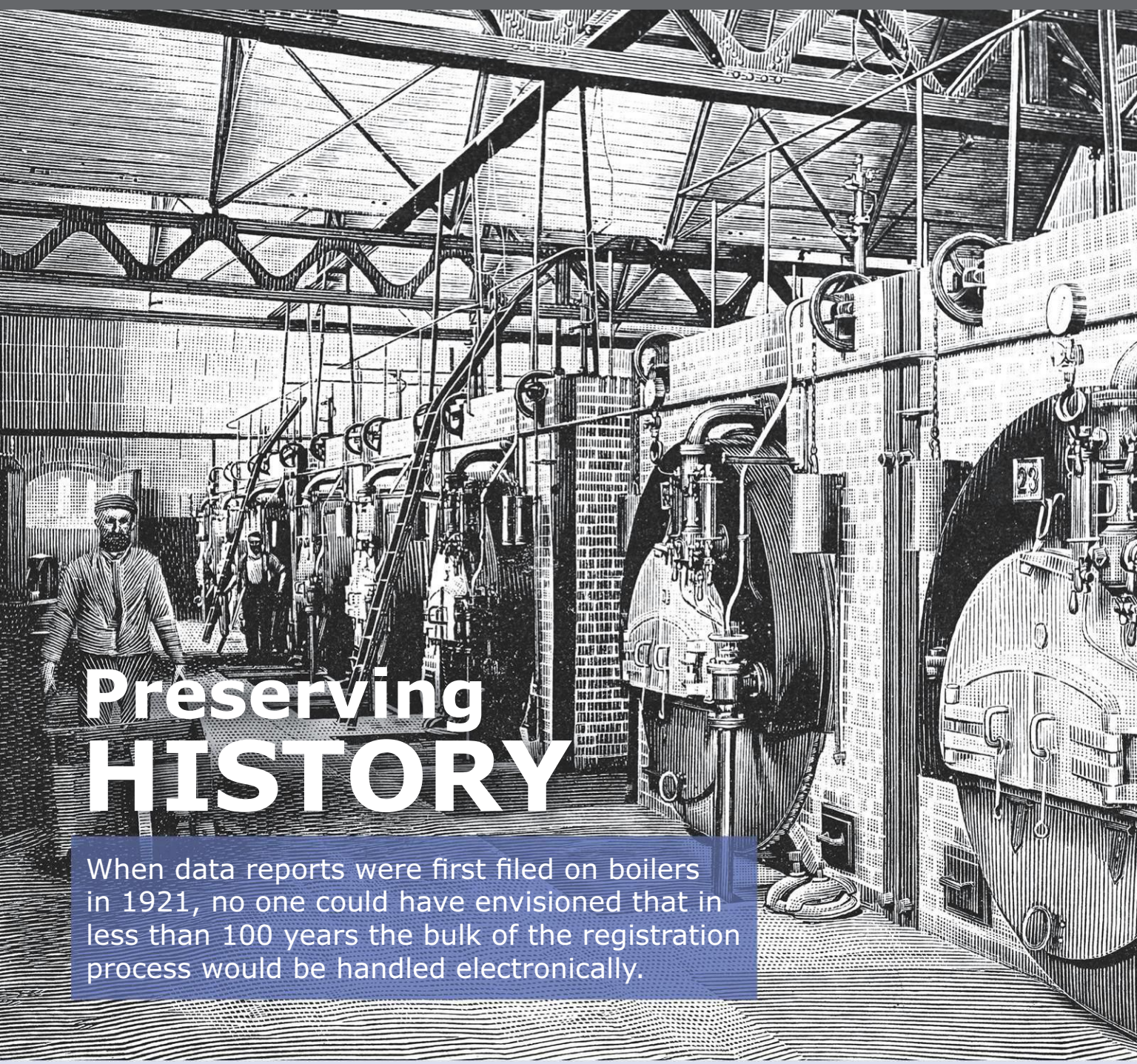
JANUARY 2022

TODAY'S BOILER

TRENDS | TECHNOLOGIES | INNOVATIONS



Preserving HISTORY

When data reports were first filed on boilers in 1921, no one could have envisioned that in less than 100 years the bulk of the registration process would be handled electronically.

