



CERTIFICATE OF CALIBRATION

ISSUED BY: JMW Limited	DATE OF ISSUE: 10/03/2025	
CERTIFICATE SERIAL NUMBER: 9159396		
PAGE: 1 of 1		

JMW Limited
 The Calibration Lab
 Warwick House
 Perry Road
 Harlow, CM18 7NF

Tel: 01279 307100
 www.jmwlimited.co.uk

Customer/Acc. No:	Example	A0001
Instrument:	Sauermann Si-CA 030	
Instrument S/No:	123456	
Instrument ID No:	N/A	
JMW Proc. No:	2922	

Location:	Post code	
Calibration Interval:	12 months	
Calibration Date:	10/03/2025	
Calibrated by (Op. No):	04	
Approved by (Op. No):	23	

Traceability:	The instrument referred to in this certificate was re-calibrated by applying known concentrations of test gas mixtures and recording the indicated values (gas ranges) and by applying nominal values at a number of points and recording the indicated values (temperature ranges). The test gas mixtures and equipment used, for which the company maintains traceability to international standards by means of certificates issued by the supplier, are listed below (ambient air at the internationally recognised value of 20.9%v/v).
Allowances:	The allowance is based on the manufacturers published specification where available or recognised industry standards.
Limitations of Use:	The following results do not carry any implications as to the long term stability of the instrument.
Environmental Conditions:	The ambient temperature and humidity throughout the calibration period were uncontrolled and unmonitored but were, typically 20°C ±5°C and 50% RH ±20% RH.

CALIBRATION REFERENCE STANDARDS						
Reference	Description	Uncertainty		Reference	Description	Uncertainty
036	Oxygen @ 0.000005%v/v	±2%		136	5.0%v/v (nom) oxygen	±2%
136	20ppm (nom) carbon monoxide	±2%		135	Reference thermometer	±1°C
014	500ppm (nom) carbon monoxide	±2%		052	100ppm (nom) carbon monoxide	±2%
023	Digital pressure calibrator	±0.05 mbar		041	Temperature indicator/simulator	±0.25°C
043	100ppm (nom) nitric oxide	±2%				

ACCESSORIES								
	Present	Sound		Present	Sound		Present	Sound
Equipment case:	Y	Y	Battery charger:	Y	Y	Sampling line/probe:	Y	Y
Printer:	N	N/A	Diff. temp. set:	N	N/A	Diff. pressure set:	N	N/A

PRE-CALIBRATION FUNCTIONAL CHECKS							
Instrument is -	Complete:	Y	Free from damage:	Y	Operational:	Y	
Pump is operational:	Y		Battery charges/discharges:	Y			

RESULTS					
Range	Applied value	Allowance	As received		After adjustment
			Indicated reading	P/F	Indicated reading
Oxygen: 0-21%v/v	0% v/v	±0.2%v/v	0.0%v/v	P	
	Oxygen @ 5.0% v/v	4.8-5.2%v/v	5.1%v/v	P	
Carbon monoxide: 0-4,000ppm	CO @ 20ppm	0-40ppm	19ppm	P	
	CO @ 100ppm	80-120ppm	103ppm	P	
	CO @ 500ppm	475-525ppm	516ppm	P	
Temperature: -40 - +600°C	0°C	±0.5°C	0°C	P	
	200°C	199-201°C	199.4°C	P	
	400°C	398-402°C	399.1°C	P	
	600°C	597-603°C	598.9°C	P	
Pressure: ±200mbar	0.00mbar	±0.5mbar	0.00	P	
	5.00mbar	±0.5mbar	5.00	P	
	10.00mbar	±0.5mbar	9.98	P	
	20.00mbar	±0.5mbar	20.04	P	
	50.00mbar	±0.5mbar	49.98	P	

The uncertainties are for a confidence probability of not less than 95%