

braeden



Solution
Partner

SIEMENS

Automation
Drives

FROM CONCEPT TO COMPLETION
ENGINEERING / PROCUREMENT / CONSTRUCTION / INSTALLATION

Company Introduction/ Overview



51 Employees

Professional Engineers
Engineers/Designers
Project Managers
Construction Mgrs.
I&E Technicians
Technical Sales



Locations

South Louisiana - Lafayette
Central Colorado - Denver
South Texas - Houston

Established
2008



braeden OFFERS TOTAL PACKAGE SOLUTIONS
*LET US TAKE YOU FROM CONCEPT TO COMPLETION
ON YOUR PROJECTS*

FEED Studies

Engineering and Design

Project Management

Fabrication

HMI & PLC Programming

Instrumentation and Electrical Installation

Custom Software Development

Industry 4.0 Applications

Complete customized integration and solution

ENGINEERING

CONSTRUCTION

INSTALLATION

Safety

- ISNetworkd
- OSHA 30
- DISA
- IADC Rigpass (Safe Gulf)
- BOSIET (includes HUET and EBS)
- COMPEX (Inspection and Service of Equipment in Hazardous Areas)
- OGUK Physicals for North Sea
- Vantage Cards for North Sea
- Singaporean Ministry of Manpower (MOM) Approval
- Vaccinations for Travel in Various Countries



Regulatory Compliance, Certification & Approvals

- NEC / NFPA / AEx
- CE (European Conformity)
- ATEX (Explosive Atmospheres)
- IEC / IECEx (International Electrotechnical Commission Explosive)
- DNV (Det Norske Veritas and Germanischer Lloyd)
- API (American Petroleum Institute)
- ABS (American Bureau of Shipping)
- SIL (Safety Integrity Level) IEC 61511, 61508 / PFX (Performance Levels) ISO/IEC 13849-1
- UL508A Quality Approval UL Industrial Control Panels for Ordinary (NITW) and Hazardous (NRBX/NNNY) Locations



