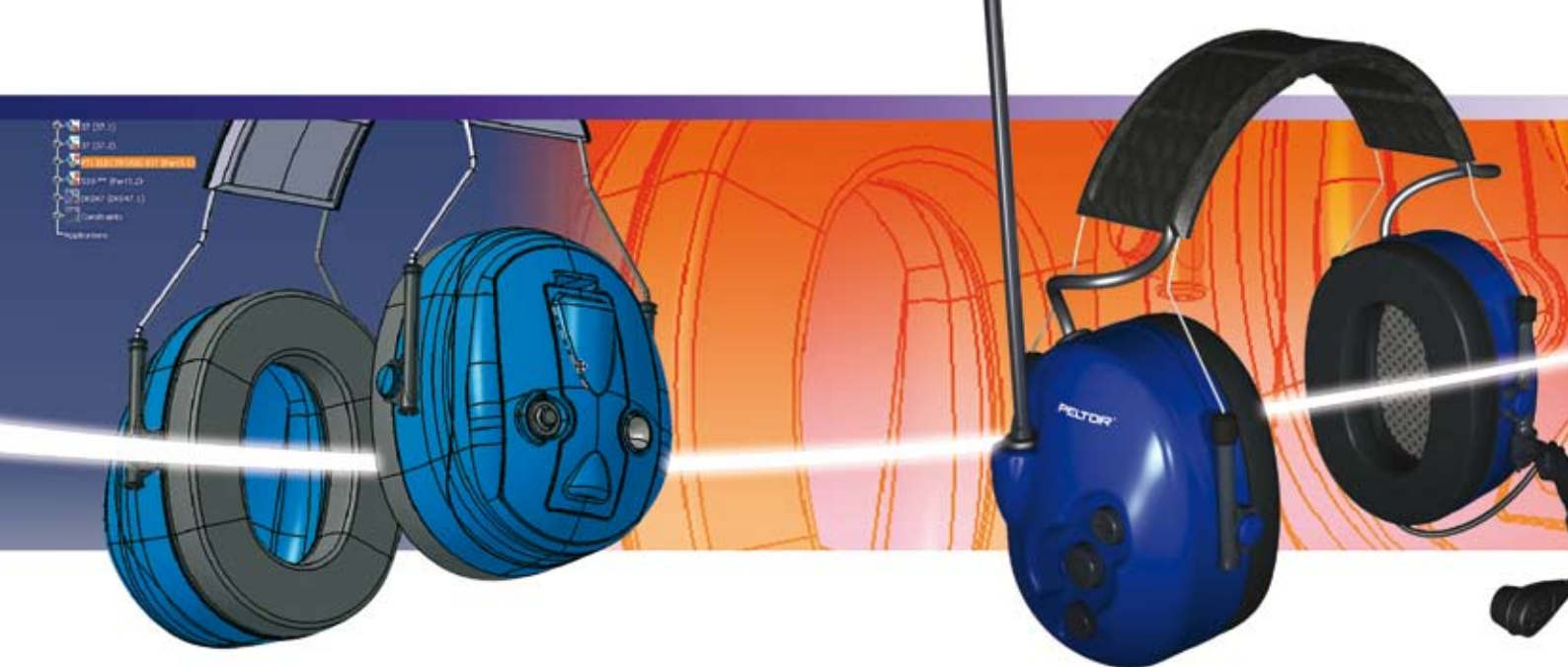


# Peltor

Launching 70% more products with CATIA V5 and ENOVIA SmarTeam





## Peltor Objectives

- **Launch more new products**
- **Deliver innovative products with superior functionality and ergonomics**
- **Adapt products to local standards and customer needs**
- **Share product data across the company**

## Company Overview

Founded in 1950, Peltor AB is a world leading manufacturer of hearing protection and communication products for professionals and consumers. Peltor products include headsets, visors, and helmets. Its hearing protection products are used in fields such as manufacturing, aviation, military, firearms, motor sports, forestry, and agriculture.

Headquartered in Värnamo, Sweden, Peltor has 350 employees and operations in 11 countries across Europe and North America. The company, a part of Aearo Corporation, has doubled its annual turnover since 1998, with 2004 turnover of US\$ 116 million.

## Business Challenges

To address a move in the personal protective equipment industry toward products with communication capabilities, Peltor has expanded its product range from passive hearing protection to complex headsets that include built-in electronic components.

With rapid technological advances in the electronics sector and strong consumer demand for the latest functionalities, Peltor must launch more new products.

“Today, we are under great pressure to bring more new products to market faster and at a lower cost,” said Per Gustafsson, European Marketing Director, Peltor.

Peltor must also differentiate itself with innovative products that marry the latest technology (e.g. Bluetooth) with high-end ergonomics. In addition, Peltor must adapt its products to local standards and share product information with its teams around the globe throughout the entire product lifecycle, including after-sales service and repair.



