

COMPANY PROFILE

SDE TECH

A trusted partner in industrial technology, automation,
and digital transformation solutions.

www.sde.vn

TABLE OF CONTENT

- I** COMPANY OVERVIEW
- II** PRODUCTS & SERVICES ECOSYSTEM
- III** KEY PROJECTS
- IV** CUSTOMERS
- V** CONTACT INFORMATION



ABOUT US



Founded in 2014, **SDE Digital Technology Co., Ltd. (SDE TECH)** is a pioneering provider of digital transformation solutions and specialized **CAD/CAM/CAE/PLM/Smart Factory** software in Vietnam.

With a team of highly experienced engineers, **SDE TECH** is a trusted partner of numerous enterprises and educational institutions across key industries such as Mechanical Manufacturing, Automotive, Aerospace, Electronics, and Medical sectors.

15

Established

30

Experiences

1200+

Customers

MESSAGE FROM THE DIRECTOR



Mr. Nguyen Huu Phuoc

Email: phuoc.ng@sde.vn

Phone/Zalo/Whatsapp: (+84) 909 107 719

“With more than 30 years of dedication to and firsthand experience witnessing the transformation of the manufacturing industry, I have always been deeply concerned with how Vietnamese enterprises can achieve breakthroughs through technology. At SDE TECH, we do not merely deliver software, we deliver comprehensive solutions and longterm partnership.

With all our experience and commitment, together with the SDE TECH team, I pledge to bring the most practical and tangible value to our customers, helping them optimize production and be fully prepared for the global digital transformation era.”

Mr. Nguyen Huu Phuoc
Director of SDE TECH

OUR JOURNEY

SDE TECH – Built upon 30 years of expertise and the technical heritage of our leadership.



VISION, MISSION & CORE VALUE

VISION

To become the leading and most reputable software solutions group in Vietnam and the Southeast Asia region.
To build and develop a comprehensive software solutions ecosystem under the SDE TECH brand.

MISSION

- **To Customer:** Constantly improving quality to bring the best product and services to meet the increasingly diverse and complex needs of customers.
- **To Industry:** Bringing **CAD/CAM/CAE/PLM/SMART FACTORY** software technologies closer to users in Vietnam. Contributing to promoting the development of manufacturing industries in Vietnam.
- **To Society:** Provide solutions to improve work efficiency and effectiveness, contribute to accelerating the development of the working environment towards modernizations and environmental protection in a sustainable way

OUR VALUE

PROFESSIONALISM & INNOVATION – TRUST – HUMAN CAPITAL

Professionalism & innovation at work
Dedication, responsibility, honesty with customers to create trust

Collective strength based on solidarity and sharing

ORGANIZATIONAL CHART



PARTNERS

Official Commercial Partners in Vietnam













University Partners

















ACHIEVEMENTS & CERTIFICATIONS



TECHNOLOGY SOLUTIONS ECOSYSTEM

Software Provision

- Distribution of CAD, CAM, CAE, PLM, Smart Factory software solutions, and more.



Service

- Assessment and solution consulting
- Implementation and installation
- Maintenance and technical support



Training

Advanced training for:

- Enterprises
- Universities



PRODUCTS

SDE TECH specializes in providing CAD/CAM/CAE/PLM/Smart Factory solutions.

CAD – Computer-Aided Design



CAM – Computer-Aided Manufacturing



CAE – Computer-Aided Engineering



Cadmould Flex

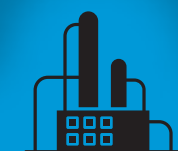


PLM – Product Lifecycle Management



Smart Factory & Digital Manufacturing

- SCADA
- IIoT Platform
- DataAnalytics
- MES/MOM
- ERP
- BI



SERVICES

Consulting & System Design

- Assessment and analysis
- System design (R&D)
- Design outsourcing services

Implementation & Installation

- Installation & Programming
- Technical manpower outsourcing
- Project management

Maintenance & Technical Support

- Maintenance & Upgrades
- Operations Outsourcing (O&M)
- 24/7 Technical Support



TRAINING

TRAINING & HUMAN RESOURCE DEVELOPMENT

Product Training and Software Usage Training for enterprises and universities.

Technical certification is awarded upon successful completion of the training programs.



