

# PRODUCT BROCHURE



## CAD CONTROL SYSTEMS CORPORATE HEADQUARTERS

CAD Control Systems provides equipment to the world's leading drilling contractors and our global reach extends to over 30 countries world-wide. We also offer manufacturing services for equipment your company has designed. From design to delivery, CAD Control Systems can meet all of your control system needs. CAD Control Systems dedication to quality extends throughout the organization and every facet of operations. Our certifications include:

- PRESAFE PRODUCTION QUALITY ASSURANCE NOTIFICATION
   PRODUCTION QUALITY ASSURANCE NOTIFICATION
   EQUIPMENT OR PROTECTED SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC
- > ISO 9001:2015 QUALITY MANAGEMENT SYSTEM INTERNATIONAL STANDARD
- > UL 508A PANEL SHOP LISTED

APPROVED SYSTEMS INCLUDE:

- > ABS CDS
- > CE MARKED WITH ATEX/IECEX



## **CONTROL SYSTEMS**

CAD's systems are as unique as your business needs. All systems are custom engineered and manufactured according to your exact specifications. Power packages are available in electric and pneumatic. We offer standard electrical auxiliary interfaces for control system remote operation and use the very latest in fiber optic technology to make our world class systems even better. The use of fiber optics has proven to improve communication between systems and auxiliary panels by eliminating the risk caused by electro-magnetic interference. Fiber optic communication lines are durable and have proven to provide more reliable communication than conventional electrical communication lines.





With over 30 years of experience in the design and manufacture of control systems, we have set the industry standard for quality, innovation, and reliability. CAD Control Systems' engineering staff will design a control system to meet your exact specification and operational requirements. Each system is manufactured in accordance with Industry Standards.



## **CONTROL SYSTEMS**

#### **CONTROL SYSTEM FEATURES**





- Land and offshore applications
- CE/ATEX systems
- Custom designed to meet exact requirements
- Rated for extreme arctic or desert climates
- Uninterruptable power supply
- Integrated or fixed diverter
- Diesel systems available
- Pneumatic and/or electric pump systems

- Class 1, Div 1 hazardous location designs
- Blind/Shear Rams
- Shear boost
- ABS/CDS approved designs
- Touchscreen remote operations
- Data-Event logging capabilities
- 3,000 & 5,000 PSI systems
- PLC, HMI Touchscreen or Pneumatic Remote Operations

#### Subsea Accumulator Module

CAD Control Systems line of Subsea Accumulator Modules (SAM) Models I & II are built to our customers unique specifications and requirements. SAMs are available in working pressures up to 6,000 PSI and are equipped with the following:

- Piston or Bladder type accumulators depending on water depth and working pressures
- 17H High flow ROV interface hot stabs and receptacles (optional J-locks)
- 316 series stainless steel accumulator manifolds w/SAE Code 62 flanges w/seal sub connections
- Standard, Box style or larger footprint retractable style Mud Mats w/optional mud jet vent system
- Floating Subsea Ball Valves w/ROV CL 4 buckets
- Subsea Pressure Gauges
- 1" Flying leads w/high visibility protective jacket
- Optional ROV Operated Flying Lead Hose Reel
- Lifting/handling slings, hook and float
- Ability to run and retrieve w/drill string
- Can be charged via ROV, surface system w/hotline, or from existing subsea system via flying lead
- Heavy duty four post frame is designed for twice the SAM weight pull load
- Optional single point accumulator gas charging setup





## **ROV INTERFACE PANELS**

CAD Control Systems ROV Panels are available as a bolt-on or weld on panels. They are comprised of a stainless steel path with handles that stabilize the ROV while working and a user defined combination of ROV-compatible interface components.





These components can include gauges that provide visual pressure read backs, hotstabs that allow for the ROV to hydraulically interface into the system, paddletype directional valves that allow the ROV to manually control circuit functions, hydraulic regulator functions and the "cut line" tubing that provide an emergency method to vent circuits by shearing them with an ROV end-effector. All of our ROV panels meet and/or exceed Industry Standards. ABS/DNV certifications are available upon request.



## DEADMAN AUTOSHEAR SYSTEMS (DMAS) DISCRETE HYDRAULIC SYSTEMS

The Deadman Autoshear (DMAS) system, when armed, automatically "closes-in" the well in the event of total loss of hydraulic supply and pilot signals with the BOP control system. It can also "closein" the well in the case of an unplanned disconnect with the Lower Marine Riser Package (LMRP) from the BOP Stack. The DMAS manufactured by CAD Control Systems meet Industry Standards.

