

**COMPANY PROFILE**

**2026**

**NEW STRUCTURE  
NEW VISION  
NEW MISSION**

**NEW**

# **COMBUSTION TECHNOLOGY**

## **VISION:**

To lead Africa's industrial energy transition by delivering intelligent, efficient, and low-emission combustion and boiler solutions that enable sustainable growth for generations to come

[www.combustiontechnology.co.za](http://www.combustiontechnology.co.za)



## MISSION:

**We partner with industry to engineer, supply, and support world-class combustion and boiler systems that maximise efficiency, ensure reliability, reduce emissions, and deliver measurable long-term value**

### OUR ESG-ALIGNED STRATEGIC PILLARS

#### **Operational Excellence & Safety (Governance)**

Deliver highly reliable, safe, and efficient combustion systems through engineering integrity, precision, quality components, robust risk management, and disciplined project execution.

#### **Energy Efficiency & Emissions Reduction (Environmental)**

Enable Customers to reduce fuel consumption, emissions and environmental footprint through system upgrades, fuel conversion, advanced control technologies, and ongoing optimisation.

#### **Innovation & Intelligent Solutions (Environmental & Governance)**

Integrate automation, data intelligence, and advanced combustion technologies to improve asset performance, enable predictive maintenance, and future-proof installations in line with evolving environmental and regulatory demands.

#### **Customer Partnership & Lifecycle Support (Social & Governance)**

Deliver long-term value through service, maintenance, training, and technical expertise that extends asset life, protects customer investment, enhances operational resilience, and promotes skills transfer.

#### **African Growth & Capability Building (Social)**

Expand our footprint across Africa and the Indian Ocean Islands while investing in local capability development, technical skills, partnerships, and sustainable industrial infrastructure that supports economic growth and responsible industrialisation.



**American Boiler Manufacturers Association**



Member of **SAGA**  
Southern African Gas Association



## Professional Craftmanship and Innovation Drive our Expertise

EXCLUSIVE DISTRIBUTOR OF WORLD RENOWNED BRANDS

**AUTOFLAME**

**Autoflame** Engineering provides the widest range of Complete Burner and Boiler Controls, Sensors and Remote Management Tools for a wide variety of commercial, industrial and process applications.

- Digital Combustion controls suitable for all makes of Boilers and Burners.
- Emissions Monitoring and Management Equipment.

**Cannon Bono Energia**

**Cannon Bono Energia** offer Design and Manufacturing of Large Industrial Boilers for standard and special applications

- Fire Tube Boilers.
- Water Tube Boilers.
- Superheated Water Boilers.
- Diathermic Oil Heaters.
- High Temperature Oil Heaters.

**I.VAR.**  
INDUSTRY

**I.VAR Industry** produces quality Boilers and Steam Generators of various outputs and construction as well as custom-made on request.

- Steam Boilers.
- Hot Water Boilers.
- Thermal Oil Boilers.

**Limpsfield**

**Limpsfield** high performance, Industrial Burners. Limpsfield is the only Burner Manufacturer who guarantees O<sub>2</sub> levels of sub 3% and CO less than 10ppm across the entire Burner firing range.

Designed to maximise efficiency and reduce fuel usage and your carbon footprint.

Savings of 8-12% with a Money Back Guarantee!

**RIELLO**  
Energy For Life

We are the exclusive distributor of **Riello**, the world's largest Burner Manufacturer, for over 38 years. We offer a full range of Burners, suitable for the most popular fuels.

- Oil Burners (Light & Heavy Oil).
- Gas Burners (Natural Gas & LPG).
- Dual Fuel.
- Low NO<sub>x</sub>.
- Biomass Burners.
- Hydrogen Burners.

**Unical**

Unical produces a wide range of Boilers for the industrial, professional and domestic industries.

- Hot Water Boilers.
- Steam Boilers.
- Thermal Oil Burners.
- Steam Boiler Accessories.

With offices in Cape Town and Johannesburg, supported by a nationwide dealer network, our reach extends across Africa and the Indian Ocean Islands, allowing us to support customers wherever they operate.

Trusted by clients for nearly 40 years, our long-standing partnerships reflect our commitment to quality, expertise, and dependable service.

