them. And now you can afford them.

Heard about IBM PLM Solutions?

"Now we don't have to develop things twice and are able to search on existing work done. This helps us in having shorter response times to customers and also saves us time because we do not have to re-do things..."

Hans Wickström

Peltor

Manufacturer of hearing protection headsets and sports safety equipment.

"Thanks to this software we were able to produce almost an entire new product range, and it has helped us to reduce production cycle times by between 35 and 40 percent. On a product development cycle of 18 months we have gained five or six months..."

Gianni Grazioli

Grand Soleil

Manufacturer of toys and garden furniture.

PLM: The key to unlock your success

PLM addresses the very real challenges businesses like yours grapple with every day. These PLM solutions for Industrial and Consumer Goods Product Manufacturers can help you:

- *Respond to RFPs and RFQs more quickly. PLM re-uses existing designs as the basis for new ones, maximizing the use of standard components with easy BOM extraction for cost analysis, and rapid DMU (Digital Mock-Up) synthesis and analysis to arrive at early estimates of product performance*
- *Reduce the long cycle times for custom projects. PLM facilitates concurrent engineering, performing quick virtual mock-up analysis to detect errors earlier and avoid late iterations. Structural analysis can be integrated into the design stage enabling computer-aided stress testing and validation earlier in the product development cycle shortening time to market by creating better designs faster. Design changes are automatically propagating throughout the product improving engineering productivity and reducing errors.*
- *Avoid the delays caused by poor coordination with other teams, suppliers and business units. PLM integrates business processes and applications throughout the supply chain, attaching product data directly to product designs, alerting team members everywhere to changes that require their attention, and facilitating the assembly and viewing of designs from multiple CAD systems in a single window*
- *Minimize development costs in a low-margin market. PLM reduces development costs by promoting increased worker efficiency, reduced re-work, faster propagation of changes throughout the design, and virtual rather than physical prototyping. PLM also simplifies collaboration processes and bridges the gaps between disparate tools, eliminating conversion and interface errors*
- *Respond quickly to changes in customer needs. PLM helps increase the rate of product innovation while lowering the cost and time required to make changes late in the development process, allowing you to anticipate and rapidly respond to marketplace demands.*

In short, PLM is about what drives your success: giving customers precisely what they want while cutting costs, reducing cycle times, collaborating with an expanding universe of partners and suppliers, maintaining quality and, in the process, improving margins and the bottom line.

PLM: Letting your business operate 'on demand'

When you look at the competitive dynamics driving your business today, they all boil down to responding with speed to any customer demand, market opportunity or external threat – a dynamic IBM describes as e-business on demand.

To operate on demand, your business processes must be integrated end-to-end across the company and beyond, linking in key partners, suppliers and customers as easily as the engineer at the next workstation. For manufacturing companies, PLM delivers this capability, making it the key to becoming an on demand e-business.

On demand businesses are responsive, variable, focused and resilient:

- *Responsive because they can meet every customer demand and maximize their market opportunities*
- *Variable because they are better equipped to respond rapidly to unexpected changes in the business environment*
- *Focused because they are organised around their products – the source of their profits and the lifeblood of their business*
- *Resilient because they have harnessed the ability to react to rapidly changing market conditions, manage risk and outpace their competitors with new capabilities.*

PLM, based on CATIA and SMARTEAM is responsive, delivering uncompromising support of the real-time decision-making process, from the shop floor to the board room. PLM enables variability, helping companies use portfolio management strategies to assess early in the development cycle if a product is likely to succeed in the marketplace. PLM has a razor-sharp focus on product, making product-related information from throughout the enterprise available across the extended enterprise. And PLM is resilient, reducing operational risk, providing robust security and privacy for your intellectual capital and supporting continuous system infrastructure availability.

PLM is what a product-focused company needs to succeed in today's competitive environment. And these PLM solutions for Industrial and Consumer Goods Product Manufacturers are designed for you.