- 3 KSI (Native), 5 KSI to 4 KSI (regulated), 5 KSI (Native) working pressures available
- Single function, dual function, multiple functions, and/or delayed secondary functions (i.e. for ram locks)
- Various hydraulic connections and custom panel dimensions available
- Numerous ROV Panel, read backs, and Trigger Valve Assembly interface configurations available
- (Optional) Fires secondary or auxiliary DMAS functions (such as ram locks
- DNV and ABS certification available

#### HOT LINE PANEL

Our Hotline Control Panels can be customized to meet any of your needs for auxiliary hydraulic supplies to allow subsea technicians and other qualified rig personnel to test hydraulic components and systems or provide temporary hydraulic power to other systems.



Available with inlet pressure up to 5000 PSI and multiple outlets that can be configured for full pressure and regulated pressures. Inlet and outlet sizes and along with end connections are completely customizable to meet client flow and interconnect requirements. Systems are composed of stainless steel and other non-ferrous wetted components. Panel bodies are constructed of 316 series stainless steel and can be customized to fit various installation requirements including free-standing, and wall mounted designs. Local pressure gauges can be augmented with electronic displays and tied into electronic data acquisition systems.

Contact our sales group for custom designs to handle all your hydraulic distribution needs.

### **UMBILICAL HOSE REELS**

CAD Controls can provide umbilical reels to handle your deployment needs for electronic/electrical cables, hydraulic hoses, or combinations of both. All systems can be designed to meet various regulatory requirements and hazardous atmosphere needs. Reels can be designed to accommodate any lengths required and can be outfitted with level winds when necessary.



Systems can be provided with multi-port hydraulic swivel connections to provide for continuous hydraulic supply during deployment and retrieval. Electronic and optical slip rings can also be provided for continuous communication. All reels can be designed with pneumatic, hydraulic, or electric drive systems and can be equipped with local and/or remote control panels. Remote control panels can be configured to control multiple reels from multiple locations. Sheaves can be custom configured to meet client's unique deployment requirements.

From single line hydraulic reels accommodating a few hundred feet to multiplex reels for deepwater applications we can meet all your deployment needs.



#### **DRIFT MANDRELS**

CAD manufactures a variety of different size BOP drift mandrels per Industry Standards. Although rugged and capable of sustaining years of use they are also precision manufactured to provide high levels of overall concentricity and dimensions. Numerous end connectors are available with documented pull testing certification.

#### **RIGID CONDUIT MANIFOLDS**

Our Rigid Conduit Manifolds (RCM) provide you with numerous fluid distribution options. They are manufactured to meet the requirements of Industry Standards.

We are offer fully customized solutions to provide for overall connectivity, functionality, and mounting/ installation options. Systems can be equipped with manifolds, crossover valves, regulators, hotstabs & filters. They can be provided in 3 KSI, 5 KSI, and 6 KSI options. Comprised of contemporary and duplex stainless steel alloys, our RCM's are designed to provide years of trouble free service.

#### SUBSEA REGULATORS AND SOLENOID VALVE TEST BENCHES

CAD can supply a variety of customized hydrostatic test benches for subsea systems.

Our hydraulic regulator and SPM valve test benches can be designed with custom connections dependent upon the style, and size of regulators or valves needed for testing. Typical systems consist of isolation and vent valves, accumulators and function valves to simulate BOP functioning. (Available in pressure up to 6 KSI)

Our Solenoid Test Benches consist of stainless steel manifolds and can be rated for pressures up to 6 KSI. The electronic interface provides customizable power options along with controls for testing. Hazardous atmosphere certification is available upon request.

## **DIVERTER CONTROL SYSTEMS**

CAD's Diverter Control Systems meet the same rigid standards as our control systems. We use the highest quality components available to ensure the safest and most reliable equipment in the industry. Designed as



freestanding systems for fixed diverters or as an integral part of the BOP Control System for wellhead-type diverters, diverter control systems can be configured for a variety of remote operation options and can be rated for use in Zone 1 hazardous locations.



Free standing fixed diverter control

## Remote Operation Packages

When the situation demands immediate action CAD's line of remote operations panels provide the flexibility and proven reliability to operate your control system, safely, from designated locations. We offer pneumatic operated, PLC based, and HMI touchscreen remote operations panels designed to meet your operating requirements.