KEY PROJECTS

SDE Digital Technology has successfully implemented numerous projects in automation, digital transformation, system integration, and technical training for manufacturing enterprises and educational institutions nationwide.



DIGITAL TRANSFORMATION IN THE DESIGN OF THERMAL PROCESSING EQUIPMENT AND PRECISION MECHANICAL ENGINEERING



Field: Energy & Industrial Thermal Processing Equipment

CHALLENGES

- Difficulty in managing and sharing large-scale design data across departments.
- Traditional collaboration workflows cause delays and are prone to errors during design revisions.
- Need for a flexible CAD platform that allows engineers to work and review drawings remotely.

SOLUTION

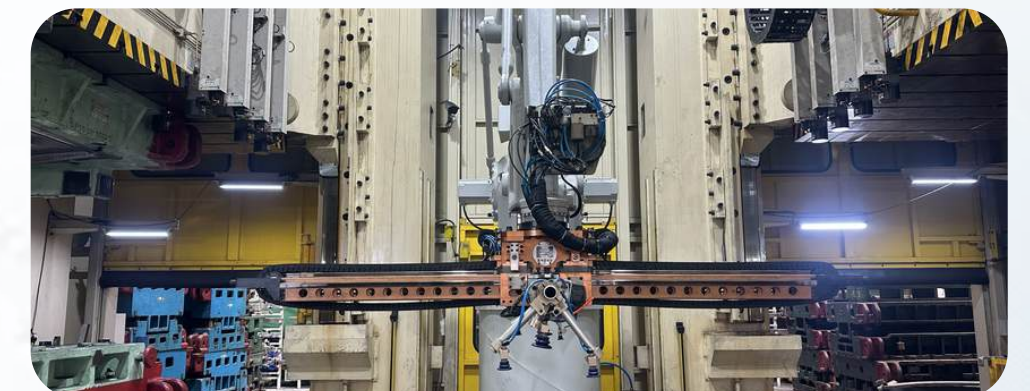
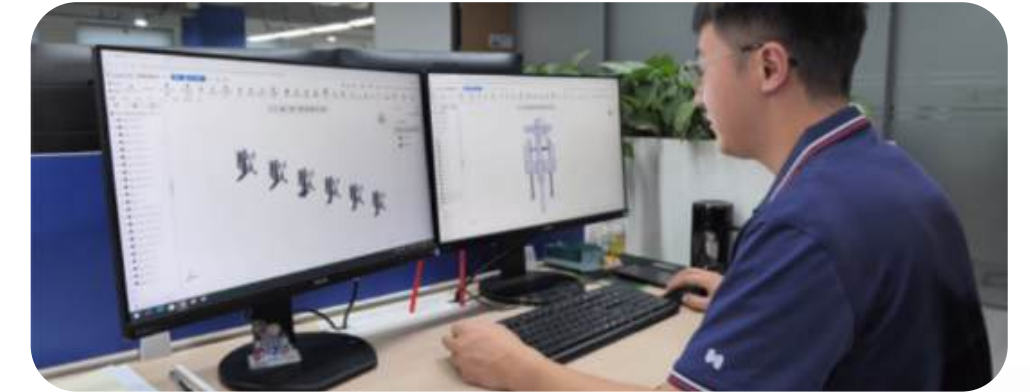
- Cloud-Native Platform: Migrating all design data to the cloud, enabling direct access and editing via a web browser without high-end hardware.
- Real-time Collaboration: Multiple users can simultaneously view, annotate, and edit 3D models, enabling instant engineering feedback.
- Integrated Data Management: Automatic version control eliminates confusion between old and new design files.

RESULTS

✓ Increased efficiency by over 50%

✓ Flexible design

✓ Infrastructure cost savings



DELIVERED ADVANCED 3D DESIGN SOLUTIONS INTEGRATED WITH PLASTIC FLOW SIMULATION TO OPTIMIZE MOLD CAVITIES

Industry: Design & Manufacturing of premium household products

CHALLENGES

- Stringent aesthetic requirements & complex assembly structures.
- Need to control plastic surface defects (sink marks, weld lines) before mold manufacturing.
- Pressure to shorten time-to-market.

