

ISO 6145-2:2014-08 (E)

Gas analysis - Preparation of calibration gas mixtures using dynamic methods - Part 2: Piston pumps

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols	2
5	Principle and equipment	3
5.1	Principle	3
5.2	Equipment	3
6	Calibration gas mixture preparation	5
6.1	Safety issues	5
6.2	Mixture feasibility	6
6.3	Preparation system and setting-up of mixture composition	7
6.4	Input pressure control	7
6.5	Temperature control	7
6.6	Homogenization	7
6.7	Stability	8
6.8	Output pressure and flow pulsation	8
6.9	Composition of the parent gases	8
7	Calculation of volume fractions and associated uncertainty evaluation	9
7.1	Calculation method A	9
7.2	Calculation method B	10
8	Gas mixture composition verification	12
Annex A (normative) Amount-of-substance fractions		13
Annex B (informative) Uncertainty evaluation of the gas mixture composition		15
Annex C (informative) Gas mixture verification		21
Annex D (informative) Numerical example		25
Bibliography		30