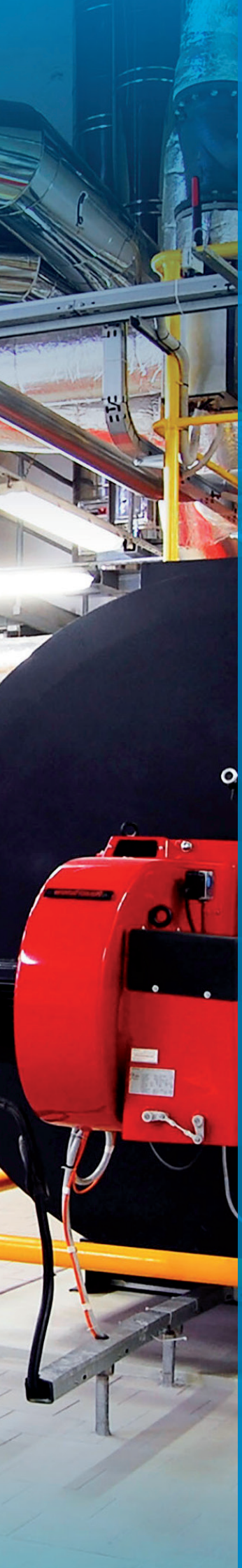
hobré
ANALYZER SOLUTIONS

Measures Wobbe Index, Heating Value, Specific Gravity and Combustion Air Requirement Index (CARI).

HIGAS

A portable compact Natural Gas Quality Meter

HIGAS
GAS QUALITY METER



Gas quality variations

The rise in cross-border gas trading impacts Natural Gas quality by causing it to fluctuate more often and more rapidly. Fast-changing gas quality can have serious implications for your combustion installations such as furnaces and boilers.

Common problems include:

- Reduced capacity
- Higher CO NOx & CxHy emissions
- Contamination due to soot formation
- Equipment failure
- Variations in product quality

These problems result in higher financial costs, safety issues and loss of production. But by measuring gas quality prior to combustion, the air:fuel ratio can be adjusted in real time, making sure it is always an optimal mixture.

Typical applications are furnace control Natural Gas fired ovens for steel, glass and ceramics industries, as well as burner control in steam boilers, gas turbines, the greenhouse industry and emergency power units. Current burners mostly use a fixed setting or rely on feedback control.

Current control systems take into account changes in weather, such as temperature and air pressure, gas pressure fluctuations and relatively slow changes in gas quality with a well-restricted bandwidth. However these systems are not set up to deal with step-changes and an increased bandwidth. A fast feed-forward control is therefore required.

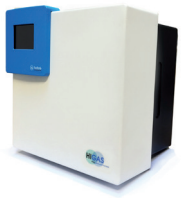
The larger and faster variations in Natural Gas quality have raised a demand for Hobré Wobbe Index technology for smaller burner installations.

The Hobré HIGAS

The HIGAS is a compact Natural Gas quality meter, providing the Wobbe Index, (Heating Value and SpecificGravity is optional) and Combustion Air Requirement Index (CARI) within 15 seconds.

PORTABLE ANALYZER

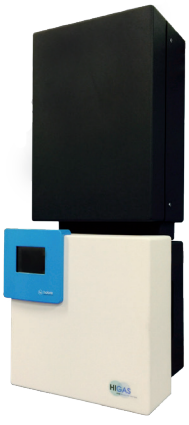
The portable version is equipped with optional battery power and is the ideal tool for burner adjustments. By measuring the actual quality of the Natural Gas during burner adjustment, optimum settings are achieved.



STATIONARY ANALYZER

The stationary version can be used to control the energy flow and air: fuel ratio to burners, with the benefits of:

- Maximizing unit capacity and efficiency
- Minimizing emission
- Installation shutdown prevention
- Reduced maintenance



The HIGAS is developed for Natural Gas measurement in safe area applications. Other applications – including those in hazardous areas – can be handled with the WIM Compas™.

TECHNICAL SPECIFICATIONS

GENERAL	
Applications	Natural Gas, Green Gas
Measuring principle	Flameless combustion with residual oxygen measurement
Location	Indoors, safe area
Models	Portable, stationary
Calibration	Automatic on 100% methane

PERFORMANCE	
Wobbe index	40 – 60MJ/Nm^3 / 1073.6 - 1610.4 BTU/scf *
Accuracy	± 0.5 MJ/Nm^3 / 13.4 BTU/scf
Repeatability	± 0.2 MJ/Nm^3 / 5.4 BTU/scf
Response time	10 - 20 < seconds (typical)
CARI (Combustion Air Requirement Index)	Max. span 15 in 0 – 25 range
Accuracy	< ±1% of full scal
Total sulfur	< 30 mg / Nm^3 *

INTERFACE	
Display	Local color touchscreen, service port TCP/IP
Analog outputs	2x 4–20mA active or passive, maximum load ≤ 600 Ω
Digital outputs	2x relay SPST for “in alarm” and “in calibration”
Digital inputs	for “start calibration” and “start validation”