# Coal-to Gas Conversions

## PROVEN EXCELLENCE FOR LARGE SCALE COAL-TO-GAS CONVERSIONS FOR A CLEANER, MORE EFFICIENT & ENVIRONMENTALLY FRIENDLY BOILER PLANT

Many boiler plants with coal-fired equipment that have reached a retired state, are being repurposed or re-fueled. Re-purposing aging coal plants to run on natural gas is increasingly considered to move to reduce emissions, cut costs and move to a cleaner energy future.

The falling price of natural gas has played a large role in this trend.

We have managed countless coal-to-gas conversion projects over the last 39 years and are well experienced to provide working solutions for your boiler plant and energy issues.



### PROJECT MANAGEMENT LEAVE IT TO THE EXPERTS!

#### Our Process:

- Equipment evaluation
- Energy / Emissions audits
- System design
- Boiler and Burner replacement
- Control retrofits
- Set Timeframes
- Project management
- Training
- Evaluation and measurement

### Benefits of a Coal-to-Gas conversion by Combustion Technology:

- SAVE on Operating costs.
- REDUCE fuel consumption and emissions by 8 – 12%.
- GUARANTEED Oxygen levels of sub 3% on Natural Gas throughout the FULL burner firing range with a Money Back Guarantee.
- 24/7 Boiler Management Service.
- END-TO-END design and construction of your conversion project.
- Operational Readiness Program to meet your Boiler Plant's demands.
- Training Program with successful Operating and Maintenance Procedures.
- Compliance with SANS329 regulations to meet safety standards.
- Legislation and Environmental Compliance.

### Natural Gas

For a more cost-effective, cleaner, efficient and reliable source of steam.

Combustion Technology are partnered with leading gas suppliers throughout Africa and Mauritius.

# Specialised Services, Spare Parts and Repairs

**WE OFFER VARIOUS PLANNED MAINTENANCE OPTIONS, SLA'S  
AND 24/7 BOILER MANAGEMENT SERVICE**

## **Our Focus**

- Emissions Reduction.
- Increasing Efficiency.
- Operating Costs Reduction.
- Safety.
- 8 - 12% Reduced Fuel Consumption .
- Matching Load Requirements at Peak Operation.

## **System Overhauls**

- Equipment Evaluations.
- Free Energy / Emissions Audits.
- Project Management.
- System Design.
- Burner Replacement.
- Boiler Replacement.
- Touchscreen Control Retrofits.

## **General Maintenance/Service**

- Installations.
- Burner Tune-ups.
- Trouble Shooting.
- Refractory Work.
- Boiler Cleans.
- Emergency Breakdown Service.
- Complete Boiler House Management.
- DA Tanks & Pumps.

**Timely and regularly scheduled servicing of your equipment ensures minimum downtime.**

## **BURNER SERVICE**

The frequency of a burner service depends on factors such as the type of fuel in use, type of operations and the operating conditions.

### **Services include:**

- Overall burner condition inspection.
- Nozzle replacement as standard.
- Listing any possible parts wear and planning for replacement.
- Full recommissioning to achieve maximum fuel efficiency.

## **STEAM BOILER SERVICE**

Annual and 3-yearly service and statutory inspections are mandatory as stated in SANS 347. Accredited AIA inspectors, all in accordance with OHASA as per SANS 347, inspect and sign-off the equipment for operation.

## **HOT WATER BOILER SERVICE**

Hot water boilers are subject to SANS 347 if they fall within the category requiring annual AIA inspection and certification. Hot water boilers must be maintained in a similar way as that of steam boilers.



# Specialised Services, Spare Parts and Repairs for all makes of Burners

## SPARE PARTS

We are official stockists of:

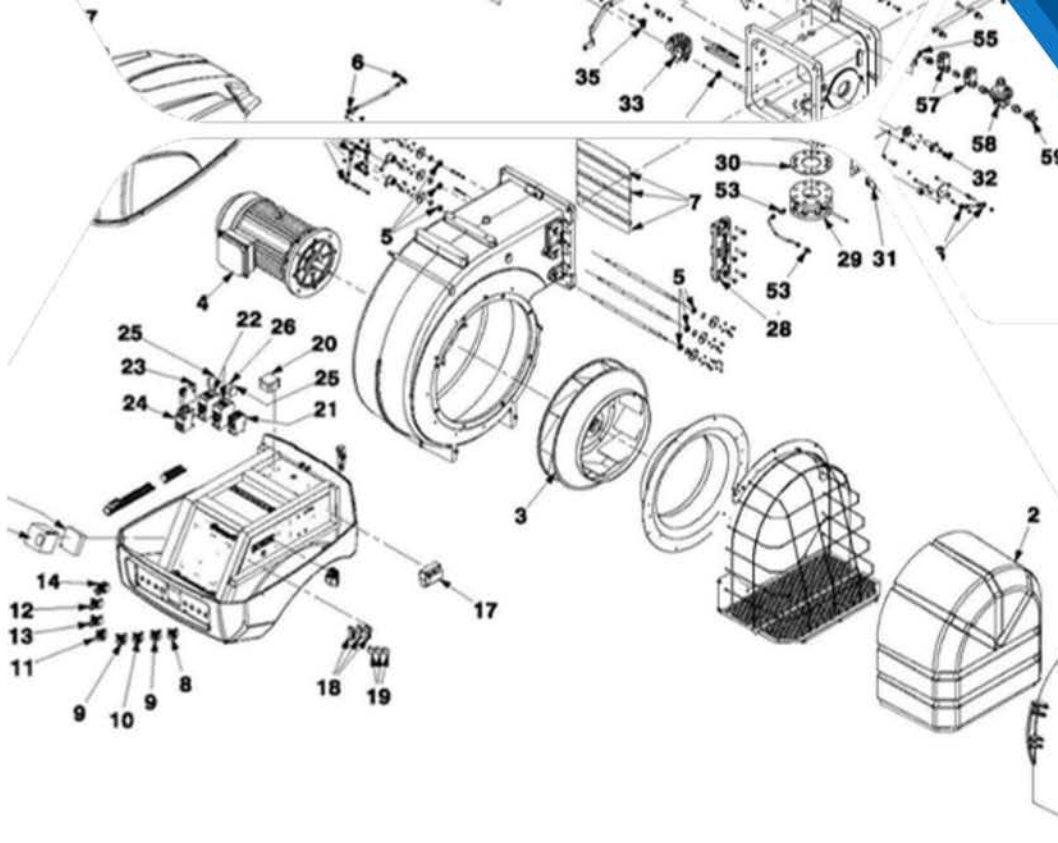
- HP Technik Pumps.
- Giuliani Anello Filters.
- Popular Nozzle brands.
- Bacharach Emissions testing.
- Suntec Pumps.
- Elbi Storage and Expansion Tanks.
- Autoflame Components.

## OTHER PRODUCTS

- Cipriani stainless steel Plate Heat Exchangers.
- Diverse range of Oil or Gas Fired Air Heaters manufactured by Tecnoclima – for greenhouse heating, factory heating, drying applications, poultry farm heating.

**WORLD CLASS, HIGHLY EFFICIENT, SUPPORT**





## **WE OFFER VARIOUS PLANNED MAINTENANCE PLANS AND FIXED MAINTENANCE CONTRACTS**

### **Service and Repair**

Our carefully selected and qualified staff regularly attend training courses throughout the year, not only to upskill on the Company's primary products, but also to make themselves conversant in gas and electrical fields to enable the Company to issue CoC's on all work performed.

We not only work on Riello and Limpsfield Burners, but offer servicing, upgrades and repairs on all makes and types of burners, including rotary cup burners. Our team is competent on both steam and hot water boilers.

Our Experience and Success go back over 39 Years!

We network with the Technical Expertise of International Companies around the world!



## OPTIMISE YOUR BOILER PLANT WITH OUR ENERGY EFFICIENT SOLUTIONS



# Specialised Services

## REDUCE FUEL CONSUMPTION AND EMISSIONS BY 8 - 12% WITH A MONEY BACK GUARANTEE

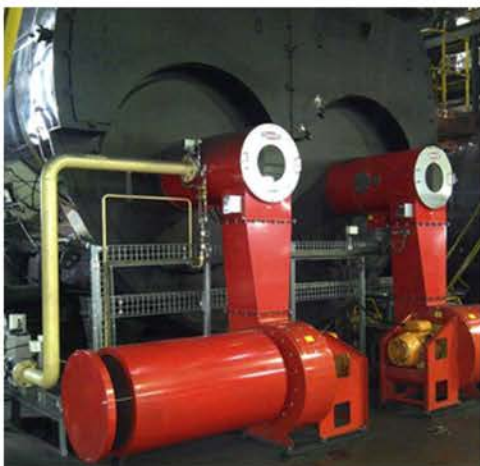
### Energy Efficiency Audits

Combustion Technology is committed to providing World Class energy efficient solutions to all its customers. We respect our environment and have devoted ourselves to the reduction of harmful emissions, such as Nitrous Oxides, Carbon Monoxide and Carbon Dioxide, whilst far exceeding the minimum requirements of National and International regulations.