“In the electronic consumer goods industry, what is new today is old tomorrow. CATIA V5 and ENOVIA SmarTeam help us innovate at the speed of market demand.”

Per Gustafsson,  
European Marketing Director, Peltor



## Solution

To address its evolving business challenges and optimize product development, Peltor chose CATIA V5 and ENOVIA SmarTeam, Version 5 Product Lifecycle Management (V5 PLM) solutions, developed by Dassault Systèmes.

### CATIA V5 for 3D product design

Peltor uses CATIA V5 to create virtual prototypes based on marketing department requirements. “We create 3D digital mock-ups for product feasibility studies at the company’s quarterly global forums,” said Sigvaard Nilsson, Technical Director, Peltor. Then engineers use CATIA V5 to develop detailed designs and product molds and to perform part stress analysis.

### Centralized product data management with ENOVIA SmarTeam

Peltor uses ENOVIA SmarTeam to manage product data, including 3D CATIA models, product drawings, electrical designs, layouts, test reports, product specifications and manufacturing and assembly operations.

### Companywide collaboration

ENOVIA SmarTeam gives Peltor teams in 11 countries access to a single database to share the same resources and files. “With SMARTEAM Web Editor, our repair, customer service, and third-party representatives around the world have instant access to our most up-to-date technical files, spare parts drawings, and product certificates,” said Hans Wickström, European IT Director, Peltor.

### ENOVIA SmarTeam for managing regulatory compliance

Peltor also uses ENOVIA SmarTeam to help it comply with the European Union’s Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment directive. “By inputting information in ENOVIA SmarTeam from our electrical component vendors on whether their products contain hazardous material, we can verify instantly that all of our products are RoHS compliant,” said Wickström.



“CATIA V5 and ENOVIA SmarTeam enable our teams in 11 countries to collaborate simultaneously in all stages of product development, from ideation to after-sales service.”

Hans Wickström, European IT Director, Peltor





## Results

### More products launched

Since implementing CATIA V5 and ENOVIA SmarTeam, Peltor develops 70% more new products.

“CATIA V5 is very comprehensive and intuitive, and offers information back to the designer. New users can learn it rapidly. There are a large number of freelance designers who know CATIA V5, so we never waste time looking for external consultants,” said Sigvard Nilsson.

ENOVIA SmarTeam speeds Peltor’s product development by giving all departments instant access to the latest product data and revisions. ENOVIA SmarTeam has enabled Peltor to cut data search time by more than 75%. In addition, it has almost completely eliminated the use of printed drawings (reduced by 97%) and current versions distribution problems, resulting in fewer errors (down 80%) and improved productivity

Finally, ENOVIA SmarTeam streamlines Peltor’s product development by capturing and making all product modifications instantly available across the extended enterprise. Peltor has reduced new product development from existing models by 55%.

### Accent on innovation

Peltor uses CATIA V5 to create 3D virtual prototypes of potential products, speeding communication in product feasibility meetings.

“3D virtual prototyping helps us to study more products and receive the input of our marketing colleagues on the feasibility of a new model,” said Sigvard Nilsson.

Peltor transmits its product designs from CATIA V5 to a rapid prototyping device to create 3D physical prototypes, reducing its prototype production costs by 40%. Overall, with V5 PLM, Peltor has reduced new part development costs by 33%.



“As a company grows, its product information grows along side at an exponential rate. ENOVIA SmarTeam helps to efficiently manage our increasing amount of product data.”

Sigvard Nilsson, Technical Director, Peltor

Product Description		
M1155Hb:UA 383		
PUSH TO LISTEN, HEADBAND, CONSUMER		
List of Documents		
Item	Doc Name	Issue
	P040093	a
	F411343	a
	P040090	a1
	P040093	a0
Bill of Material		
Item	Qty	Art No
1	1 EA	AG
2	1 EA	53100 SV
3	1 EA	530-383-SV
4	2 EA	37N
5	2 EA	FE0214
6	1 EA	1078 GF
7	1 EA	K155A-PTL GF
8	1 EA	DK047
9	1 EA	DK07



### Greater adaptability to client needs

ENOVIA SmarTeam helps Peltor to tightly control its development processes and track product configurations.

“Some customers are governed by strict safety regulations. With our V5 PLM solution, we can deliver the right model because we know the exact product configuration, right down to the critical parts,” said Wickström.

Using ENOVIA SmarTeam to create Bills of Materials (BOM) helps Peltor manage and track information on product materials more effectively. Time required to produce BOMs has dropped by 50%.

### Regulatory compliance and sustainable development

ENOVIA SmarTeam helps Peltor comply with the EU’s ban on hazardous materials in electrical equipment (RoHS directive). It uses ENOVIA SmarTeam to track materials in suppliers’ electronic components to ensure compliance with the directive.

