Computer-Aided Engineering Market Research Report by Component (Software, Services), by Deployment Model (On-premise Solutions, Cloud-based Solutions, Hybrid Solutions), by Simulation Type (Static Simulation, Dynamic Simulation, Linear & Nonlinear Simulation, Real-time Simulation), by Technology [Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), Multibody Dynamics (MBD), Discrete Element Method (DEM), Smoothed Particle Hydrodynamics (SPH), Boundary Element Method (BEM), Meshless Methods], by End-User Industry (Automotive, Aerospace & Defense, Electronics, Energy & Utilities, Healthcare & Medical Devices, Consumer Goods, Industrial Equipment, Transportation, Mining, Infrastructure, Others), and by Region (North America, Europe, Asia Pacific, South America, MEA) Forecast till 2035

Market Report | 2025-09-02 | 244 pages | Market Research Future

AVAILABLE LICENSES:

- Single User Price $4950.00
- Enterprisewide Price $7250.00

Report description:

Computer-Aided Engineering Market Research Report by Component (Software, Services), by Deployment Model (On-premise Solutions, Cloud-based Solutions, Hybrid Solutions), by Simulation Type (Static Simulation, Dynamic Simulation, Linear & Nonlinear Simulation, Real-time Simulation), by Technology [Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), Multibody

Dynamics (MBD), Discrete Element Method (DEM), Smoothed Particle Hydrodynamics (SPH), Boundary Element Method (BEM), Meshless Methods], by End-User Industry (Automotive, Aerospace & Defense, Electronics, Energy & Utilities, Healthcare & Medical Devices, Consumer Goods, Industrial Equipment, Transportation, Mining, Infrastructure, Others), and by Region (North America, Europe, Asia Pacific, South America, MEA) Forecast till 2035

Market Overview

The global computer-aided engineering market is projected to reach USD 28,787.42 million by 2035, growing at a CAGR of 9.3% (2025-2035). Computer-Aided Engineering (CAE) is the use of computer software to support engineering tasks such as analysis, simulation, design optimization, and validation of products. It helps engineers predict performance, improve efficiency, and reduce the need for physical prototypes.

One of the most significant factors leading to the global Computer-Aided Engineering (CAE) market increase is the demand for automation that is rising continuously, along with the adoption of the simulation-driven design. The requirement for reduced product development time, cost-effectiveness, and the reliability of the product, where companies are motivated to use advanced simulation tools right from the design stage, is the primary reason behind the accelerated use of simulation technologies. Other reasons, such as outsourcing to developing countries, strict government safety and environmental regulations, and the arrival of AI-powered simulation platforms, also contribute to the overall positive trend of CAE adoption.

Key Company Development

SimScale has made remarkable progress through strategic partnerships and the introduction of new products. In December 2024, it joined hands with PTC to assist startups with free access to its simulation platform and collaborated with Hexagon to launch an advanced SaaS tool for nonlinear structural analysis. In May 2021, it facilitated CAD editing on its platform, while in March 2020, it opened up collaboration features for enterprises and reinforced its presence in cloud-native CAE solutions.

Major Players

Major competitors in the global computer-aided engineering market include Siemens AG, Autodesk Inc., Hexagon AB, Dassault Systemes, PTC Software, Bentley Systems, Inc., ESI Group, Aveva Group, and SimScale.

Report Attribute Details

- Market Size 2035: USD 28,787.42 Million
- CAGR (2025-2035): 9.3%
- Base Year: 2024
- Market Forecast Period: 2025-2035

Market Segmentations

- By Component: Software - 9.0%, Services - 9.8%.
- By Deployment Model: On-premise Solutions - 6.2%, Cloud-based Solutions - 13.7%.
- By Simulation Type: Static Simulation - 6.9%, Dynamic Simulation - 8.2%.
- By Technology: Finite Element Analysis (FEA) - 8.1%, Computational Fluid Dynamics (CFD) - 11.0%.
- By End-User Industry: Automotive - 8.1%, Aerospace & Defense - 9.6%.

Regional Insights

North America's CAE market is experiencing a profound rise, which is mainly driven by the breakthroughs in simulation technologies and the escalating demand of the imposing sectors such as automotive, aerospace, and electronics. Despite the problems caused by expensive software and the lack of qualified personnel, the adoption of cloud-based CAE platforms in this region has created favorable conditions for startups and SMEs. The North American CAE market is led by the U.S. at USD 2,639.7 million in 2024, with Canada contributing USD 341.6 million.

Europe's CAE market still shows positive growth characteristics, with the most significant demand coming from the development

of advanced driver assistance systems, autonomous driving, and the transition to electric vehicles. The development of lightweight materials and the use of digital twins are contributing to the growth of the CAE market in the automotive and aerospace sectors. Germany dominates the European CAE market with USD 1,017.7 million, followed by the UK at USD 653.3 million and France at USD 522.6 million.

Asia Pacific is becoming a major player in the CAE market, supported by the successful application of Industry 4.0 and the growing use of simulation-based product testing. The implementation of smart manufacturing is speeding up the use of the technology as companies are looking for more efficient design and engineering processes. China drives the Asia-Pacific CAE market with USD 1,866.7 million, while Japan follows with USD 549.0 million in 2024.

South America's CAE market is gaining traction, especially in Brazil and Argentina, where the automotive industry is a major driver. AETHRA Componentes Automotivos illustrates the regional trend by using CAE solutions to refine automotive component design, shorten development cycles, and improve quality. The aerospace sector is also beginning to adopt CAE tools for simulation and optimization.

The Middle East and Africa are witnessing growing interest in CAE solutions, propelled by AI-driven simulation and large-scale infrastructure projects. The region faces challenges around cost and limited access for smaller firms, yet opportunities lie in sustainable design and green infrastructure projects. Governments' focus on energy-efficient systems is expected to further accelerate CAE adoption across industries.

Table of Contents:

Computer-Aided Engineering Market Research Report by Component (Software, Services), by Deployment Model (On-premise Solutions, Cloud-based Solutions, Hybrid Solutions), by Simulation Type (Static Simulation, Dynamic Simulation, Linear & Nonlinear Simulation, Real-time Simulation), by Technology [Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), Multibody Dynamics (MBD), Discrete Element Method (DEM), Smoothed Particle Hydrodynamics (SPH), Boundary Element Method (BEM), Meshless Methods], by End-User Industry (Automotive, Aerospace & Defense, Electronics, Energy & Utilities, Healthcare & Medical Devices, Consumer Goods, Industrial Equipment, Transportation, Mining, Infrastructure, Others), and by Region (North America, Europe, Asia Pacific, South America, MEA) Forecast till 2035

Market Report | 2025-09-02 | 244 pages | Market Research Future

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User Price	$4950.00
	Enterprisewide Price	$7250.00

Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-02-11
		Signature	