SOLUTIONS

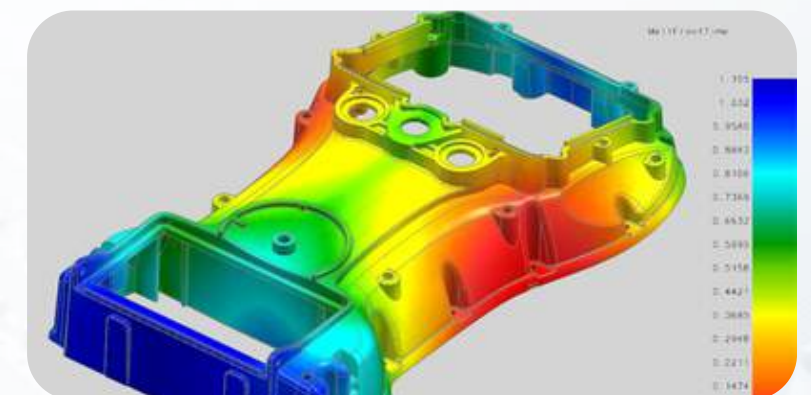
- NX Mach 2: Advanced 3D design & drawing automation.
- NX EasyFill: Plastic flow simulation to optimize mold cavities.
- Training: Transfer of Japanese-standard processes to engineers.

RESULTS

✓ Reduced design and mold adjustment time by ~ **30%**

✓ Improved accuracy from the early design stage

✓ Reduced project time-to-market by **30%**



OPTIMIZING MACHINING PERFORMANCE AND NC PROGRAMMING

Field: Precision Machining & Aerospace

CHALLENGES

- Aerospace Machining: Handling tough materials with absolute precision.
- Production Inefficiency: Excessive air cuts and sub-optimal feed rates prolonging cycle times.
- Collision Risks: Potential spindle damage or scrap of expensive workpieces during new NC program runs.
- OEE Demands: Need to increase equipment effectiveness for strict international orders.

SOLUTIONS

- MANUSsim Optimization: Automating G-code analysis to eliminate redundant motions.
- Feed Rate Optimization: Dynamic feed adjustments based on actual material removal for stable tool loading.
- NC Simulation & Verification: 100% digital twin simulation to prevent collisions before machining.

RESULTS



Average 20% reduction in total cycle time



Eliminate 100% of collision and machine damage risks.



Extend tool life and protect the spindle

MANUS
SIM



DEVELOPED A CUSTOMIZED POST PROCESSOR FOR THE DOOSAN NPH 5500 AND IMPLEMENTED AN INTEGRATED NX CAM PROGRAMMING SOLUTION



Field: Vacuum Components & High-Precision Mechanical Engineering

CHALLENGES

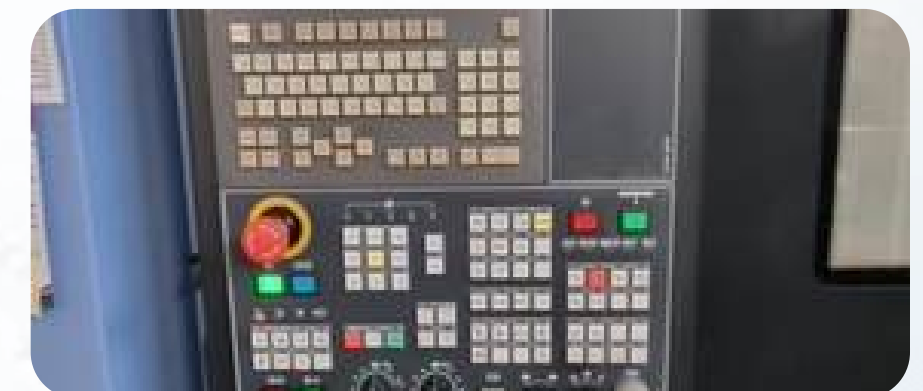
- Standardizing programming capability for modern Doosan CNC machine systems.
- Requiring absolute precision when integrating Automatic Pallet System (LPS).
- Needing a virtual simulation process to ensure safety and prevent collisions on real machines.