ABMA®
LEADERSHIP FOR THE BOILER INDUSTRY

The Future of Servicing Boiler Equipment – Remote Service Engineers / PAGE **10**

Solutions to Common Heat Transfer Fluid Problems / PAGE **26**

Remote Monitoring Advances in the Steam Boiler Industry

Viewing multiple boiler rooms from one centralized location gives managers a birds-eye view into an organization's critical steam generation infrastructure.

By David Vrana

Miura's Connect Remote Monitoring System.

Technology is continuously evolving across industries to keep up with the growing consumer demand. In the steam boiler industry, this evolution is evident in the effort to conserve resources, support scalability, simplify installation and maintenance requirements, and monitor equipment health.

Better communication between steam boilers and their operators often results in increased efficiency and productivity, key objectives that save time and money while meeting current needs, allowing operators to stay ahead of changing requirements.

Change is constant, as are challenges, and being better prepared is all about having the capabilities to deal more effectively with them as they happen.

If the current decade has taught the industry anything, it's that those who can respond quickly to changing circumstances with flexible options in place will operate with greater certainty. Remote monitoring capabilities provide these options, and recent advances ensure operators stay informed on equipment health.

Real-Time Monitoring in Real-Life Operations

Real-time monitoring provides essential advantages that can often make the difference between achieving production goals and falling short.

To put the power of monitoring in the hands of those overseeing the equipment, companies are launching mobile, cloud-based, real-time remote monitoring and customer-accessible platforms, such as Miura Connect, that provide an innovative view of all the connected boiler room equipment.

Advanced remote monitoring capabilities can give end users eyes from almost anywhere, ensuring optimal system reliability. These capabilities offer a sophisticated, knowledge-based analysis of a particular situation, which is crucial to eliminating guesswork while staying on top of day-to-day operations.

For example, users can set notification preferences to receive real-time boiler room notifications and alerts directly to their smartphones and easily access relevant information while searching for technical documentation in seconds.

Traditionally, operators would receive a caution or alarm from the boiler, notify their maintenance

representatives via a phone call, and request service.

Now, a representative can look into historical and real-time data to be better informed on the issue, allowing them to bring the right tools and materials to quickly address the issue.

Getting a head start by anticipating and preparing for a potential situation is always preferable to figuring it out on-site and running the risk of needing to return with additional supplies or tools.

Labor Concerns Won't Always Fix Themselves

The current labor struggle affects all industries, and no one can be certain when it will improve or even how to fix it. Skill positions, like boiler operation and maintenance, which are not new to this shortage plight, are feeling the effects of supply and demand as the country continues to ramp up production to meet growing needs.

In a typical situation, a steam boiler facility is short-staffed due to current conditions. Where they once had multiple maintenance technicians, they now only have one for multiple utilities. Text messages and email alarms can now promptly inform technicians to tend to various issues and provide the necessary fixes before they become potentially bigger and more costly problems.

The same advantage applies to large organizations with multiple sites that can take advantage of multiple site monitoring options, regardless of their labor situations, to ensure proper efficiency and maintain supply and demand within parameters.

Viewing multiple boiler rooms from one centralized location gives managers a birds-eye view into the organization's critical steam generation infrastructure nationwide.

Real-Time Remote Monitoring that Stays Current

Engineered to be continually optimized, this remote monitoring tool and the Internet of Things (IoT) technology that enables it ensures such platforms will be living applications with upgrades and features automatically available without the need for on-site updates or additional hardware in most cases.

Figure 1. Miura's LX Series Modular Boilers.

Integrated technical documentation will allow users to access data when needed, including supporting documents, such as water logs and maintenance procedures, while accessing manuals and technical documentation.

By signing into the secure, cloud-based user interface, boiler operators, company management, representatives, and technicians can quickly and easily access real-time boiler room data from any web-enabled device.

As uncertainties continue to guide future considerations, real-time remote monitoring provides greater flexibility that addresses the critical concerns of steam boiler facilities in businesses, schools, and health care facilities by allowing them to be more informed and respond more appropriately.

Practical features, including data report generation, will create custom historical data reports fast for quick visibility and trend analysis, allowing users to customize the start and end date timeline or view complete lifetime info to generate comma-separated values (CSV) reports. Tailored alarm notifications provide instant text or email notifications in real time, enabling users to take precautionary measures that eliminate downtime. Tracking and trending historical data that is securely stored in the cloud can be filtered to specific date ranges to help make informed decisions that may potentially increase the life of the equipment.

Advances in Remote Monitoring Keep Users Ahead

Investing in real-time remote monitoring systems provides a range of protections for steam boiler facilities that allows users to take advantage of enhanced communication between connected systems, management, and representatives.

Today, Miura is looking at innovative technology that provides real solutions, and quicker, more thorough, more accurate communication is vital among them.

Flexible options are essential for better preparation, which is why steam users need to take a closer look at proven technologies, like advanced remote monitoring, to addresses a range of possible concerns. These options make it easier to operate within an environment of change while meeting the challenges of today and tomorrow. TB

By David Vrana, national manager, customer experience and rep. engagement, Miura America Co. Ltd.

THANK YOU TO OUR 2022 ANNUAL MEETING SPONSORS

PREMIER SPONSORS:

Atlas Copco — atlascopcorental.com

Superior Boiler — superiorboiler.com

NBBI Since 1919 — nationalboard.org

Frederick Cowan / Instruments & Controls Inc. — frederickcowan.com

Miura — miuraboiler.com

Powerhouse, Part of the Atlas Copco Group — powerhouse.com

umicore, materials for a better life — umicore.com

Victory Energy, Full Steam Ahead! — victoryenergy.com

CHAMPION SPONSORS:

BFS Industries, LLC, established 1946 — bfs-ind.com

nyb — nyb.com

PARTNER SPONSORS:

Applied Heat Recovery — appliedheatrecovery.com

Clark-Reliance — clarkreliance.com

Cleaver-Brooks — cleaverbrooks.com

DuBois — duboischemicals.com

Honeywell, The Power of Connected — honeywell.com

oilon — oilon.com/us

Power Flame Inc. — powerflame.com

Questtec Solutions — questtecsolutions.com

Rentech — rentechboilers.com

UL — UL.com/HVACR

Ware, All ways steam. — wareinc.com

Webster Combustion, A Selas Heat Technology Company — webster-engineering.com

HSB, A Munich Re company — go.hsb.com/gies

Howden — howden.com

Laars Heating Systems Company, A subsidiary of Bradford White Corporation — laars.com

Metal Forming Solutions — metalformingsolutions.com

Nationwide Boiler Incorporated — nationwideboiler.com

Simoneau — groupesimoneau.com

Sterling Deaerator Company — sterlingdeaerator.com

STICO Mutual — sticomutual.com

Fox Equipment — foxequipment.com

Robinson Fans — robinsonfans.com

CONTRIBUTING SPONSORS:

Autoflame — autoflame.com

ClearSign, Sub 2.5 ppm NOx — clearsign.com

Industrial Steam — industrialsteam.com

PanGlobal — panglobal.org

Vapor Power International — vaporpower.com

wabash, Power Equipment Company — wabashpower.com

Visit ABMA.com to learn more about our upcoming events.

ABMA Events

BOILER 2022 – ABMA Boiler Technology Conference & Expo
April 11-13, 2022
Hyatt Regency
Dallas, TX

June 24-27, 2022
The Ritz-Carlton
Amelia Island, FL

January 13-16, 2023
Park Hyatt Aviara Resort
Carlsbad, CA

June 23-26, 2023
Fairmont Chateau Whistler
Whistler, BC Canada