We offer on-site Energy Efficiency Audits to determine how effectively your plant is operating. A detailed report is drawn up to include recommendations for potential Energy Savings, from modern low emission burners to Automated Combustion Management Systems. Our extensive list of references confirm we can save you on average 8 – 12% off your Fuel Costs.

### Multifuel Burner Solutions - Fuel flexibility. Energy Security. Future-ready performance.

We deliver advanced Dual Fuel and Multifuel Burner solutions that give your boiler plant the freedom to operate on multiple fuel sources seamlessly. Designed for today's uncertain energy landscape, our systems allow seamless switching between gas, liquid fuel and alternative biofuel energy sources - ensuring operational continuity, reduced operating cost, less maintenance and lower operational risk. Powered by intelligent combustion controls and real-time exhaust gas analysis, our burner systems automatically optimise the combustion, even when fuel quality varies.



The result: improved performance, lower fuel costs, reduced carbon footprint and peace of mind knowing your plant is ready and able to handle whatever the future may bring.

# SOUTH AFRICA'S GAS CRISIS: SURVIVING SASOL'S 2028 EXIT





## LP BURNER RANGE

- Firing rates 0.75 MMBTU to 10 MMBTU.
- Fully modulating control system.
- Natural gas, LPG, Diesel, and dual fuel.
- Supplied fully wired for simple installation.
- Simple construction allows easy access to internal components for maintenance.
- Stainless steel diffuser and blast tube.
- Adjustable gas split to accommodate different gaseous fuels.
- Guaranteed 3% O<sub>2</sub> throughout the complete firing range (if we have room to add).
- Low NO<sub>x</sub> solutions.



