



# DESIGN SYSTEMS, INC.

## Manufacturing Engineering & Consulting

### Powertrain Services



Established in 1983 with headquarters in Farmington Hills, Michigan, Design Systems, Inc. is a multi-discipline manufacturing engineering and consulting firm with strategic office locations to serve the global marketplace.

For over thirty years, Design Systems, Inc. has provided engineering services, construction professional services, and full-service staffing for automotive, heavy truck, aerospace and defense, package handling, steel manufacturing, food and beverage, pharmaceutical, health care, and many other industries.

Since 2007, Design Systems, Inc. has provided over 400,000 hours of engineering services, construction professional services, and full-service staffing to our Powertrain Customers.

#### Powertrain Engineering Services and Construction Professional Services



Design Systems, Inc. provides engineering services and construction professional services for the removal, scrap, storage, relocation, retool, and installation of Powertrain process equipment.

- Machining / grinding, coolant filtration, ATF, wash, and chip processing
- Sub-assembly, mainline assembly, test, and button-up
- Kitting areas, team areas, material areas, maintenance and support areas

#### Typical design packages include:

- Identification of process equipment
- Collection of OEM installation drawings, data sheets, and scope of work documents
- Design of mechanical, electrical, and network utility connections
- Routing of coolant supply and return piping
- Design of mist collection, dust collection, and process exhaust systems.
- Design of structural supports for utilities, coolant piping and tanks, mist / dust / exhaust systems, bridge cranes, service rails, tool rails, fall protection beams, and Andon boards
- Compilation of master utility data matrix
- Electric load study, balance, and arch flash hazard analysis
- Drawings and documents required to solicit competitive bids

#### Additional services include:

- Process equipment layout development
- Industrial and material flow engineering
- Laser scanning and 3D modeling
- Simulation
- Plant trades engineering (detailed engineering)
- Electric power measurements
- Integration of plant floor information systems
- Launch support
- Full-service staffing

#### Construction professional services include:

- On-site support: program managers, project managers, engineers, construction safety professionals, contract managers, document controllers, planners / schedulers, field coordinators, and clerks / administrative assistants
- Project management
- Bid and award management
- Change control
- Construction safety
- Document control
- Contract closeout



#### "BOTTOM-LINE" RESULTS

- Early involvement of key players
- Competitive bids
- Early identification of facility / utility requirements
- Safety - "Safety Is Priority One"
- Early identification of facility / utility deficiencies (overload)
- Quality
- Cost control
- On-time delivery

### DSIDSC.COM

DESIGN SYSTEMS, INC.  
38799 WEST 12 MILE ROAD  
FARMINGTON HILLS, MI 48331-2903  
800-660-4DSI • 248-489-4300  
FAX: 248-489-4321

DESIGN SYSTEMS CANADA, LTD.  
3585 RHODES DRIVE  
UNIT A  
WINDSOR, ONTARIO, CANADA N8W 5B3  
519-944-8807 • FAX 519-944-8853

DESIGN SYSTEMS de MEXICO  
BOULEVARD RUFINO, TAMAYO #304-A  
OFICINA 17 PLANTA BAJA, COL. ALPES NORTE  
SALTILLO, COAHUILA, MEXICO CP 25270  
(011.52) 844-254-4029 • FAX (011.52) 844-431-4010