Our PLC based remote operations panels provide a clean, user friendly layout that reflects the operators unique stack configuration. They also afford users the same ease of use and two handed operation safety feature as our HMI touchscreen remote panels. Illuminated push button control gives the user visual position indication for each stack function with digital read out pressure meters that provide real time system pressure readings.

PLC based remote operation panels are designed and manufactured in accordance with your operational requirements and specifications and can be rated for use in Class 1 Div 1 or Zone 1 hazardous environments.

## **TOUCHSCREEN TECHNOLOGY**

HMI Touchscreen Remote Operations Panels are the next generation of remote operations capabilities. CAD's touchscreen remote panels offer a significantly smaller foot print than conventional remote panels. Because of the HMI's smaller, space efficient design, the operator has considerably more installation options over traditional remote panels.

With a user friendly, customizable interface, our touchscreen remote panels can be easily configured to meet your operational requirements. When your stack configuration changes, the HMI can easily be modified to reflect those changes.

The HMI also provides event logging capabilities. It records, time stamps and archives each system event which can easily be downloaded or viewed.

The HMI Touchscreen Remote is yet another technological advancement by CAD Control Systems affording our customers a cost effective solution for enhanced operational capabilities. No one gives more options and user friendly technology than CAD Control Systems.



## DATA ACQUISITION SYSTEMS

CAD provides several types of Data Acquisition Systems to capture required information, helping improve safety and reliability.

#### FEATURES:

- User friendly
- Customized view of data
- Monitor and record all data, including any and all changes
- Data logged and displayed on a central server or remotely
- Ease of analysis through use of date stamped logs

- Customized data analysis according to system operator needs
- Ease of data sharing in various file types
- Redundant data storage with RAID 3 hard drive configurations
- Redundant data servers with constant synchronization between servers
- Optional rack mount or desktop server

## **PUMP PACKAGES**

#### Electric (Triplex)

The electric motor driven module is the primary source for generating the hydraulic energy which is stored in the accumulators to operate the BOP functions. The pumps are offered in a variety of options to incorporate them into the complete BOP control system. The electric driven pump modules manufactured by CAD are designed for operation in hazardous locations where the presence of explosive gases are anticipated and include electric explosion proof motor starters and pressure switches as required.



#### Pneumatic

Pneumatic operated pump modules are used to provide high pressure fluid energy to charge the accumulators and operate the BOP stack functions. They are used in conjunction with electric pump modules as an option to provide/ meet the requirement for multiple power sources for BOP control systems. Pneumatic pump modules are supplied in various options and configurations to meet specific system requirements.



## NITROGEN BOOSTER PUMP



#### FEATURES:

- Working Pressures: 100 PSI 6,000 PSI
- Air driven, reciprocating piston design pump
- 40:1 Compression Ratio
- Typical Gases to be boosted
  - Air
  - Nitrogen
  - Nitrous Oxide
  - Oxygen
  - Hydrogen
  - Carbon Dioxide

CAD manufactures a range of air driven nitrogen boosters capable of providing pressures in excess of 10 KSI. Single and double acting nitrogen pumps are available to meet flow rate requirements. They can be used for pre-charging accumulators or for high pressure testing. The systems can be designed for mobile, fixed and offshore installations.

## **CHART RECORDERS**

#### Analog

CAD Control Systems has the toughest, most compact chart recorders in the industry today. They are ideal for use in terra stockers, desiccators or for factory recording conditions simultaneously in several cleanroom locations.



#### FEATURES:

- Single pen or dual point recording
- Highly reliable and vibration proof
- Removable chart drive modules ensure easy chart paper changes and easy calibration

#### Digital

CAD provides a convenient, inexpensive solution to pressure monitoring. These fully digital chart recorder offer an array of improvements over the conventional analog circular style chart recorder. It can be mounted to the front panel of the test unit or detached and stored when not in use. There is also a DAQ to monitor Laptop Package for Record Maintenance.



#### **FEATURES**:

- Multiple point recording/monitoring of temperature, humidity, cold storage, warehouses, effluent and borehouses
- Highly reliable and vibration proof
- Secure data recording with 64 MB internal flash memory and archiving to SD memory card
- Comprehensive audit trail, secure archiving format and extensive physical and configuration security features, making SM500F ideally suited to applications where compliance to 21CFR part 11 is required
- Extensive physical and electronic security features ensure integrity of recorders configuration and archived data

## HIGH PRESSURE TEST SYSTEMS (ELECTRIC)

CAD Control Systems has over three decades of design and engineering experience with high pressure test systems.