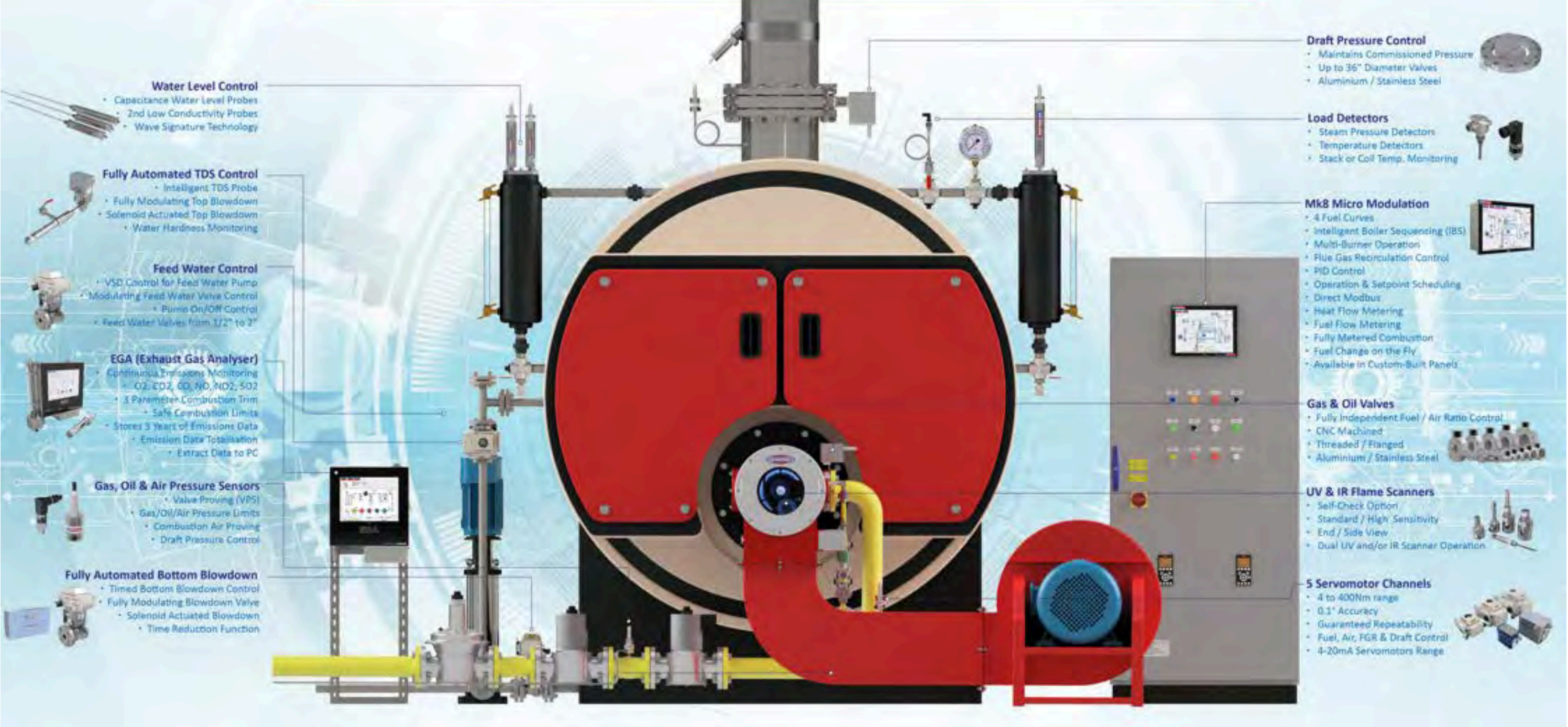
## LC BURNER RANGE

- From 0.75 MMBTU to 220 MMBTU.
- Gas turndown from 6:1 up to 10:1.
- Oil turndown from 4:1 to 8:1.
- Low and ultra-low NO<sub>x</sub> solutions.
- Fully modulating control system Various gaseous and liquid fuels Combustion air up to 482°F Guaranteed 3% O<sub>2</sub> throughout the complete firing range.
- Large rear flame viewing port, enabling a unique view of the combustion process.



