

## Styled plastic and packaging solution from IBM



### Drive innovation and growth

Product lifecycles are growing shorter. Customer expectations are rising. Do you have the tools necessary to respond to these changing market demands? The styled plastic and packaging solution from IBM is designed to unleash the creativity to help you innovate and create winning products. Achieve a strong competitive edge with advanced styling and design.

### Gain support for design and process transformation

We know that you face multiple challenges in accelerating design, optimizing product quality and ensuring a high level of innovation in this complex global environment. That's why IBM has developed a set of PLM practices, in partnership with Dassault Systèmes, to help you bring innovative products to market at a lower cost. Our PLM practices cover industrial design, detailed design and collaboration.

- From concept to detailed moulded part styling and detailing
- Reverse engineering for industrial design
- Photo rendering
- Functional molded part design

We offer a new product set within CATIA V5 that provides a revolutionary way to conceptualize by enabling users to quickly and simply transform a shape idea into a 3D exact geometric model. And we offer the middleware and consulting services to support innovative design and business process transformation—helping your company gain market share and penetrate new markets.

### Realize the benefits of innovative design

The styled plastic and packaging solution from IBM offers many benefits.

- Optimize design visibility, product quality and innovation.
- Accelerate dramatically complex surfacing design.
- Reduce the number of physical prototypes with virtual visualization to drive down cycle costs.
- Virtually eliminate errors by reducing product cycle times. Increase customer satisfaction and loyalty.
- Integrate collaboration and data management.

In addition to powerful design applications, IBM offers an entire portfolio of product lifecycle management support. We leverage our own experiences using PLM applications and concepts to turn around our business, as well as the expertise gained from implementations for manufacturers of all sizes around the world. We can help you utilize applications, middleware and business process transformation to develop a culture that supports product innovation.



### Enhance customer loyalty and gain market share

Effective collaboration, integration between industrial design, engineering and other business units, and control of the development process—the keys to increase market share and enhance customer loyalty in this global market. The styled plastic and packaging solution from IBM is designed to help you deliver the right products on time while minimizing product lifecycle costs.

### Leverage our consumer goods experience

The IBM Product Lifecycle Management team has dedicated resources with experience and knowledge gained from implementing styled plastic and packaging solutions in the consumer goods industry.

- We offer complete and integrated solutions through the combination of industry leading IBM engineering and middleware software, hardware and consultancy delivered by IBM Global Services and IBM PLM Business Partners.
- Having developed PLM practices, in partnership with Dassault Systèmes, specific to the consumer goods industry, we can offer a solution that promotes efficient reverse engineering, collaboration and rapid prototyping.
- We have a proven deployment approach for fast and successful implementations.
- We employ more than over 1,300 experts specifically dedicated to PLM.

## Bring innovative products to market quickly

In the low-margin, competitive consumer goods industry you need to differentiate your company. Develop the right product at the right time for the right customer. Our solution can transform your business processes using a suite of software tools—including CATIA V5 with the new Image & Shape 2 product dedicated to shape creation for industrial or conceptual design—and an evolving set of specific PLM practices. Use collaborative workspaces and data management to aid information exchange.

- Increase data visibility requirements with multisite concurrent engineering.
- Deliver the right products to market at the right time by shortening cycle times with tools that allow you to simulate designs and help reduce costly, time-consuming prototype production.
- Drive product quality and innovation by translating market requirements directly into design.
- Analyze the impact of change early in the process through 3D product visualization.
- Increase product quality and customer satisfaction by rapidly integrating product changes late in the design cycle.
- Record simulation data to avoid future errors with the ability to reuse previous data.
- Capture, reuse and modify designs with collaborative reviews using powerful visualization and communication capabilities.

The new Image & Shape 2 product offers designers:

- Ability to directly shape an idea in 3D.
- Design freedom with a blank screen.
- High quality surfaces with built-in analysis.
- Minimal physical prototypes.
- Standard surface integration.
- Solid integration.
- Ability to go straight to detailed design, mold design or production.

## Estech improves design innovation

With customers requesting more design proposals than before, French design-house Estech needed powerful tools to stay on the leading edge and produce high quality designs during the conceptual design phase. Estech chose to use the CATIA Image & Shape module in part because of its subdivision surface technology that allows users to quickly and easily create realistic 3D geometric models without prior sketching or prototyping. Subdivision surface technology was once reserved for the entertainment industry to produce high definition animation films. CATIA V5 is the first and only PLM solution to incorporate it.