Engineering Services



Instrumentation & Electrical



Control and Automation Systems



Mechanical & Piping



Structural & Civil



Software Design and Development



Project/ Construction Management

Manufacturing Capabilities



Control Panels

- Custom Design – One-Offs
- Repeat Builds – Assembly Line

MCCs

Switchgear

Small Skid Assemblies 5-10 tons

Over 18,000 SF Combined Shop Space

Overhead Gantry Capability

QAN/ QAR

- IECEx/ ATEX Certified Assemblies
- Unit Verification or Type Certifications

UL

- NITW
- NRBX
- NNNY

Onsite Engineering/ Drafting

Automation

Siemens

TIA Portal, S7 Series, WinCC, PCS 7

Rockwell

ControlLogix, SLC, MicroLogix, FactoryTalk View

Schneider

Quantum, Unity, Momentum, Compact

Other

GE, Mitsubishi, B&R, Horner, SCADApack, Red Lion, Unitronics, Pro-face

Hazloc Related

BARTEC, R. STAHL, Crouse-Hinds, Appleton, Meltric, Amphenol, Turck

SCADA

Ignition, Intouch & ArchestrA, Intellution

Honeywell

PlantCruise

Database

SQL, MySQL, iHistorian, InSQL, RsSQL, Big Data Platforms

Data Logging & Report Generation

PDF, Excel, Access, XML

Remote Monitoring

Web, GPRS

Software Development

Visual Studio, Java, C#, C++, ASP

Tools and Platforms



Engineering

P&IDs

AutoCAD, CADworx P&ID

3D Modeling

AutoCAD, CADworx, Inventor, Solidworks, Creo

Piping Isometrics

PDMS, ISOGEN

Structural Design & Detail Drawings

STAAD.Pro, AutoCAD

Electrical Drawings

AutoCAD, AutoCAD Electrical

Hazardous Area Design

IEC 60079, NEC, NFPA

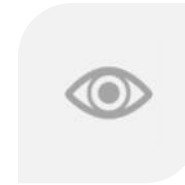
Current Products / Development



BOP/ DIVERTER
CONTROL UNITS



HIGH PRESSURE
TESTING / CONTROL
UNITS



VISION AND
INSPECTION SYSTEMS



SAFETY SHUTDOWN
SYSTEMS



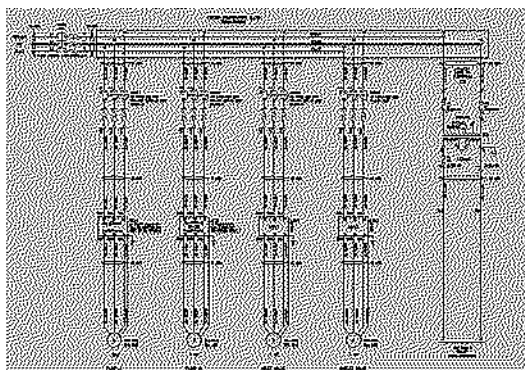
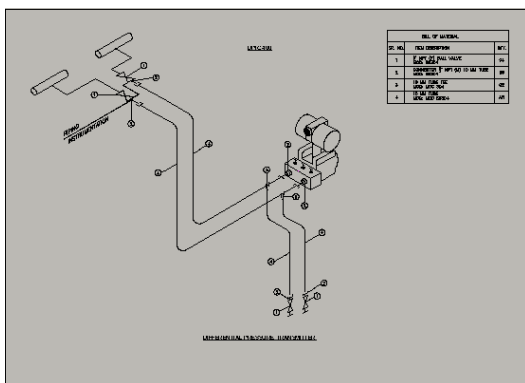
DIGITAL CHART
RECORDER



DIGITAL HYDRAULIC
GAUGES



Instrumentation & Electrical



Electrical



Motor Control Center Design



Single Line Diagrams



Plant Lighting Distribution



Earthing Design & Layouts



Cable & Cable Tray Sizing / Routing

Instrumentation



Instrument Datasheets



Hook-up / Installation Drawings



Alarm & Interlock Table



Cause and Effect



Alarm Management



Cable & Junction Box Schedule



Cable & Cable Tray Sizing / Routing

P&IDs

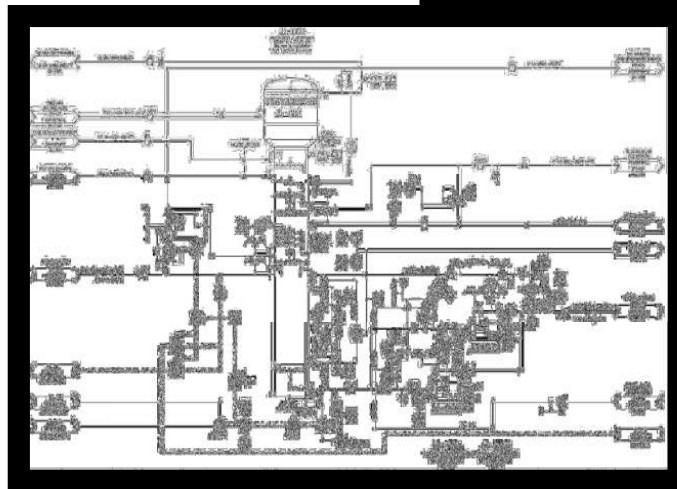
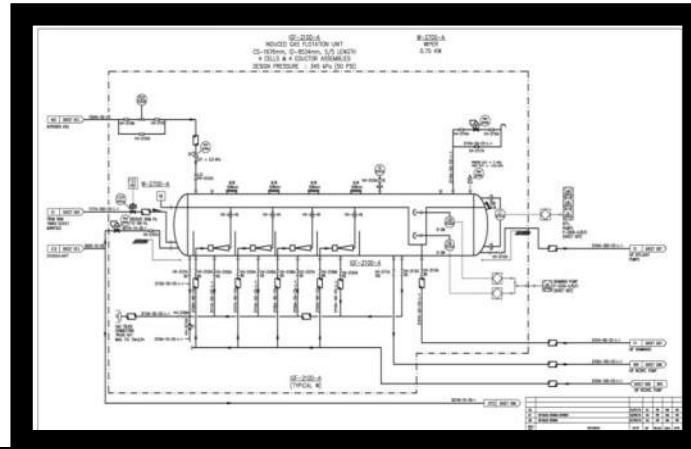
Petrochemical, Refinery & Offshore