# AUTOFLAME

## A COMPLETE COMBUSTION MANAGEMENT SYSTEM



**PRECISE AND INTELLIGENT CONTROL  
GUARANTEED**

**THE WORLD'S FIRST AND MOST ADVANCED  
COMBUSTION CONTROL SYSTEM**

# Boiler Management Service

## INNOVATION, AUTOMATION AND CONTROL

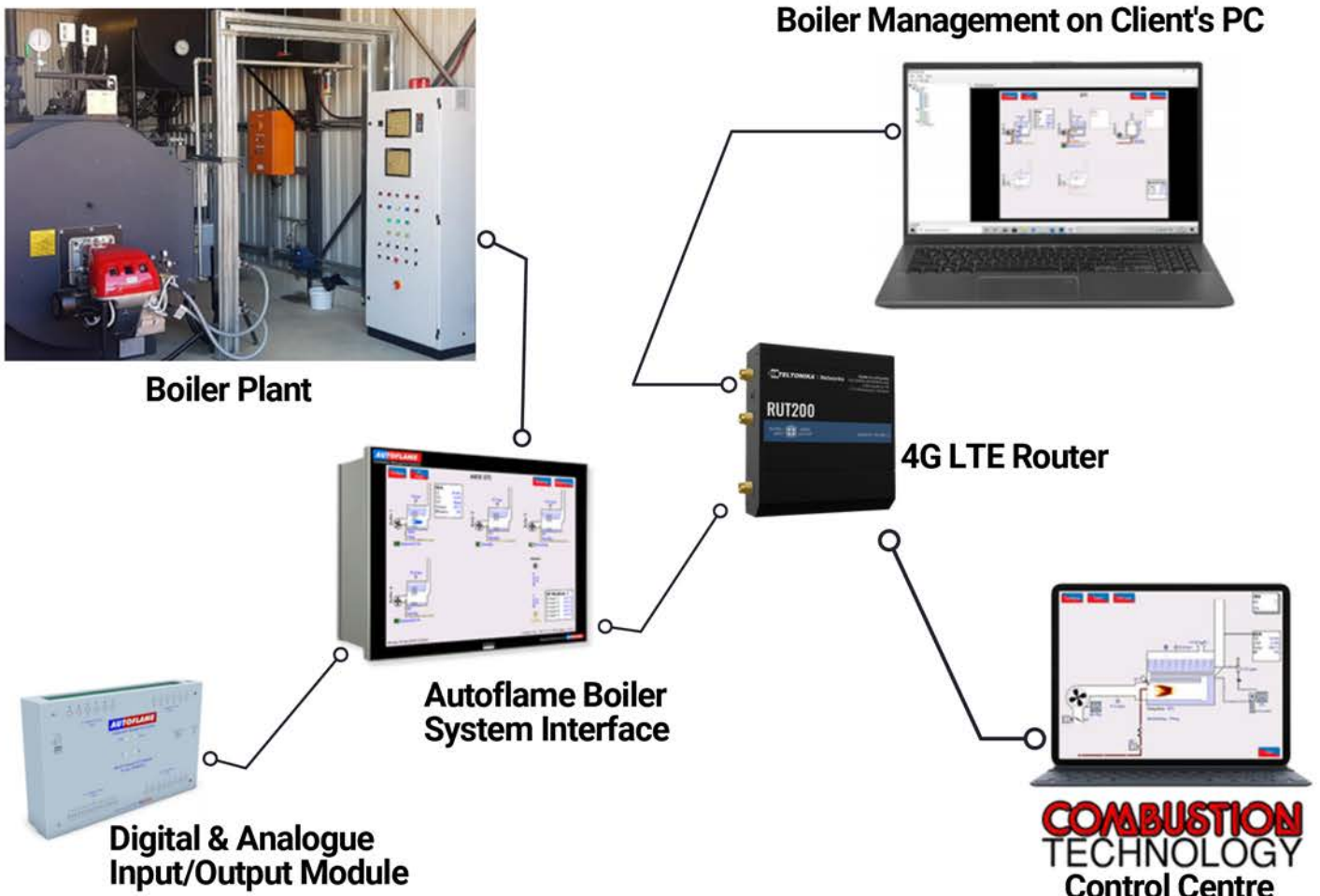
### Continuous Boiler Management 24/7

By installing Our Boiler Management System, we are able to log onto any site and monitor a Boiler running in real time.

Features such as: efficient functioning of your Boilers, fuel consumption vs steam generation, steam flow metering, fuel pressure sensor, water level control, ideal emissions (O<sub>2</sub>, CO<sub>2</sub>, CO) and many more are enabled and managed 24/7.

### Reporting

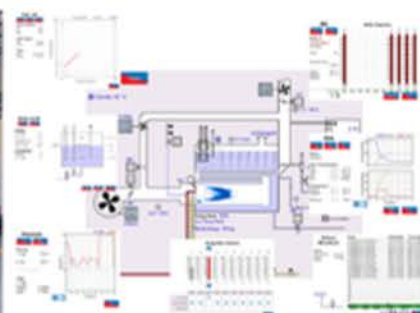
- Diagnostics of Maintenance and performance issues on all Boilers.
- Efficiency reporting targeting Fuel Reduction.
- Expert opinion available 24/7.
- Monthly Performance Reports.
- Pre-emptive Maintenance
- Planned Maintenance
- Data History stored for 2 years.
- Alarms and lockout reviews and recommendations.





## What Our Customers Say

- ★ *The overall **insights provided in the Boiler Management Report** regarding Boiler Functionality and Planned Maintenance are very useful"*  
**Ernst Nortje – Upward Spiral, Johannesburg, SA**
- ★ *"The **response rate to logged calls** and support turnaround times of the Service Engineers are excellent. They display excellent **product and technical knowledge**"*  
**Johan Hatting – Clover, Cape Town, SA**
- ★ *"Combustion Technology is an excellent partner and has helped us **reduce our annual fuel consumption** on our HFO fueled Boiler. Their **service levels** are top quality and I highly recommend them."*  
**Lawrence Lombard - MPACT Ltd, Kuilsrivier, SA**
- ★ *"Our business has benefited from the **monthly Boiler Management Service Reporting with key findings**. Features that stand out are water temperature alerts, burner service reminders, monitoring and reporting of all key sensor values i.e. stack temperatures and if cleaning is required."*  
**Antoine van Heerden – ButtaNutt, Paarl SA**
- ★ *"Combustion Technology's **24/7 Boiler Management System** excellent; they are very quick to respond to **site deviations**"*  
**Brian Richter – Johnson & Johnson, East London, SA**
- ★ *"I find the **Boiler Functionality and Planned Maintenance reporting** in terms of boiler and burner performance very useful"*  
**Brian Taylor – Desert Diamond Fishing, Cape Town, SA**



