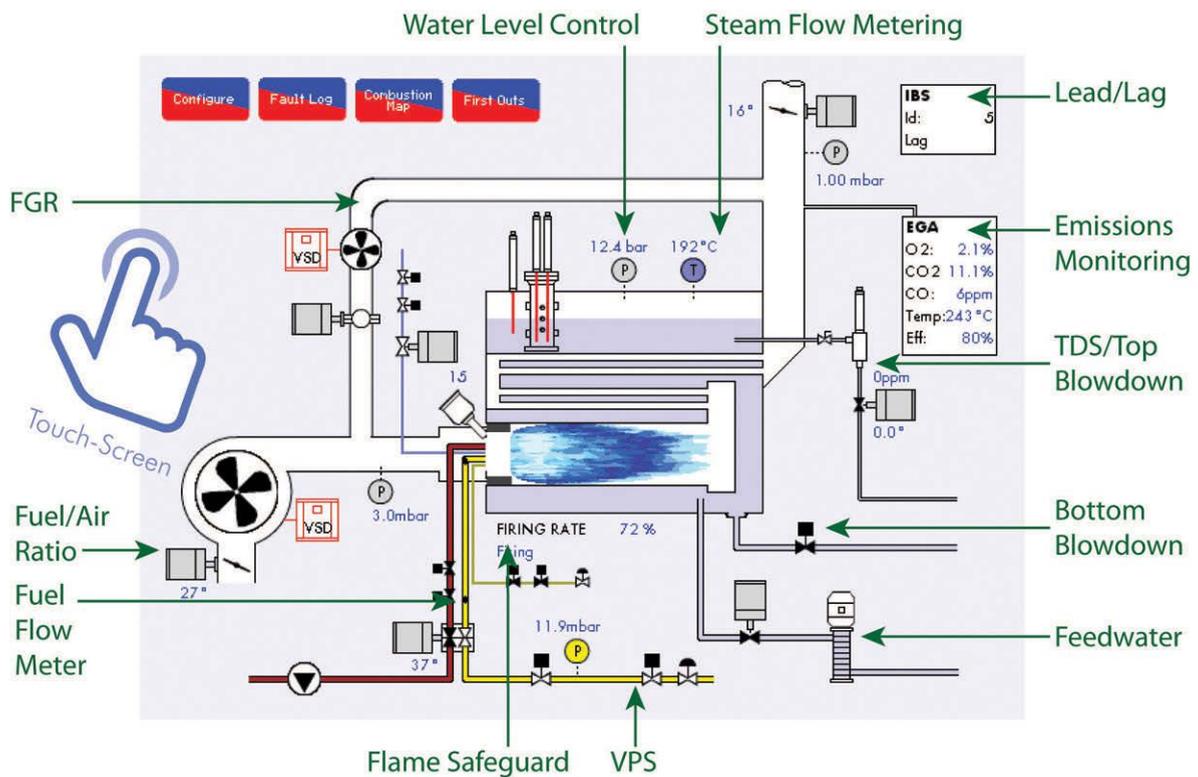


WIPING THE SLATE CLEAN



Simplify operation with all-in-one touchscreen boiler controllers.

Commercial and industrial boiler controls have typically been characterized by either manual linkage or multiple control modules joined together and then managed through a small LCD HMI. Those wanting to incorporate more of the process control could opt for a much more elaborate PLC (Programmable Logic Controller), although with this comes a hefty price tag. You could, however, go with the “keep it simple” approach of an all-in-one touchscreen controller. Design engineers who go this route will find a wide variety of financial and environmental benefits while simplifying their combustion application without limiting themselves

on control variables.

An all-in-one touchscreen control combines the controller and all ancillary modules and puts them in a single box with a touchscreen interface on the exterior. Flame safeguard, VPS, fuel/air ratio control, VSD, reporting and graphing, FGR, scheduling, lead-lag, blowdown, TDS, draft control — all of these features and more can be controlled from the single touchscreen. Autoflame, who invented all-in-one boiler controls in the early 1980s, were again pioneers to incorporate the touchscreen technology to all-in-one control with the release of the Mk7 MM Controller in 2007. The latest product, the Mini Mk8 Controller, arrived earlier this year. It wipes the slate clean with a whole new approach to compact touchscreen burner controls.