Database
Configuration

Development
of P&IDs
using
CADworx
P&ID

Revisions
based on
Mark-ups by
client as per
walkthrough

PFDs based
on P&IDs



Waste Water Treatment

PFDs from
client's
sketches

Development
of P&IDs
using
AutoCAD

Revisions
based on
Mark-ups

As-built
drawings

Controls and Automation



PLC / SCADA / HMI Programming:

PLC Programming using Ladder Logic, Function Blocks, Structured Text
Graphics design for various SCADA and HMI platforms
Alarm Management, Historian Database, MES and Custom Reports



Control Panel Design and Engineering:

Control Panel / Marshalling Cabinet Design as per UL 508
Panel Wiring / Loop Wiring / Interconnection Drawings
Preparation of Submittals, O&M Manuals



Installation & Start-up Assistance



Manufacturing Execution Systems



Custom Software Development





Industry 4.0 - Smart PLCs

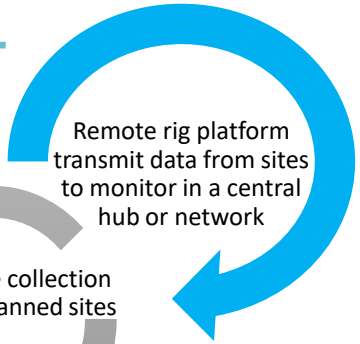


Infrastructure network upgrade and a central hub for data collection, analysis, reporting and visualization

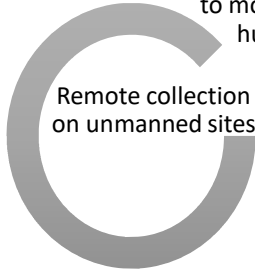


Sensors and PLCs in the network for ERP data transfer and more

Remote Real-Time Monitoring



Remote rig platform transmit data from sites to monitor in a central hub or network