# Specialised Services

MOBILE BOILER SOLUTIONS FOR  
EMERGENCIES  
UNPLANNED MAINTENANCE  
ANNUAL SHUTDOWNS



**TRY BEFORE YOU BUY OPTION AVAILABLE**

\* \*\*Terms and Conditions Apply

**EACH CONTAINERISED STEAM BOILER ROOM INCLUDES:**



## **WE HAVE EVERYTHING YOU NEED TO MANAGE DOWNTIME**

Is your boiler plant preparing for a long maintenance shutdown, a seasonal production peak, or an upcoming annual inspection? Whether you're replacing an existing steam boiler or adding additional capacity, Combustion Technology offers a proven, flexible boiler rental solution you can trust.

We deliver a containerised boiler directly to your site and operate it for 2–3 months, allowing you to assess real-world performance, efficiency, and operating cost savings before committing to a purchase. Our solutions are ideal for short- or long-term requirements, emergency situations, and unexpected downtime.

We are so confident in our offering that we include a **FREE 3-Year Service Level Agreement**, providing 24/7 boiler management and peace of mind.

### **What sets our solution apart:**

- Operation and maintenance are fully managed by our qualified team
- Trailer-mounted boilers up to 5 tons per hour
- Containerised boilers up to 2,5 tons per hour
- Flexible rental or steam outsourcing options on the customer's site
- Proven efficiency, reliability, and cost control

If you're looking for a smarter way to manage boiler house costs while ensuring uninterrupted steam supply, leave it to Combustion Technology.



**A COMPLETE  
BOILER ROOM  
SOLUTION**



**AVAILABLE ON  
LOCATION 24/7**



**RAPID  
INSTALLATION  
BY EXPERTS**



## CUSTOMISED AND FLEXIBLE BOILER RENTAL SOLUTIONS

### Why Rent a Boiler?

#### Speed and Supply

- No investment required, make rapid and non-binding decisions.

#### Energy Efficient

- Our Solutions consume 15% less fuel than any Competitor.

#### Transparency

- No nasty surprises, costs are certain, enable clear planning.

#### Prompt delivery

- Our boiler is available upon booking and ready for installation.

#### Guarantee

- Our boiler is certified and complies with regulations efficiency, emissions, fuel efficiency.

*All our containerised boilers are SANS 13577 Compliant*





# Biomass Boiler Solution

**THE BEST GREEN ENERGY SOLUTION FOR YOUR BUSINESS**



## HUGE BENEFITS

- Lowest Cost to Generate Steam.
- Burns any form of Wood Waste/Fuel.
- Quick ROI.
- Up to 80% less expensive than Liquid Fuels on Energy Value.
- Best for the Environment.
- Up to 26% less expensive than COAL on Energy Value.
- HUGE Health and Environmental Benefits.

