

SMART CANNON™

Enhanced cleaning performance you can rely on

SMART Cannon™ represents the most advanced furnace cleaning technology available. With over 90 installations in the United States and 150 installations worldwide, SMART Cannon™ has proven to cover more furnace cleaning area, reduce maintenance, and improve efficiency dramatically over any other product on the market. The main advantage customers gain is increasing cleaning coverage in their boiler from 30% with traditional wall blowers, up to 80% with SMART Cannons™. By increasing the heat transfer in their furnace, operators can finally take control of, and optimize, their boiler performance.

The precision of the SMART Cannon™ is unmatched and is the easiest system to maintain available. Unlike other systems, it has tube life and thermal impact measurements included, along with unprecedented 24x7 customer support. With SMART Cannon™, the difficult decision to struggle with underperforming systems or invest heavily in a new system has become a thing of the past. SMART Cannon™ is a smart solution that can be continuously adapted and enhanced as use demands.

Its precision starts with absolute position indication provided through highly reliable servo motors, delivering +/- 1/64" accuracy and much greater speed control over traditional induction motors. The design also eliminates drifting and overshooting found in competing devices. The SMART Cannon™ system is designed for the most efficient and reliable operation available. All of its parts are modular, providing ease of maintenance, and limiting down time. Additionally, its logic is PLC based – not the common PLC and PC hybrid, with all electrical components enclosed to prevent environmental damage, with cooling air keeping the components operating even in high ambient conditions.

Throughout the SMART Cannon™ design, there are dozens of innovative improvements over typical industry standards. An example is the positive sealing and cooling against flue gases and radiation accomplished via a "Uni-Ball" wallbox joint, complete with integral seal air manifold and a chrome carbide coating for years of reliable operation. The Uni-Ball reduces the amount of air required by less than a third of competing devices.

SMART CANNON™

One reason for its precision and maintenance ease is that SMART Cannon™ claims the most sophisticated operating system available – SMART Controls™. SMART Controls™ is an expandable system that easily integrates with existing DCS. SMART Controls™ provides continuous, detailed reporting on critical operating data that ensures ongoing troubleshooting accuracy and improved performance.

SMART Pump

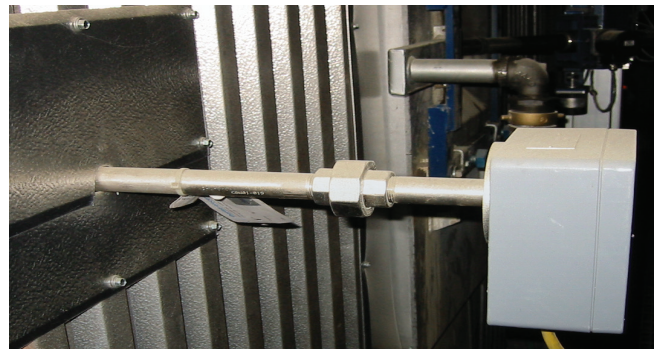
Dynamic water pressure is supplied to the SMART Cannons™ via the compact, variable speed, variable pressure SMART Pump water pumping station. The heart of the SMART Pump skid is a VFD controlled, ultra-reliable pump, made with dual bearings and a double mechanical seal. Due to its unique configuration (in either single or dual nozzle configurations), SMART Pump water quality requirements are not restrictive to a treated potable source or condensate. With unparalleled low maintenance, and unmatched precision cleaning results that pay for themselves over just a few months in most cases, it's clear why boiler owners and operators are making the investment to switch furnace cleaning systems to SMART Cannon™.

SMART Flux Sensor™

SMART Flux Sensors™ provide the real-time data acquisition on the heat transfer occurring in the furnace. Embedded in strategic locations throughout the furnace waterwall tubes, they monitor slag location and tenacity. This data feedback is used by the SMART Controls™ system to direct the cleaning activity at precisely the right time and location. In addition to the automatic operation of each cleaning event, the system adjusts its own frequency and intensity of cleaning to maximize safety and effectiveness.

Benefits

- Increased furnace heat transfer for improved efficiency, reliability and emissions
- Modular design for safe and easy maintenance
- No equipment ever inserted into the furnace, avoiding costly damage
- Precise positioning for effective cleaning with longer tube life
- 24x7 tech support



Clyde Industries Inc.
4015 Presidential Parkway | Atlanta | GA | 30340
+1 800 241 5996 | clyde-industries.com

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =