Industrial Engineering

ISO 9001:2008 Certified www.adc9001.com





Services

- 3D Design & Product Development
- Concept & Prototype Development
- Mechanical Component/Assembly Design & Engineering
- Custom Machine & Equipment Design, Build & Installation
- Electronic Packaging Enclosure Design
- Electro-Mechanical System Design
- Analysis & Simulation (FEA, Modal, Thermal, CFD, Random Vibe, etc.)
- Wire Harness Design & Assembly
- Process Optimization and Manufacturing Integration
- Cost Reduction/Optimization Engineering
- Component/Assembly Optimization
- Industrial Automation
- Automation Engineering

Custom Design / Build Engineering Company for Industrial

Applications



Printing Production



Food Industry



Production Equipment



Pharmaceutical



Water Heating/Cooling Industry



Medical Equipment

Industrial Experience

At ADC USA, Inc. we develop custom solutions which range from individual components to turnkey stage systems. Our systems encompass a wide variety of applications in industries including architecture, nuclear, medical technology, defense, automation, engineering, manufacturing; products and systems include heavy duty actuators, lift tables, mechanical lifts, stage lifts and backdrop movement.

Instrument for NASA

ADC in collaboration with NASA Langley Research Center completed a turn-key design, build, and install major components for an updated indoor radar cross section and antenna measurement range. The RCS NASA Experimental Test Range consists of a rail positioning system and four rail positioning carriages: antenna measurement positioner, RCS pylon, azimuth rotator, and an electric manlfit.

For more information and video please visit:

http://www.adc9001.com/products/view/510 Or visit: http://www.nasa.gov/











Industrial Instrument Design-Build for Australia

ADC has taken the overall concept for the largeindustrial instrument developed by ANSTO designers, and provided final engineering design and then built the instrument as imaged below. ADC completed all the calculations, FEA analysis, and meeting the ASME codes. The size of this large instrument was roughly 8 feet in diameter, 67 feet long and weighed 32 tons.

For more information and video please visit: http://www.adc9001.com/products/view/478











Robotics Applications

Our experience with robots has allowed us the ability to engineer flexible tooling designs for various applications. ADC's expertise ranges from adding an end effector and integrating with new or existing equipment to integrating a single or series of robots into custom equipment where the robot(s) provide controls and material handling as part of a complete cell. In every case, we do the complete job - providing you with a turnkey robotic system that meets your needs.

ADC's engineers write, design, and build all the software, hardware, and control panels for the Robots, PLC's, and HMI's in house. We are flexible enough to use your preferred PLC and HMI manufacturer, or we can select the best option for your application. We have experience with manufacturers such as, Allen Bradley, FANUC, GE, Koyo, Modicon, Siemens, and various others.

Robotics Integration Capabilities

- Assembly
- Material Removal
- Palletizing / DePalletizing
- Part Transfer
- Picking & Packaging
- Automated Inspection
- Vision Robotics

Industries

- Aerospace
- Alternative Energy
- Automotive
- Ammunition & Firearms
- Consumer Goods
- Warehousing
- Food & Beverage
- Medical & Healthcare
- Pharmaceutical

Software Development

- **C,C+**
- Visual Basic
- RSLogix500
- RSLogix5000
- RSView ME
- Panel Builder 32
- Cognex Insight Software
- Cognex Checker Software
- LabView
- LabWindows
- Mathcad
- Factory Talk View









Robotic Engineering

Robotic Assembly

ADC USA, Inc. is an ISO 9001 & ITAR certified full-service automated equipment builder. We offer a complete range of services including fabrication, machining, manufacturing, installation, and on-site repair. We offer automated solutions to improve efficiency, productivity, and quality control for the manufacturing industries we serve. Founded as a privately held company in 1995, ADC has grown into one of world's leading technology companies and has enjoyed 18 straight years of business growth and profitability with more than 500 customers located in over 26 countries.







Distillation Equipment

Water Purification Equipment

Pharmaceutical Equipment

Electronics

ADC USA, Inc. has uses the following electronics throughout many projects. We have provided mostly stepper motors but also servo motors on occasion. We have applied incremental and absolute linear and rotary encoders. A brake on all axes is standard. Limits consist of mechanical switches. For close repeatability at small gaps or near the beam pipe, ADC uses high repeatability (< 1 um) mechanical limit switches.



Allen-Bradley













Software

ADC USA, Inc. has also incorporated software skills and development platforms including Microsoft Visual C++, LabView, EPICS, Visual Basic, CNC, and generic PLC (AB, NAIS, GE-Fanuc, Schneider, etc.) and Parker ACR and Accroloop. Our primary skill, however, is the integration of these components into a functioning system, fully debugged, documented, and ready for operation.











We Offer:

- Mechanical Design
- Electrical Design & Programming
- Build to Customer Print
- Custom Machining
- Fabrication and Welding
- Refurbishing and Upgrades
- Control Panel Building
- Painting and Finishing
- Installation Services
- On Site PM and Repair Work

Automated Solutions

- Robot Integration
- Build to Print Equipment
- Process and Assembly Equipment
- Pierce and Punch Equipment
- Metal Joining Equipment

Design/Build

- An Innovator in Automated Equipment Industrial Manufacturing
- Mechanical Designers and Electrical Controls Engineers
- In-House Fabricators, Machinists, and Machine Builders
- Turn-key Services