## EXPERTS IN THE INDUSTRY

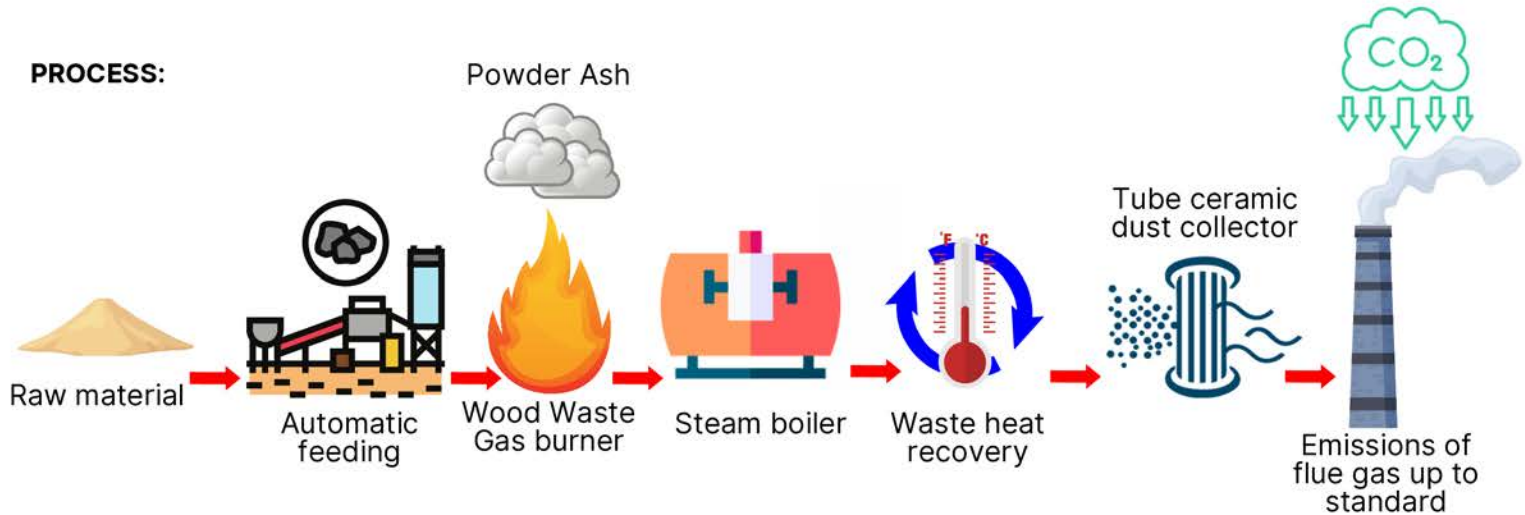
- Outright Turnkey Purchase.
- Lowered Maintenance.
- No Carcinogenic COAL ASH to deal with.
- Happy Staff.
- 24/7 Boiler House Management.
- Monthly in-depth reporting.
- No Frills Steam Supply Agreement.
- Short Term – 5 Year Contract.
- Min 5 Year Guarantee of Fuel Supply.
- Preventative Maintenance Planning.
- Pre-emptive and predictive operational planning.



# BIOMASS STEAM SUPPLY



## PROCESS:



## ADVANTAGES

- The whole body is cast with first-grade high aluminum refractory material, the main Burner adopts 4 layers of protective measures, and the whole body is cooled by water.
- Professional refractory casting process, anchor nail reinforcement, expansion joint process.
- The top of the furnace is protected by 4 layers of American refractory material, and the top cover is water cooled and insulated.
- The Flame Nozzle is made of imported high aluminum material, resistant to scouring and high temperature.
- Outer refractory uses a water jacket protection, reducing the furnace surface temperature, while fully protecting the furnace body.
- The fuel cost of Wood Waste is 30% less than pellets.
- The main body has three layers of insulation, less heat loss, improve heat utilisation. High temperature cracking multi-stage eddy current aeration to ensure full combustion of raw materials, improves thermal efficiency.
- Suspension semi-gasification combustion, increases the contact area with oxygen, so that the fuel combustion is fully uniform, the overall thermal efficiency of up to 95%.

# Boiler School, Tips & Training

**REALISE THE VALUE OF YOUR BOILER SYSTEM,  
MAINTAIN IT PROPERLY AND SAVE FUTURE COSTS**



## Training Courses

We offer both on-site and off-site training for your employees, delivered in our modern mobile boiler room or at your facility.

Our courses cover basic troubleshooting and problem-solving, empowering operators and maintenance teams to better understand boiler and burner operation, system behaviour, and performance optimisation.

Training is aligned with industry best practices, supported by relevant guidance documents, applicable standards, and practical facilitation tailored to each customer's unique operating environment.

Certificates of completion are issued for all courses.



**American Boiler Manufacturers Association**



# 2026 & 2027 TRAINING



## AUTOFLAME & LIMPSFIELD TRAINING WORKSHOPS

March | November

We host two dedicated Autoflame and Limpsfield training workshops each year, designed to keep our customers and partners up to date with the latest combustion technology, best practices, and system enhancements.

- Boiler Operation & Maintenance with Burner Combustion.
- Fuel-Air Ratio Commissioning and Boiler Control.
- Combustion Principles and Emissions.
- Introduction to **Autoflame** and **Limpsfield**.
- Controller Overview.
- Hardware Updates.
- Software Updates.
- Previous Updates Overview.



SCAN TO BOOK/ENQUIRE



 NAIROBI,  
KENYA



 CAPE TOWN,  
SOUTH AFRICA



 PORT LOUIS,  
MAURITIUS

Coordination and facilitation by Experts.

Contact us to secure your 2026 / 2027 Group Training in any of these cities.

**AUTOFLAME**<sup>®</sup>



# Meet The Management Team



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LET'S WORK  
**TOGETHER**



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