在线修改

#	描述	值
1	M.M.: 锅炉温度/压力感应器种类	温度
2	M.M.: 调试马达转动速度限定	10.0 度/秒
3	未选中: 选项	
4	未选中: 选项	
5	M.M.: 吹扫位置	...
6	PID: 比例带	20 °C
7	PID: 积分时间	10 秒
8	M.M.: 伺服马达通道	通道 1、2及3
9	M.M.: 内部温度操作	...
10	M.M.: 燃烧机关闭补偿	3 °C
11	M.M.: 燃烧机开启补偿	3 °C
12	E.G.A.: EGA 功能	微调适用
13	E.G.A.: EGA 错误反应	...
14	未选中: 选项	

全部 M.M. PID E.G.A. D.T.I. E.C.

日期: 2015年5月 10:08:10

AUTOFLAME CONTROLS SUPPORT A WIDE VARIETY OF LANGUAGES, INCLUDING CHINESE.

INTUITIVE, SAFE OPERATION

Programming and viewing settings of a complex boiler system using multi-functional push buttons and a 3-in LCD screen can be difficult and confusing. By building a touchscreen system around a boiler schematic, the end user can intuitively navigate the process and quickly get to answers without having in-depth training on the controller. Want to know the historical fuel line pressure? Simply tap on the fuel line pressure gauge part of the schematic and immediately you have your answer. Of course, the burner commissioning engineer still needs the proper training to install and commission the systems. But the Autoflame touchscreen systems are inherently safer because they take out guesswork and confusion.

By allowing users to quickly access information via the touchscreen, it is much more likely that a dangerous situation in the boiler room is identified and resolved. This is especially the case when product is exported to non-native English speakers; taking the guesswork out of the commissioning and operation creates a much safer delivered product. Autoflame's touchscreens can be set up to display in almost any language.

EMISSION REDUCTION & FUEL SAVINGS

The Mini Mk8 is capable of reducing boiler emissions by 15%. This can be much greater if the boiler has not been regularly maintained, as linkage systems are subject to hysteresis (linkage slop) over time. The Mini Mk8 ensures burner temperature is accurate to within 1°F and pressure to 1 PSI, not only at the time of commissioning, but for years afterward. Thus, ideal combustion with the most minimal emissions is achieved over the long term. It is not unusual to see a 10-15% fuel savings. One recent customer reported savings in excess of 31%, with the findings certified by a third party.

REDUCED MAINTENANCE/DOWNTIME

By automating so many aspects of the boiler, fewer man-hours

of oversight are needed for day-to-day operations. Additionally, because the Mini Mk8 operates precise servomotors, one can go years without significant adjustment. When there is a problem with the boiler, the Mini Mk8's numerous reporting features and error logging allow technicians to quickly resolve issues, reducing downtime. The 1,000-entry boiler log historically records every event and startup.

COMPACT FIT

All-in-one controls are inherently more compact. All of the sprawling wiring and module functions are contained in a single fully-enclosed control. The Autoflame MM controls are fully encased in IP20 enclosures (IP65 front), requiring as little as 6.6-in by 5.3-in surface, and fitting in areas as small as 2.9 in deep. This compact size makes it ideal for the small packaged burner applications, avoiding large and costly control panels.

Boiler controls have greatly evolved over the past decade, as have expectations. Both users and manufacturers are looking for great simplicity in setup and operation, and many are finding all-in-one touchscreen controllers the perfect fit for their boiler room. **TB**

It's what your boiler would choose...

Visit www.topog-e.com to learn more about the world's most popular molded rubber handhole and manway gaskets.

Contact us to receive **FREE**:

- STEAM TEMPERATURE SLIDE RULE
- TECHNICAL SPECIFICATION AND USAGE GUIDE
- SAMPLE GASKET
- CONTACT DETAILS FOR YOUR LOCAL DISTRIBUTOR

For further information and a quotation:
 1224 North Utica • Tulsa • Oklahoma 74110
(800) 587 7123
 tel 918 587 6649 • fax 918 587 6961
 sales@topog-e.com • www.topog-e.com



TODAYS BOILER

TRENDS, TECHNOLOGIES & INNOVATIONS

AVOIDING THE BIG FREEZE

As cold weather kicks in, consider heat tracing and other temporary boiler tips.

The Official Magazine of



Supplement to *Engineered Systems Magazine*. *ES* is a member of ABMA.

CHP Success
PAGE 8

Considering Special Fuels
PAGE 10

Firetube Boiler Design
PAGE 16