We manufacture Test Systems for:

- Compressors
- Pressure & burst
- Positive displacement engines & pumps
- Dynamic testing cylinders (Hydraulic & Electric)
- Cylinders
- Tube Testing
- Bunker style safe BOP Testing System

These Test Systems may also include:

- Multiple Data Acquisition Methods
- · Freestanding/Skid/Trailer Mounted w/easy access controls and integrated reservoir tanks





- Provides reduced test times (up to 80% compared to pneumatic test systems)
- Compact, space efficient design
- 20 100 HP available (75 HP standard)
- Test range from 250 30,000 PSI standard
- Analog or digital chart recorder
- Dual gauges for low pressure and high pressure test readings
- Higher volume
- Four post lift frame and forklift pockets
- Can be configured to operate on 120v, 240v, 380v, 480v (standard), 575v or 600v

## HIGH PRESSURE TEST SYSTEMS (PNEUMATIC)

CAD Control Systems has over three decades of design and engineering experience with high pressure test systems.

We manufacture Test Systems for:

- Compressors
- Pressure & burst
- Positive displacement engines & pumps
- Dynamic testing cylinders (Hydraulic & Electric)
- Cylinders
- Tube Testing
- Bunker style safe BOP Testing System

These Test Systems may also include:

- Multiple Data Acquisition Methods
- · Freestanding/Skid/Trailer Mounted w/easy access controls and integrated reservoir tanks





- Compact, lightweight and portable
- Operates efficiently on 100 PSI rig or shop supplied air at 280 CFM
- Test range from 250 30,000 PSI standard
- Custom systems up to 40,000 PSI
- Air lubricator and filter
- Dual gauges for low pressure and high pressure readings
- Small footprint allows for flexibility of system placement
- An economical solution for hydrostatic testing requirements

## HIGH PRESSURE TEST SYSTEMS (DIESEL)

CAD Control Systems has over three decades of design and engineering experience with high pressure test systems.

We manufacture Test Systems for:

- Compressors
- Pressure & burst
- Positive displacement engines & pumps
- Dynamic testing cylinders (Hydraulic & Electric)
- Cylinders
- Tube Testing
- Bunker style safe BOP Testing System

These Test Systems may also include:

- Multiple Data Acquisition Methods
- · Freestanding/Skid/Trailer Mounted w/easy access controls and integrated reservoir tanks





- Self-contained system requires no additional power source
- Integrated drop pan and four post lift rack
- 114 HP air cooled diesel engine
- Test range from 250 15,000 PSI
- Analog or digital chart recorder
- Independent low and high pressure test circuits
- Lift eyes and forklift pockets for portability
- Controls designed for accessibility and ease of use
- Hydraulically operated regulator allows operator to accurately adjust test pressure

#### FLUID FILTRATION SYSTEMS

Fluid contamination is one of the major causes of failure and reduction in the operational life of fluid power systems. CAD Control Systems offers flexible, scalable, and cost effective fluid filtration solutions to meet a variety of fluid filtration requirements. We also offer self contained filtration systems, for high and low pressure applications, designed to meet your exact specifications for a variety of fluid filtration systems to existing fluid management equipment. A quality fluid filtration/ management system is critical in decreasing the expense associated with maintenance, downtime, and/ or failure associated with contaminated fluid, as well as, effectively addressing environmental concerns.

CAD Control Systems filtration systems can be used in a multitude of industries including:

- Agriculture
- Construction
- Marine Applications
- Petroleum and Natural Gas (Drilling, Completion, Production)
- Mining
- Paper and Steel Mills



Fluid sample before filtration (NAS 8)





Fluid sample after filtration (NAS 4)

Maximize productivity and minimize cost. Let CAD Control Systems design and manufacture a fluid filtration solution to meet your needs!



## Fluid Mixing Systems

In order to meet your fluid management needs, CAD offers a line of versatile and customizable fluid mixing systems designed by our in-house engineering team. We work closely with you to design systems based on your unique requirements: capacity and pressure, remote capabilities (manual, PLC, HMI), footprint, alarm requirements, data acquisition and the overall operating environment (hazardous/nonhazardous)...