As a consequence, designers have complete design freedom plus the ability to produce 3D geometric models that can easily be leveraged by engineers. With CATIA Image & Shape, Estech save times, increases precision and foresees eventual problems earlier by integrating any 'what if' scenarios directly in the 3D design.

## Drive down costs to increase profitability

We can help you maximize efficiency, drive down costs and bring products to market more quickly.

- Accelerate complex surfacing design with collaborative reviews and knowledge sharing.
- Help drive down cycle and production costs by replacing physical prototypes with virtual visualization.
- Speed up time to market with virtual real-time views of design throughout the process.
- Bring products to market faster to help increase profitability.

## Implement and support a proven design solution

Are you effectively implementing a collaborative solution and data management systems across the extended consumer goods design process? IBM can help you integrate a solution based on consumer goods and packaging PLM practices. We offer best-in-class computer aided design programs, digital mock-up and knowledge management for consumer products, styled plastics and packaging.

## IBM—innovative practices and integrated processes

IBM offers a complete, innovative and integrated portfolio for creating, controlling and modifying engineered and freeform shapes. In partnership with Dassault Systèmes, we have developed PLM practices, specific to consumer goods for product lifecycle management. Our solution offers:

- Integrated reverse engineering and rapid prototyping capabilities.
- Innovative styling and plastic products processes using CATIA V5 and EnoviaSmarTeam products from Dassault Systèmes.
- IBM Business Partner products to maximize added value on downstream processes.
- Easy-to-use surface and shape tools that can be used by non-surface specialist engineers.
- Management of knowledge—embedded capabilities to guide users through tasks, speed up design generation and help reduce risks.

## Connect designers with global players

IBM offers the consumer goods industry an infrastructure that connects design engineers with global players. The new CATIA Image & Shape 2 offers native integration into CATIA and features new approaches, such as:

- Surface modeler based on new technology, enabling complex shape description with very few elements.
- Use of subdivision surfaces adapted to the CAD world.
- Curve modeler that is “stylists-oriented,” giving the user a natural and intuitive way of drawing and controlling a complex curve.
- New construction methodology based on topology description.
- Dedicated and simplified user interface.

In addition, the styled plastic and packaging solution offers:

- Concurrent relational design
  - Speed the design process with efficient tools that allow several designers working on various components of a shared assembly structure in a structured environment. Maintain consistent, accurate and timely data with a single virtual real-time view of the process.
  - Allow assembly associations between designers.
- Reverse engineering and industrial design
  - Avoid data flow interruption between industrial and mechanical design.
  - Reduce time and expense of creating physical mock-ups with digital tasks.
  - Provide a dedicated and simplified user interface for communication exchange.
- Molded part design
  - Simplify preliminary designs with an intuitive, user-friendly native skeleton approach.
  - Manage design specification changes more effectively with a single view of real-time data.
  - Incorporate process-oriented features that allow robust design changes and advanced 3D features.

## Fissler implements CATIA V5 and EnoviaSmarTeam

Fissler GmbH Idar-Oberstein Germany, a market leader in cookware, worked with IBM to drive innovation in product design. The goals of the project included:

- Growth of productivity by improvement of the processes.
- Integration in an existing IT environment.
- Bidirectional data exchange—product development, intranet and ERP.
- Redesign of the PLM process.
- Tool construction.
- Change from 2D to 3D
- Assembly modeling
- Continuous productivity during the transition.

IBM helped Fissler transition from CATIA V4 to CATIA V5, and implement EnoviaSmarTeam. The project affected several departments, including design, tool construction, tool making and fixture construction. Fissler realized a smooth integration and high productivity gains with the IBM solution implementation.

## Reduce costs significantly

Utilize intrinsic knowledge management and reuse of existing data to help reduce production costs. Our solution is:

- Web-based to reduce necessary internal and external data exchange support.
- An integrated package that replaces costly manual associative assembly elements with efficient morphing design.
- Powerful and efficient with digital mock-up tools that allow fast redesign cycles and perform structural verifications throughout the design process.

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