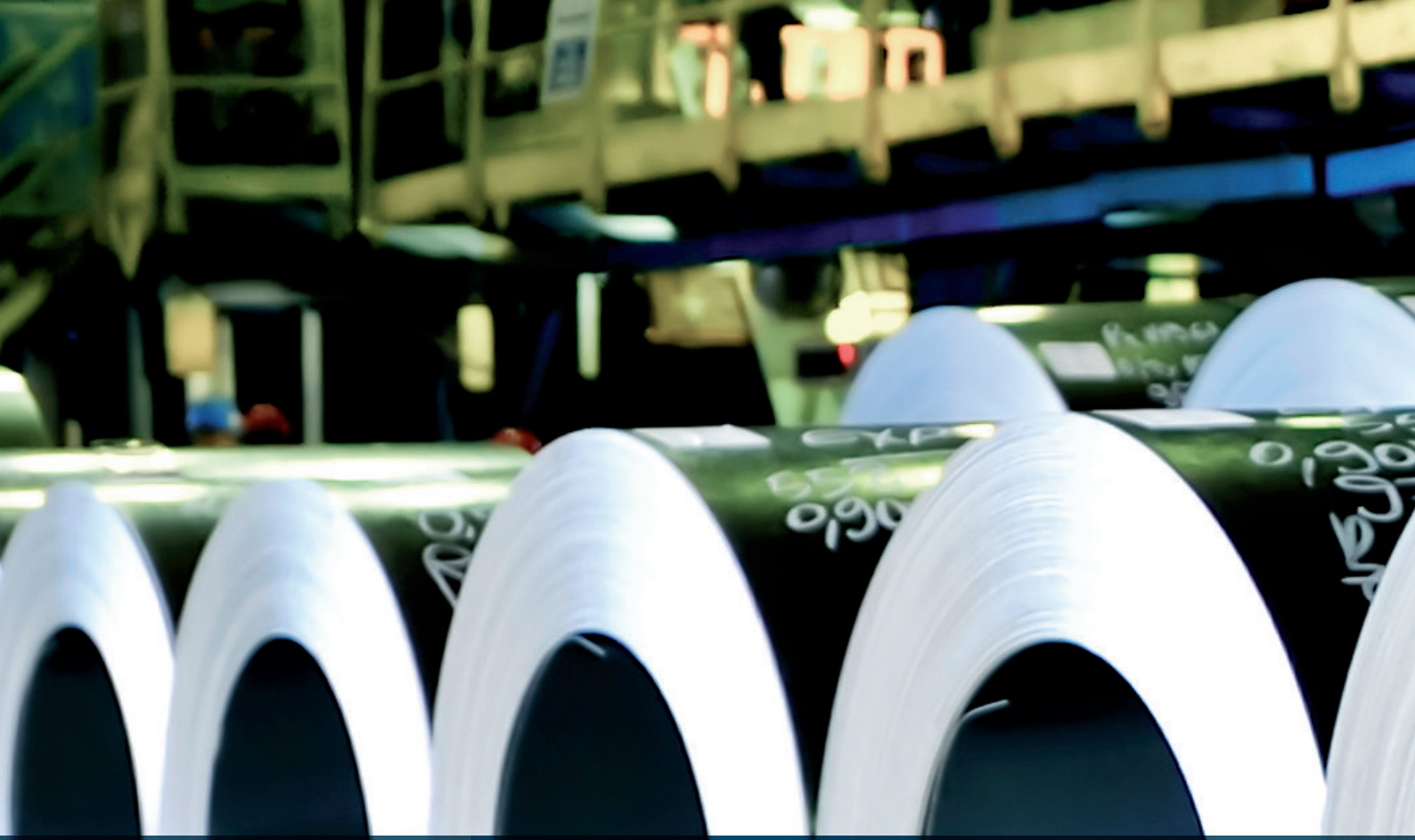
UTILITIES	
Power supply	115 / 230VAC, 50 / 60Hz or 24VDC (optional battery pack incl. – portable version)
Power consumption	50VA max.
Instrument air	Not required (internal air pump included)
Sample flow	< 0.1 Nl/min < 0.2 scf/h (filtered)
Sample pressure	0 - 0.1 barG standard / 0 - 8 barG with pressure reduction 0 - 1.5 psi / 0 - 116 psi

INSTALLATION	
Installation	Wall mounting (stationary version)
Dimensions (HxWxD)	500 x 400 x 250mm (depending on configuration)
Weight	≤ 15kg / 33 lbs
Enclosure	Epoxy-coated stainless steel
Ambient temperature range	5 – 45°C / 41 - 113°F

ORDER CODES

ST	Stationary version (wall mounted)
P	Portable version
H	Horizontal mounting (ST version)
V	Vertical mounting (ST version)
CC	Carrying case
115	Power supply 115 VAC, 50/60 Hz
130	Power supply 230 VAC, 50/60 Hz
24	Power supply 24 VAC
BP	Battery Pack (P version)
SG	Specific Gravity Cell

For more detailed information, visit our website www.hobre.com or contact our sales representatives.



HOBRÉ INSTRUMENTS

HOBRÉ IS A LEADER IN THE DESIGN, MANUFACTURING AND MAINTENANCE OF ON-LINE ANALYZERS, SAMPLE SYSTEMS AND COMPLETE TURNKEY ANALYZER SYSTEMS. ESTABLISHED IN 1978, OUR COMPANY FOCUSES MAINLY UPON PROVIDING SOLUTIONS FOR THE OIL AND GAS INDUSTRY AND PETROCHEMICAL SECTOR WORLDWIDE.

HOBRÉ SERVICES

- FEASIBILITY STUDY & ENGINEERING
- COMMISSIONING, SAT AND START-UP
- TRAINING
- PREVENTATIVE AND CORRECTIVE FIELD SERVICES
- IN-HOUSE MAINTENANCE AND REPAIR
- SPARE PARTS AND SUPPLY
- REMOTE SUPPORT

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