#### CAD offers two types of systems:

#### 1. Hydraulic Power Systems (HPU)

- Continuous mixing/circulation of fluids stored in reservoir
- Ability to create/store hydraulic fluid pressure up to 7500 PSI
- Can be safely operated manually and remotely

#### 2. Fluid Reservoir Mixing Systems

- For use in hazardous and non-hazardous environments
- Single or multiple tank designs
- Can be safely operated manually and remotely for a variety of fluid types



## SURE-FIRE

#### **3" 10K RESETTABLE RELIEF VALVE SYSTEM**



- Fail Safe Open Pneumatic Actuator
- Tungsten Carbide Gate/Seat
- Temperature Class 'U' (0 to 250° F)
- 4130 Body and Stem
- 4130 Surface Hardened Bonnet
- Adjustable Set Pressure
- Can be field calibrated
- 3 1/16" 10K studded API connection on both inlet & outlet with a 5.88" "X" & "Y" dimension from centerline
- Fully Qualified with over 300 Break Out Cycles at 10,000 PSI



## SURE-FIRE

#### **3" 10K RESETTABLE RELIEF VALVE SYSTEM**



This system is designed to relieve over pressuring mud systems. IE: Mud Pump Systems, Riser Gas Handling Systems, as well as MPD (Managed Pressure Drilling) Applications. The valve is electronically controlled and pneumatically actuated.

The valve is made from 75k yield material and manufactured in accordance with API 6A, PSL3, Material Class DD, Temperature Class P/U. The sealing components are Tungsten Carbide, along with a Tungsten Carbide Wear Sleeve downstream of trim to protect against erosion.

The valve has a studded 3 1/16" 10K inlet and outlet, with both the X and Y being 5.88" from centerline. This allows for adaptor flanges to be made to allow the valve to fit into existing pipework. (No need for any fabrication on rig)

The valve has been successfully tested at 10,000 PSI over 300 times, with various pressure tests run at 200-400 PSI during the testing cycle. At cycle 300 a 30 minute test at 200 PSI and a 30 minute test at 10,000 PSI was successfully performed.

The control panel is constructed of a Stainless Steel Console and is a PLC based system with an HMI to display pressures, valve states, and relief settings, which can easily be calibrated and set to the desired opening pressures. System status is logged locally for easy access to detailed analysis of events and alarms. System diagnostics can be viewed directly on the HMI for ease of troubleshooting. The system can be manufactured to IECEX, ATEX, CE for Zones 1 and 2, depending on rig request.

The System is also available with the following options:

- · Battery Back Up to keep system running during loss of power
- Remote Data Acquisition which will record all system statuses for long term data storage and trend analyzing, including pressures, cycle counts, events, alarms, operator commands, and diagnostics.
- Adaptor Flanges

## **CUSTOM ENGINEERED EQUIPMENT**

CAD Control Systems is a leading provider for custom designed and engineered equipment to meet virtually any operational requirements. Provide a design and let us manufacture it. Don't have a design? Give us the concept and the operational requirements and our engineering staff will work with you to develop a solution to meet your requirements and exceed your expectations.



Custom designed Mobile High Pressure Test Facility



Subsea mixing unit with high pressure pumping system

#### PAST PROJECTS INCLUDE

- Nitrogen Back-Up
- Data Acquisition Systems
- Hotline & ROV Panels
- Spider-Gimbal Panels
- Alarm Packages
- BOP Tensioners
- Drift Mandrels
- Hydraulic Power Systems
- Mixing Systems
- High Pressure Testing Systems
- Discrete Subsea Control Systems
- Hydraulic Reels
- Subsea Accumulator Modules

## FABRICATION

CAD Control Systems has a large team of experienced welders. We offer fabrication services for high capacity production using stainless steel, carbon steel and specialty steel components. Our commitment is to provide quality workmanship regardless of the design or final destination of your equipment.

#### FEATURES:

- Stainless Steel Shop
  - Lift Capacity (5 Tons)
  - Underhook Height (12.5 ft)
  - 2 1/2 ton jib cranes
- Carbon Steel Shop
  - Lift Capacity (20 tons)
  - Underhook Height (19 ft)
  - 5 1/2 ton jib cranes



#### Our experience in metal fabrication includes production of:

#### METAL COMPONENTS

- Trailer frames and skids
- Shell plates
- Elliptical and oval beveled holes
- Heat exchangers
- Frames and skids
- Enclosures for generators & turbines

#### INDUSTRIAL APPLICATIONS O

- Base frames for motors
- Conveyor systems
- Catwalks
- Water chillers
- Enclosures

#### OIL & GAS

- Pump skids
- Frac tanks
- Specialty trailers
- Pump jacks
- Indirect and logistical racking & equipment

## **ACCUMULATOR BOTTLES & SYSTEMS**

Customized accumulator systems consisting of piston or bladder style accumulators can be provided for numerous different applications. While many of the systems provided by CAD are used for stored energy on BOP Control Systems, both in surface and subsea applications, we can provide bottles and systems to meet many other needs.



