



Engineering



ENGINEERING TAILORED TO YOUR NEEDS

At AM&DE we cater our engineering services *for those who design, produce, manufacture, service, or support technical products*. Our goal is to provide customers with 360-degree-support for all product-related processes, from concept through design and manufacture to product service.

WITH PRODUCT LIFECYCLE MANAGEMENT BUILT IN FROM THE START

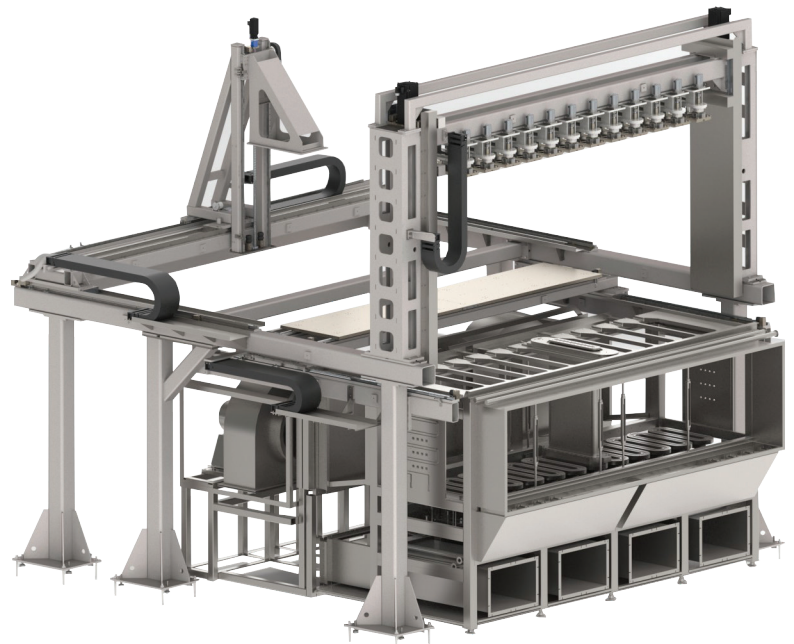
We take a product lifecycle management (PLM) approach *that integrates people, data, processes, and business systems* with cutting-edge tools for design, engineering, analysis, and manufacturing planning.

TO DELIVER THE BEST POSSIBLE SOLUTIONS

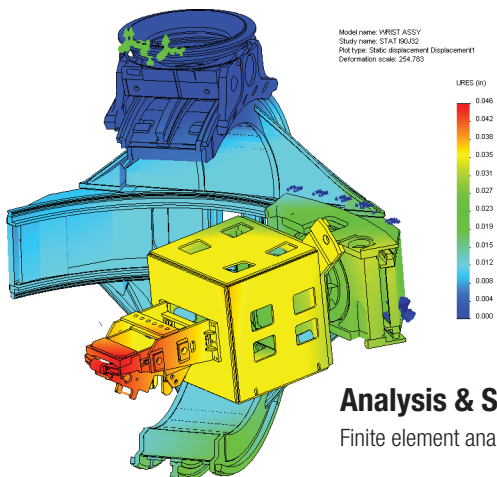
Our combined experience with understanding of the nuances of multiple disciplines and various engineering analysis techniques gives us the ability to tackle complex processes and consistently create the best possible products *to capture greater market share, and increase customer satisfaction*.



Product Development
Laboratory equipment and devices.



Equipment Design
Semiconductor processing equipment.



Analysis & Simulation
Finite element analysis.



Product Development

- Lab devices and instruments
- Medical instruments
- Electronics
- Robotic systems
- Software development
- Software testing
- PCB development

Equipment Design

- Precision positioning systems
- Machine tools and CNC equipment
- Precision material handling equipment
- Agricultural & off-highway equipment
- Mining equipment
- Aerospace manufacturing systems
- Factory automation, PLC & HMI programming

Plant Layout

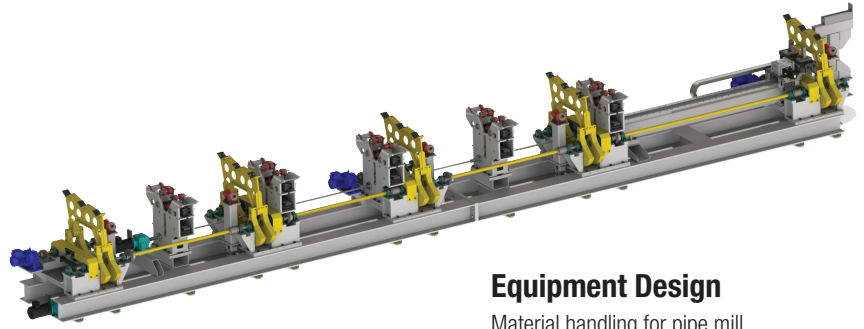
- Plant & equipment simulation
- Capital equipment engineering and selection
- Plant layout
- ROI studies and cost studies

Analysis & Simulation Services

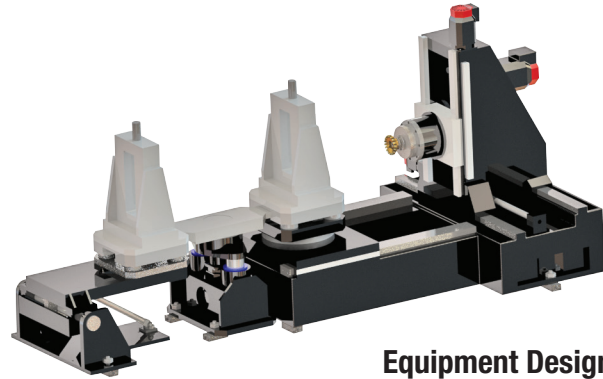
- FEA
- CFD
- Thermal analysis
- Motion and kinematic analysis
- Animations

CAD & CAE Services

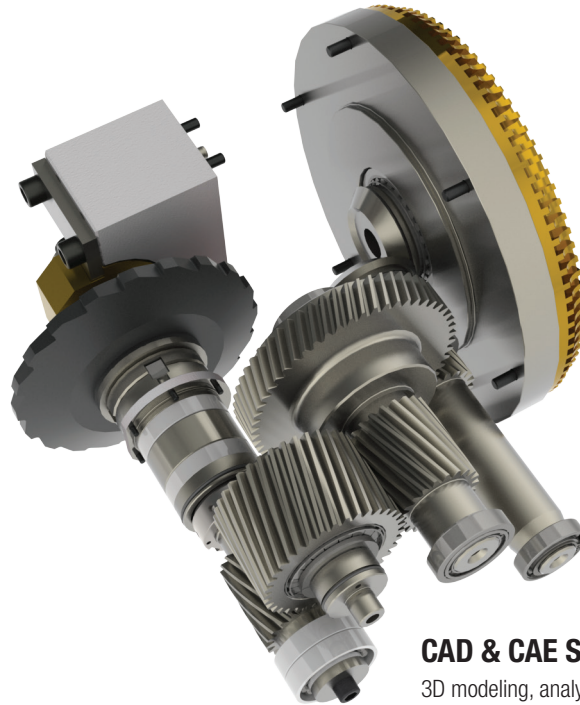
- 3D CAD
- Assembly drawings, detail drawings, drafting
- Electrical schematics
- Hydraulic and pneumatic schematics
- Geometric dimensioning & tolerances
- Design for assembly
- Design for manufacturing
- Prototyping
- Blueprint creation



Equipment Design
Material handling for pipe mill



Equipment Design
3 axis milling machine.



CAD & CAE Services
3D modeling, analysis, and design.