



# ENVIRONMENTAL SYSTEM DESIGN & ENGINEERING

## CUSTOM-ENGINEERED SOLUTIONS FOR AIR, WATER, AND ENERGY

Anguil has decades of experience in system design and project management, resulting in a global portfolio of technologically advanced, highly effective, and user friendly environmental solutions. We partner with you to design, manufacture, and install quality systems that reduce your environmental footprint, lower operating costs, and maximize return on investment.



### YOUR ENGINEERING EXPERTS

**We specialize in complexity. As a single source supplier of both air and water abatement systems, we deliver quality engineered, custom solutions.**

- Fully turn-key, in-house team of engineering experts involved at every level of your project, from pre-engineering to design and manufacturing to aftermarket and emergency service
- Technology agnostic, full-service provider specializing in the integration of a wide variety of equipment, including air and water abatement technologies and energy recovery systems
- Over half of Anguil's staff are degreed engineers with experience across mechanical, electrical, structural, chemical, and environmental disciplines



### ADVANCED CONTROLS & AUTOMATION

**Our systems use the latest in Programmable Logic Controller (PLC) based controls, touch screen interfaces, and remote telemetry, delivering seamless integration with your process.**

- LCD Color touch screen Human Machine Interface (HMI) (remote HMIs available)
- PLC with system control logic; Rockwell / Allen Bradley and Siemens are standard
- Variable Frequency Drives (VFD)
- Remote Connection for off-site monitoring and troubleshooting
- Flame detection with self checking UV scanner
- Digital Data Recorder
- Flexible control panel options



### INSTALLATION PACKAGES

**From site supervision to fully turn-key, our flexible installation packages ensure your Anguil system is delivered and operational when planned.**

- Engineering services
- Installation supervision
- Mechanical, electric, and gas installation
- Piping design, supply, and erection
- System integration into your existing processes
- Equipment startup, operator training and remote monitoring
- Controls design, supply, and integration



### QUALITY DESIGN & MANUFACTURING

**State-of-the-art equipment, designed and built by expert craftspeople using and the most current manufacturing techniques.**

- Anguil's design team uses the latest in Computer-Aided Design, including AutoCad, Solidworks and other 3D software.
- Projects executed with a proven gate approach to ensure quality standards and schedules are met
- Robust Quality Assurance Department with a comprehensive quality management program
- Global network of diverse, Anguil-certified suppliers



# ADVANCED CONTROLS AND AUTOMATION

Anguil's control systems provide the safest, most efficient, and highly reliable operation while integrating smoothly into existing plant operations. From new equipment to upgrades and retrofits, our systems utilize the latest in Programmable Logic Controller (PLC) based controls, touch screen interfaces, and remote telemetry.



## RELIABLE CONTROLS

- Designed to minimize downtime, account for safety and compliance risks, and optimized for usability
- Flexible Programmable Logic Controller (PLC) offerings
- LCD color touch screens (6" to 15" screens available)
- Remote access gateways for simplified remote monitoring and troubleshooting
- Self-checking UV scanners and other smart devices bolster continuous operation
- Digital data recorders for streamlined compliance reporting



## EFFICIENT & INTELLIGENT DESIGN

- Variable Frequency Drives (VFDs) accommodate a wide range of process flows
- Auto-balancing media beds optimize heat loading and transfer
- Customizable Hot Gas Bypass (HGBP) offerings for excess heat management and recovery
- Dynamic media bed and heat exchanger bypass controls
- Optional Supplemental Fuel Injection (SFI) to minimize NOx formation
- Process measurements to control the dosing of treatment chemicals



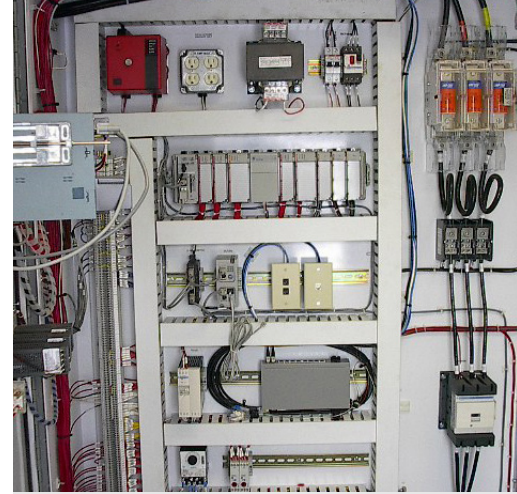
## INTEGRATE WITH CONFIDENCE

- Multiple inlet/pick-up point design with automated pressure control
- Automatic fresh-air dilution responds to changes in process flows
- Flexible control panel mounting and configuration options
- Extra digital and analog I/O to accommodate future additions
- Seamless integration and operation of water treatment trains with several skidded components
- Remote Human Machine Interfaces (HMIs)



## REMOTE MONITORING & CONTROL

- PLC Remote Connection — A troubleshooting lifeline during system upsets and a “force-multiplier,” allowing Anguil engineers to offsite access to your system’s operation
- **(Coming Soon)** Industrial Internet of Things (IIOT) package to improve safety, reliability, and maintenance efforts. Enables communication with your Anguil system to get real-time data logging, event reporting, and alarm notification.



## ANGUIL'S TYPICAL CONTROLS PACKAGE

- LCD Color touch screen Human Machine Interface (HMI) (remote HMIs available)
- PLC with system control logic; Rockwell / Allen Bradley and Siemens are standard
- Variable Frequency Drives (VFD)
- Remote Connection for off-site monitoring and troubleshooting
- Flame detection with self checking UV scanner (oxidizers)
- Digital Data Recorder
- Flexible control panel configurations: NEMA 3R skid mount, weatherized control panel, NEMA 12 indoor mounted control panel, Control room with NEMA 12 control panel

**Depending on the requirements of your pollution control device, our standard program is capable of:**

- Auto balance
- Supplemental Fuel Injection (SFI)
- Customized Hot Gas Bypass (HGB) logic to not only dump excess heat but also use heat
- Multiple inlets with pressure control
- Automatic fresh air dilution
- De-rating of heat recovery media or exchanger to handle moments of high loading
- Automated offline cold face bakeout to remove organic build-up from media