**Stored Energy** - Racks of accumulators can be provided as a source of stored energy for many needs, including back up power sources for power plants and steel mills. These systems can be as small as one quart to actuate a single valve or be built out to supply thousands of gallons of fluid for large industrial systems that require large volumes at high pressure.

**Emergency Systems** - Accumulators can act as an emergency energy source in case of loss of electricity or pump output so that emergency sequences have an energy source in order to bring the system to a safe condition.

**Hydraulic line shock** - Properly sized accumulator systems can help eliminate hydraulic line shock caused by fast actuating valves and high flow circuits.

**Pump Cavitation** - Installed on the outlet of a pump system accumulators can significantly reduce pump cavitation and noise.

Pressure holding & Leak compensation -Accumulators provide a steady supply of pressure and can make up for system leakage, ensuring that your systems operate smoothly and reliably.

**Thermal expansion** - In closed loop hydraulic circuits, accumulators can be utilized to provide protection from thermal expansion.



Our engineering team can work with you to meet your particular needs based on the application.

## WORLDWIDE SERVICE SUPPORT

CAD Control Systems started as a field service company in 1983 providing 24 hour service, performing on location repairs of BOP control systems (land and offshore). Customer service and satisfaction has always been the foundation of our business.

Over the last three decades, field services has grown from immediate repairs to complete system installations and commissioning of new capital equipment as well as performing upgrades and modifications to existing equipment. CAD Control Systems also offers training to its customers employees.

With continued growth, CAD Control Systems has diversified into other industrial markets. CAD Control Systems offers high quality and affordable infield solutions to a wide range of industries such as HVAC, municipal, chemical processing, automotive, power generation, mill applications and assembly line applications. Our world class products are backed by a staff of highly trained and qualified service representatives ready and capable of providing service at virtually any location throughout the world. Technicians can be globally dispatched 24 hours a day.

SERVICES INCLUDE:		
Equipment Troubleshooting & Repair	Training	
Instrumentation Calibration	Field System Refurbishment	
System Inspection	Equipment Maintenance	
Site & Equipment Evaluations	System Installation/Commissioning	
Single Unit or Fleet Evaluations	24 Hour Service	
Fabrication	24 Hour Replacement Parts	

CAD Control Systems offers an extensive selection of the highest quality new and re-manufactured OEM replacement components. We deal directly with all major component manufacturers, keeping our prices extremely competitive with quicker delivery times. We can supply replacement parts for a single facility or a complete rig fleet. We also have hard to find components readily available and the ability to locate those we do not have in stock.

Please visit www.cadoil.com or call 337.369.3737 for more information.

## WORLDWIDE SERVICE SUPPORT

#### **SERVICE CENTER LOCATIONS - UNITED STATES**

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#### **SERVICE CENTER LOCATIONS - OTHER**

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#### **ON-SITE OR IN-HOUSE TRAINING**



With over 30 years of experience in the industry, CAD Control Systems is continually developing customer training programs. These programs are designed to help our customers save money and improve sustainability of their equipment and systems. Our programs have saved our customers tens of thousands of dollars on a case by case basis.

Training programs are developed around industry standards, sound engineering practices, in addition to decades of experience. Our classes are in-house and offered to engineers, operations and maintenance personnel. Held in a classroom setting with a lesson plan customized to your equipment, the classes are informative and interactive, offering a "hands on" approach to learning and can use actual specified equipment and personnel in charge. We will work with you on the basics and move toward advanced techniques to help identify and solve severe and recurring problems. We then follow up with on-site training and the creation of an operations manual. These materials will give your staff the tools they need to maintain your equipment and identify when your equipment is not functioning properly before it turns into a major repair.



For more information or to schedule a training class, please contact: 337.369.3737 or 337.369.3724 (Fax) avige@cadoil.com





## CONTACT US

Headquartered in Broussard, Louisiana, we have CAD representatives and authorized agents ready to serve you throughout the world. Please see the list below to contact the CAD representative nearest you.

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