INTEGRATED CAD/CAM SOLUTION

- Digital Twin: Building a virtual 3D model of Doosan machine systems (NPH 5500, LYNX series) to simulate machining in NX CAM.
- Custom Post Processor: Developing a dedicated machine language translator fully compatible with the LPS automatic pallet system.
- Automation: Setting up automated machining setup documentation templates to synchronize data from design to the shop floor.
- Managed Services: Providing software licenses and 24/7 expert technical support.\

RESULTS

- ✓ Eliminate collision risks
- ✓ Reduce CNC programming & setup time by **20–30%**
- ✓ Fully synchronize NX CAM, Post Processor, and the automatic pallet system



OPTIMIZATION OF COMPLEX PLASTIC INJECTION MOLDS USING CADMOULD FLEX SOLUTION

Field: Plastics Industry – Cable Management Accessories Manufacturing

CHALLENGES

- Manufacturing plastic clips, connectors, and cable management systems with complex geometries, thin walls, and multiple interlocking features. Multi-cavity molds (24–32 cavities) are difficult to balance in runner system design.
- Extremely strict requirements for dimensional accuracy and warpage control.
- High cost and long lead time for mold corrections due to repeated physical trial-and-error.

SOLUTION

- Cadmould Fill & Pack: Simulates flow and pressure to automatically balance runner systems.
- Accurately predicts shrinkage and warpage to compensate mold cavity dimensions.
- Virtual Try-out: Performs virtual injection molding trials to determine optimal machine parameters before physical production.

RESULTS



Cutting mold trials down from 5-6 to just 1-2

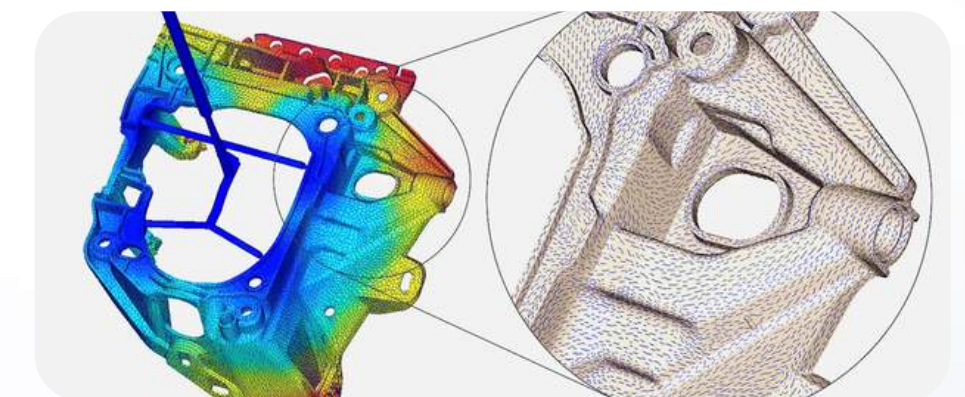
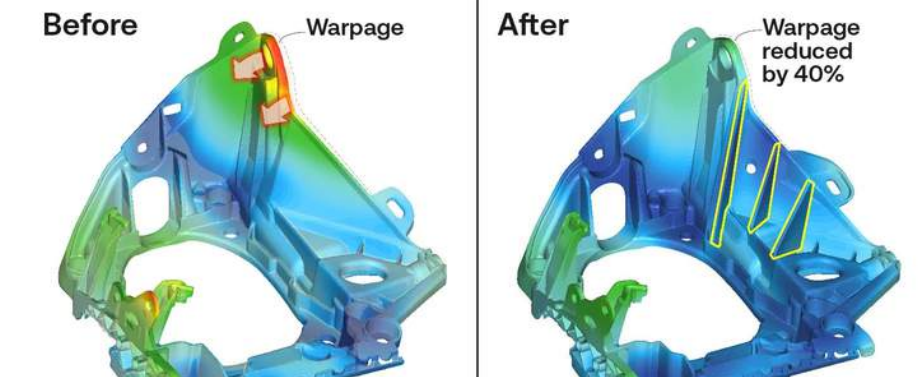


Save €3k–€5k per mold repair on average



Shorten mold lead time by 4–8 weeks

Cadmould Flex



OPTIMIZING PISTON COOLING SYSTEM USING PARTICLEWORKS SIMULATION

Field: Automotive Engine R&D

CHALLENGES & NEEDS

- Traditional CFD (mesh-based) is too slow and struggles with fast-moving piston dynamics.
- Difficulty in accurately simulating complex interactions between oil jets and cooling cavities.
- Risk of thermal deformation due to inability to predict localized hot spots.