Finally, ENOVIA SmarTeam and CATIA V5 help Peltor to contribute to environmental and economic sustainable development by eliminating paper drawings (from 60,000 to 2,000 printed drawings annually) and to social sustainable development by increasing worker satisfaction.

### Better response to the after-market

ENOVIA SmarTeam’s single, up-to-date data repository enables Peltor’s departments, including its global after-sales teams, to work in concert and share the latest product information.

“Today, we know everyone has access to the latest version, ensuring better after-sales service and happier customers,” said Nilsson.

## V5 PLM Key Benefits

**+ 70%**  
**New products**  
70% increase in number of new products developed in same time period

**- 80%**  
**Errors**  
Errors during production reduced by 80%

**- 33%**  
**New parts cost**  
Cost of developing new parts down 33%

**- 1 man-year**  
Elimination of printed drawings saves one man-year annually



## Independent ROI study

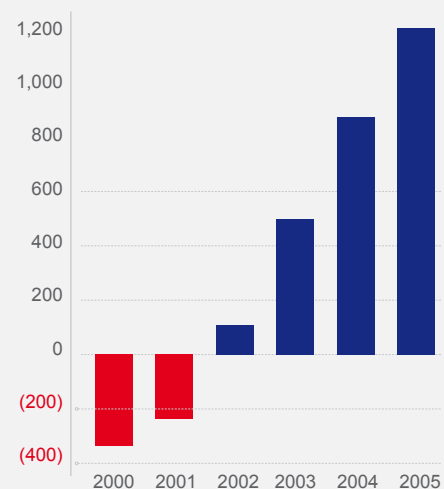
CIMdata performed an independent Return on Investment (ROI) study on Peltor's implementation of Dassault Systèmes V5 PLM solution. The study was based on interviews with Peltor personnel and on data about the benefits of the V5 PLM solution as well as the cost of its deployment (software, hardware, training, maintenance, ramp-up and administration). CIMdata's ROI model calculated the overall ROI for a six-year period.

Peltor's overall ROI is impressive with a short payback period and a high internal rate of return..

### Findings

- the pay back period is 2.2 years
- the net present value of the investment (the cumulative discounted cash flow) over six years is 1,195 k\$
- the internal rate of return is 89.9%

Cumulative Discounted Cash Flows - k€



CIMdata is a leading and independent worldwide consultancy specialized in PLM strategy

**CIMdata**



## Future

Peltor plans to maximize use of its PLM solution by further populating ENOVIA SmarTeam with product related information, including third-party product test reports and finalized Engineering Change Request (ECR) documents.

The company also will increase use of SMARTEAM's Web Editor to give more users access to the centralized product database, implement a document approval process via ENOVIA SmarTeam, and increase use of its workflow capabilities.

Finally, Peltor will use ENOVIA SmarTeam to manage the large number of ECRs required to adapt its products to the EU's RoHS directive and plans to investigate ENOVIA SmarTeam's other regulatory compliance functionalities to further its design-to-compliance development strategy.

"With ENOVIA SmarTeam, we are sure that our products comply with local standards and regulations, such as the EU ban on hazardous materials in electrical products."

Per Gustafsson,  
European Marketing Director, Peltor

## V5 PLM for the Fabrication & Assembly and Consumer Goods industries

### **Fabrication & Assembly and Consumer Goods**

Dassault Systèmes has been working with major Fabrication & Assembly (F&A) and Consumer Goods (CG) manufacturers and suppliers for more than 20 years to provide a range of leading PLM solutions.

DS V5 PLM solutions cover the product development needs of F&A sectors such as machinery manufacturing for industry,

construction, mining, paper, printing, textiles, the industrial equipment sector and other specialized production and process domains. It covers the requirements of CG sectors, including furniture, white goods, home and garden, leisure, personal goods, watches and jewelry and consumer packaged goods.

The DS V5 PLM portfolio of CATIA, DELMIA, ENOVIA and

SIMULIA enables F&A and CG manufacturers to increase innovation, reuse company knowledge and part design, standardize processes, ensure quality, increase flexibility and reduce product development costs.

**For information about DS V5 PLM solutions for F&A and CG industries, visit [www.3ds.com](http://www.3ds.com).**

The Dassault Systèmes home page can be found at [www.3ds.com](http://www.3ds.com)

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As a world leader in 3D and Product Lifecycle Management (PLM) solutions, the Dassault Systèmes group brings value to more than 90,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire life cycle of products from conception to retirement

Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance.

The Dassault Systèmes V5 PLM offering consists of CATIA V5 for designing the virtual product, DELMIA for virtual production, ENOVIA for global collaborative lifecycle management (including ENOVIA VPLM, ENOVIA SmarTeam, and ENOVIA MatrixOne), and SIMULIA for virtual testing.

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