

Hellenic Accreditation System



Annex F2/6 to the Certificate No. **758-2**

SCOPE of ACCREDITATION

of the

Pressure & Chemical Analysis Calibration Laboratories

of the

Hellenic Gas Transmission System Operator (DESFA) SA

Measurand / Calibration item	Range of measurement	Calibration & Measurement Capability (k=2)*	Remarks
Pressure Measurements			
Relative pressure measuring instruments of direct reading using air medium, analog and digital	(10 – 31] kPa	3,9 Pa	Calibration according to Guide DKD-R 6-1/2003, using pressure calibrator. Calibration can be performed on-site.
	(31 – 100] kPa	120 ppm	
	(100 – 420] kPa	64 Pa	
	(420 – 1400] kPa	150 ppm	
	(1400 – 2100] kPa	240 Pa	
	(2100 – 7000] kPa	110 ppm	
	(7000 – 10000] kPa	170 ppm	Calibration according to Guide DKD-R 6-1/2003, using pressure balance.
	(7 – 15,3] kPa	0,62 Pa	
	(15,3 – 350] kPa	0,01 Pa + 40 ppm	
	(350 – 2800] kPa	0,1 Pa + 40 ppm	
Absolute pressure measuring instruments of direct reading using air medium, analog and digital	(2800 – 11000] kPa	0,1 Pa + 55 ppm	Calibration according to Guide DKD-R 6-1/2003, using pressure calibrator. Calibration can be performed on-site.
	(35 – 420] kPa	64 Pa	
	(420 – 1400] kPa	150 ppm	
	(1400 – 2100] kPa	240 Pa	
	(2100 – 7000] kPa	110 ppm	
	(7000 – 10000] kPa	170 ppm	

Measurand / Calibration item	Range of measurement	Calibration & Measurement Capability (k=2)*	Remarks
	(7 – 15,3] kPa	1 Pa	Calibration according to Guide DKD-R 6-1/2003, using pressure balance.
	(15,3 – 350] kPa	0,4 Pa + 40 ppm	
	(350 – 1750] kPa	0,41 Pa + 40 ppm	
	(1750 – 2800] kPa	5,1 Pa + 40 ppm	
	(2800 – 7000] kPa	0,42 Pa + 55 ppm	
	(7000 – 11000] kPa	3,5 Pa + 55 ppm	

* Where uncertainty is accompanied by the corresponding measurement unit, it is absolute, while where it is not accompanied by a unit, it is relative.

Chemical Measurements


Performance evaluation of gas-chromatographs for natural gas analysis	amount fraction %mol/mol	amount fraction %mol/mol	According to ISO 10723:2012 Calibration can be performed on-site.
	Methane	[64-77,5] (77,5-99,4]	
Nitrogen	[0,1-14]	0,010 + 1,0%	
Carbon dioxide	[0,05-8]	0,006 + 1,9%	
Ethane	[0,1-14]	0,6%	
Propane	[0,05-8]	0,003 + 1,6%	
i-Butane	[0,01-1,2]	0,0012 + 2,0%	
n-Butane	[0,01-1,2]	0,0012 + 1,9%	
i-Pentane	[0,005-0,5]	2,8%	
n-Pentane	[0,005-0,5]	3,2%	
n-Hexane+	[0,005-0,35]	2,3%	

Site of assessment: **Laboratory permanent premises, Patima Elefsis, Greece**
 Approved signatories (for Pressure): **E. Kaparakos, E. Karantanas, N. Tsantilis**
 Approved signatories (for Chemical): **G. Dritsas, E. Karantanas, K. Tsakou**

This Scope of Accreditation replaces the previous one dated 23.11.2015.

The Accreditation Certificate No. **758-2**, to ELOT EN ISO/IEC 17025:2005, is valid until 27.07.2019.

Athens, January 17th 2017


 Ioannis Sitaras
 Director of the Laboratories Accreditation Division