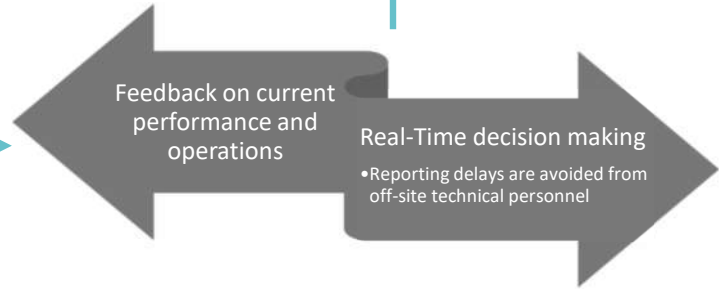


Remote collection on unmanned sites

Smart and Reliable Technology



Mobile application for efficiency and performance



Feedback on current performance and operations

Real-Time decision making

- Reporting delays are avoided from off-site technical personnel

Oil & Gas/ Maritime

BOP and Diverter Control Systems

Drilling Control Systems

Subsea Control Systems

Pipeline Monitoring and Control Systems

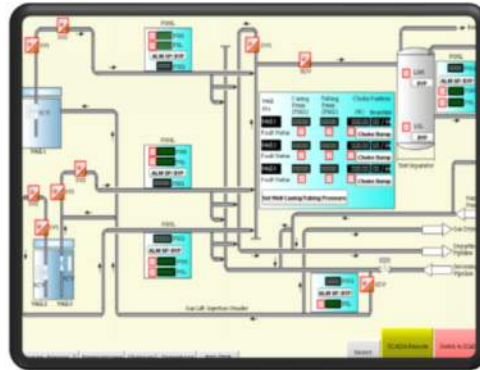
Refinery Monitoring and Control Systems

Production Control Systems

Vessel Management System

ESD Systems

Tank Monitoring



Hazardous Area Compliance

PLC / HMI Programming

Custom Report Generation

Panel Wiring Drawings

Loop Drawings

PDF Submittals and Reports

FAT & Start-up Support

Commissioning

Trouble Shooting and Support

Training

Industrial/Manufacturing

Plant Monitoring and Control Systems

Product Line Control Systems

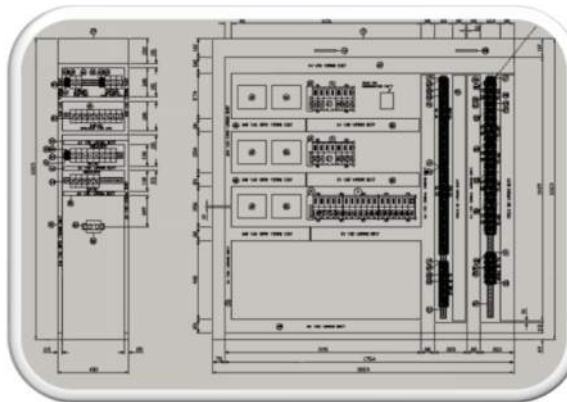
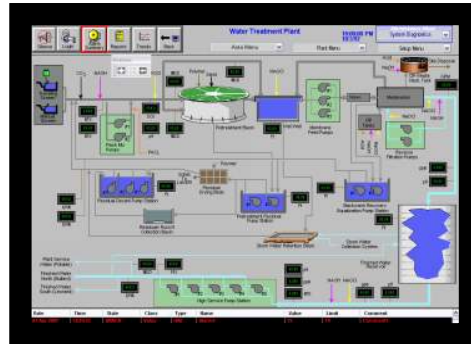
Power Management System

Bulk Handling Systems

Batch Processing

Safety and Alarm System

Testing Systems



PLC / SCADA Programming

SCADA Alarm Configuration

Custom Report Generation

Panel Layouts

Wiring Schematics

Interconnection Drawings

Conduit Schedule

FAT & Start-up Support

Hazardous Area Compliance

Commissioning



Increased Quality & Efficiency While **Reducing Costs**



Reduced accident risks for personnel



Better decision-making reduces risks of improper machine usage and downtime



Efficient maintenance reduces costs and risk of unplanned downtime



Improved approach to machine operations, increases uptime and product output



Reduced manual labor by using automation or analytics



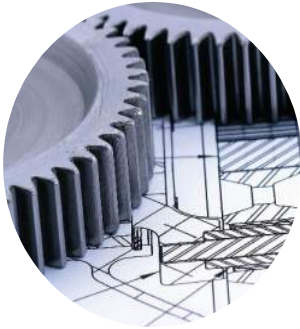
Availability and hardware reduction of data management in the cloud reduces costs



SIEMENS

Siemens Integrator

- Experience with older electronic equipment
- Support and resources
- Preferred pricing



Provide all levels of engineering, design and services

- Flexibility and agility to utilize the best solution
- Customized package solution to meet client's needs



Globally experienced designers, engineers and field technicians

- Fast response time
- Efficient mobilization and international travel where restrictions apply



Variety of skill sets including:

- Safety systems and other SIS (Safety Instrumented Systems)
- Hazardous Areas
- Vision Systems
- Instrumentation and controls
- Equipment Manufacturing
- Field service and support
- Regulatory or Standards Compliance - local or international
- Professional Engineering Firm and Electrical Contractor



Servicing clients around the world

- Established track record with public companies around the world
- Adaptability for changing customer requirements
- Coverage within multiple markets and industrial sectors



Finding cost effective, reliable and efficient solutions

- Competitive rates
- Effectively reduce costs through efficient personnel management, resource allocation, and legacy systems



Why braeden?

Thank You



Questions?