PLM solutions for Industrial and Consumer Goods Product Manufacturers

Sized for your current needs, expandable for your future ones

These PLM solutions from IBM and Dassault Systèmes start with CATIA V5 product design modules and SMARTEAM product data and release management modules tailored to the needs of the following industry segments:

- *Industrial equipment – streamlines the entire industrial system engineering process from definition to integration.*
 - *Machinery and mobile equipment – accelerates the mechanical engineering process from assembly definition to functional verification*
 - *Generative tooling (jigs and fixtures) – removes the manual design phase and facilitates automated tooling reconfiguration*
 - *Progressive die tooling – accelerates the progressive die design process from bidding to manufacturing and maintenance*
 - *Styled packaging, styling and plastic products – easily creates, controls and modifies engineered and free-form surfaces for plastic products, consumer goods and packaging.*
- In addition, each bundle is available with everything you need to get up and running quickly with your new PLM solution, including your choice of the software, hardware, service and support to achieve the functionality you desire:
- *IBM WebSphere Application Server Express for a security-rich, robust Web services delivery platform that helps extend your PLM system to remote users and your supply chain.*
 - *IBM ECSR (Electronic Customer Support Rep) enhanced support, including access to 24 hours a day, 7 days a week, Web-delivered support and telephone access to 150 trained PLM support specialists worldwide who can answer your end-user questions in 20 native languages.*
 - *Web-based learning solutions that deliver basic application training and learning resources that provide a true companion right at an engineer's workstation. Functions include context-sensitive help and monitored practice such as 'Show Me,' which walks a user through a process, and 'do it, CATIA' which performs the function for the user.*
 - *IBM engineering workstations, including IntelliStation workstations and ThinkPad notebooks certified and tuned to maximize the speed of your CATIA applications, with optimal graphic performance and extensive expansion capabilities.*



Heard about IBM PLM Solutions?

"...We needed an overall solution, a complete solution, with close-at-hand support... Today the solution works, all training and implementation deadlines have been met and we're over the moon."

Jean-Philippe De Groot

*General Manager, Engineering, Automatic Systems
Maker of access control and pedestrian/vehicle security systems including motorway tolls and turnstiles.*

"Thanks to it's visualization, the customer is rapidly involved in the production process and it's clear data management tools give us instant information retrieval at any time."

Fritz Sollberger

*Magerle AG
Swiss maker of precision industrial cutting machines.*

- *IBM@server xSeries servers enable shared application access and secure network connections with revolutionary advances to I/O, memory and processors and a pay-as-you-grow approach to Intel 32- and 64- bit systems. And with the large amounts of data generated by PLM applications, reliable, easily managed storage systems take on added importance. IBM's TotalStorage products offer a broad range of expanded storage solutions focused on open standards and interoperability for today's heterogeneous environments. The IBM@server xSeries server also features IBM Director, enabling your IBM Business Partner to remotely manage your IT infrastructure.*
- *IBM or IBM PLM Business Partner services for design and innovation best-practice consulting, training, implementation support and customisation.*
- *IBM Global Financing for flexible, low-rate financing for your total solution.*

Best of all, PLM solutions from IBM and Dassault Systèmes are designed to deliver what your company needs today without limiting its options tomorrow. Every solution in the PLM express portfolio comes with a clear upgrade path to more advanced features and functions, ensuring your investment is protected as your business grows and changes.

So if you thought PLM wasn't for you or that you couldn't afford the best PLM software, hardware and support on the market today, think again. PLM Express solutions from IBM deliver an unbeatable competitive edge at a price you can afford. So what are you waiting for? Call your authorised IBM Marketing Representative or IBM Business Partner representative today. Soon your competitors will be the ones scratching their heads and wondering how you do it.

ibm.com/solutions/plm/express is your one-stop source for the latest information on Product Lifecycle Management express portfolio of offerings for medium-sized businesses.



While you are there, try our new, free PLM diagnostic. In just 15 minutes, you can project the proven, real-world benefits of PLM to your business. Visit today!

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