



COMBUSTION WITHOUT COMPROMISE

CASE STUDY

FOOD & BEVERAGE · VIETNAM

FUEL OIL BOILER BURNER UPGRADE

PASCO for Suntory PepsiCo Vietnam Beverage · Vietnam

BURNER

Limpsfield LC036

CONTROLS

3-parameter trim ($O_2/CO/CO_2$)

FUEL

Light (#2) oil

INSTALLATION

Indoor · Vietnam

>15%

FUEL SAVINGS, PER
MONTH

<3% O_2

GUARANTEED, DOWN
FROM ~12.8% AT LOW
FIRE

-25%

CO_2 EMISSIONS, 955 TO
718 TONS/YEAR

<40ppm

CO, DOWN FROM UP TO
500PPM

01 THE CHALLENGE

The existing burner at Suntory PepsiCo's Vietnam Beverage plant ran with high levels of both CO and excess air, losing efficiency to outdated, non-modulating technology.

- CO emissions as high as 500ppm
- Excess O_2 around 12.8% at low fire
- Outdated, non-modulating burner technology



BEFORE

Outdated, non-modulating oil burner



Suntory PepsiCo Vietnam Beverage, a strategic alliance between PepsiCo Inc. and Suntory Holdings, now running six factories across Vietnam.

02 THE IMPACT

COMBUSTION METRIC	BEFORE	AFTER LC036	CHANGE
CO emissions	Up to 500ppm	<40ppm	-92%
Excess O ₂ , low fire	~12.8%	<3%	-77%
CO ₂ emissions (tons/yr)	955	718	-25%
Fuel cost, per month	Baseline	-15%+	>15% saved

Fuel savings exceeded 15% per month, with CO emissions cut to below 40ppm and excess O₂ held under 3% across the complete firing range. Flue-gas temperature fell by around 25°C, and CO₂ emissions dropped from 955 to 718 tons per year.

03 THE SOLUTION

PASCO specified a Limpsfield LC036 burner, fully engineered and optimised to match the boiler's exact steam output, fully modulating, and guaranteeing sub-3% O₂ across the complete firing range.

LIMPSFIELD LC036 BURNER

Fully modulating, matched to boiler steam output

3-PARAMETER TRIM (O₂ / CO / CO₂)

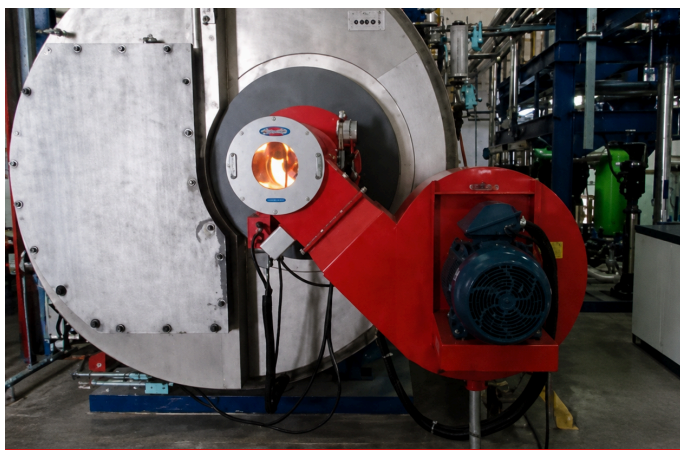
Constant emissions monitoring across the firing range

INCREASED TURNDOWN RATIO

Substantially reduced cycling, intelligent boiler sequencing

BEYOND THIS SITE: SPVB'S NET ZERO PROGRAMME

Suntory PepsiCo Vietnam Beverage now runs six factories, including its largest plant, a \$300m, 20-hectare LEED Gold site with 1.24 billion litres of annual capacity, biomass steam, rooftop solar and zero waste to landfill. SPVB targets net zero by 2050, with interim cuts of 50% from direct operations and 30% across the value chain by 2030. The 718-ton CO₂ reduction Limpsfield delivered here is a concrete proof point toward that direct-operations target.



AFTER

Limpsfield LC036 burner, installed and commissioned

For more information on the Limpsfield burner range, please contact your tech centre or Limpsfield direct.

Website www.limpsfield.co.uk

Tel 00 44 (0)1959 576 633



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