SOLUTION

- Particleworks (MPS): Mesh-free particle-based simulation, flexibly handling complex moving surfaces.
- GPU Computing: Leveraging GPU performance to accelerate computational speed.
- Thermal Coupling: Integrating flow simulation data into FEA thermal analysis to predict temperature distribution.

RESULTS



Computation time reduced to only 20 hours



Temperature error compared to experiments < 10°C



Results - Distribution



KEY EVENTS



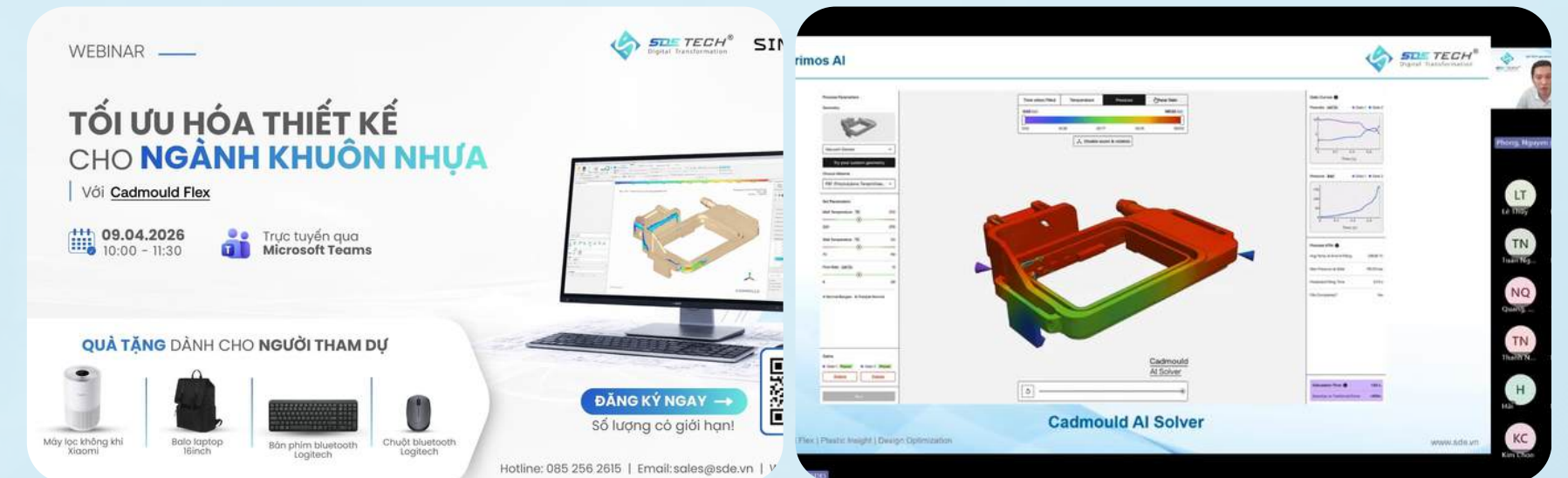
Seminar on the Application of 3D Printing Technology in Digital Manufacturing



VIMF 2018 Exhibition



Seminar “Digital Transformation Driving Creativity and Innovation in Engineering” at Nguyen Tat Thanh University



Webinar “Optimizing Design for the Plastic Mold Industry with Cadmould Flex”

CUSTOMERS

Automotive & Spare Parts























Electronics





























Machinery & Automation



















Construction & Home Appliances















Others











Aerospace





CONTACT WITH US

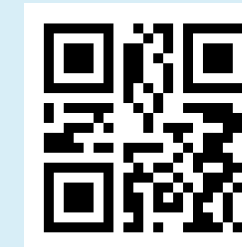
SDE DIGITAL TECHNOLOGY CO., LTD (SDE TECH)



SDE TECH



SDE TECH



SDE DIGITAL
TECHNOLOGY
CO.,LTD



SDE TECH



(+84) 909 107 719 - (+84) 85 256 2615



sales@sde.vn



HCMC Office: 96 Street No. 3B, Conic Residential Area, Binh Hung Commune, HCMC.
Hanoi Office: To Hieu Street, Nghia Tan Ward, Cau Giay District, Hanoi.

THANK YOU

