

CONE CALIBRATION CERTIFICATE

N° Z221/20

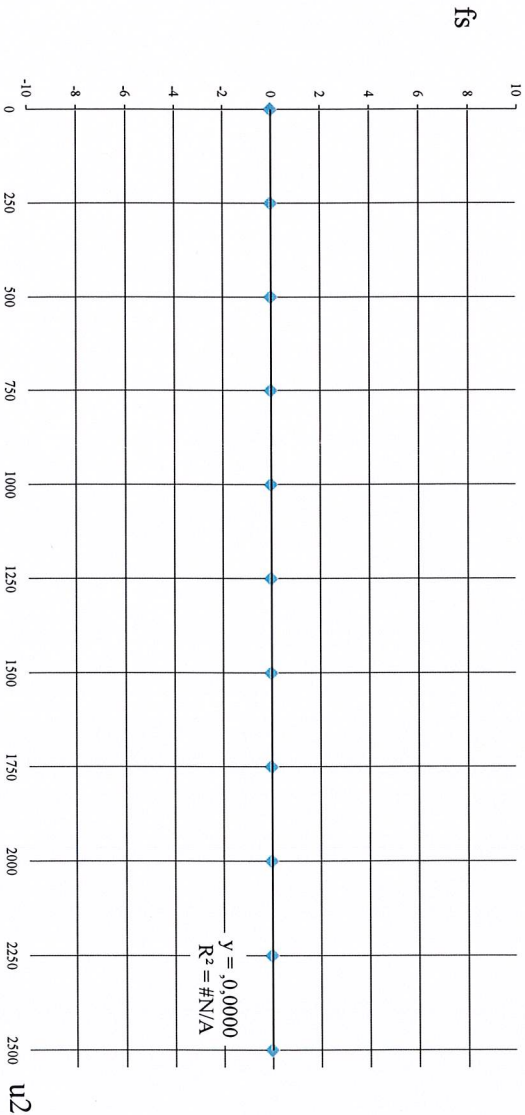
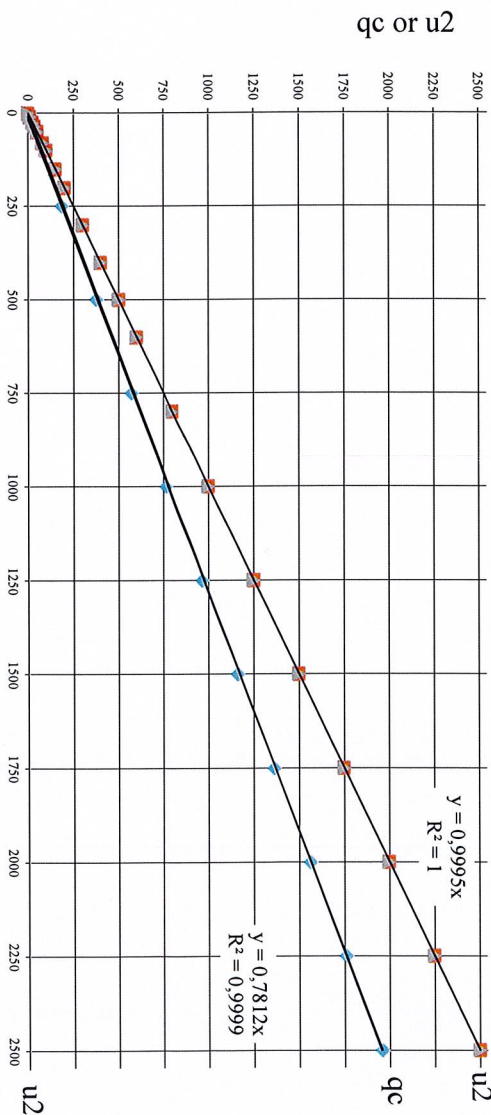
Calibrated system (Sistema tarato):
 Serial number: **MKS724**
 Tip net area ratio (a_n): **0,7812**
 Sleeve net ratio (b_n): **0,0000**

Adressee (destinatario):
 TESTLAND Laboratorium Materiałow Budowlanych
 ul. Chwarznińska 87A
 81-602 Gdynia, Poland


	u ₂ (kPa)	qc (kPa)	fs (kPa)	u ₂ (psi)	qc (psi)	fs (psi)
0 (0)	0,10	0,00	0,00	0,00	0,00	0,00
250 (36,26)	250,00	188,00	0,00	250,90	27,27	0,00
500 (72,52)	500,00	381,00	0,00	500,60	55,26	0,00
750 (108,78)	750,00	575,00	0,00	750,20	83,40	0,00
1000 (145,04)	1000,00	768,00	0,00	1000,00	111,39	0,00
1250 (181,30)	1250,00	967,00	0,00	1250,10	140,25	0,00
1500 (217,56)	1500,00	1165,00	0,00	1500,20	168,97	0,00
1750 (253,82)	1750,00	1364,00	0,00	1750,70	197,83	0,00
2000 (290,08)	2000,00	1567,00	0,00	2001,30	227,27	0,00
2250 (326,33)	2250,00	1766,00	0,00	2252,00	256,14	0,00
2500 (362,59)	2500,00	1964,00	0,00	2503,20	284,85	0,00

Unit: kPa - (psi)

Temperature of calibration: 22°C
 Humidity: 45%
 Factory calibration in accordance with ASTM D5778-12



The adopted calibration procedure has been developed according to the suggestions given by Prof. Paul W. Mayne (Georgia Institute of Technology) and Prof. Diego Lo Presti (University of Pisa)

Cone calibrated by  Date of issue 10/12/2020

CONE CALIBRATION CERTIFICATE

N° Z221/20

Calibrated system (Sistema tarato):

Serial number

Mks724

Sensor

TIP RESISTANCE

Max. Capacity [MPa]:

100

Sealing Factor:

191400

Tip net area ratio (a_n):

0,78

Sleeve net ratio (b_n):

0,00

Addressee (destinatario):

TESTLAND Labororium Materiałów Budowlanych

ul. Chwarznińska 87A

81-602 Gdynia, Poland

Applied load measurement system:

(Sistema di rilevamento del carico applicato)

Load cell:

Manufacturer

AEP transducers

Model

KAL 200 KN

Serial Number

138913

Power press:

Manufacturer

Easydur Italiana

Model

Aura 20T

Serial Number

29084

The measurement system is periodically checked in a SIT calibration center. (Il sistema di rilevamento è sottoposto a verifica periodica presso un centro SIT)

Last verification date:

16/01/2020

Certificate N.

LAT 091 2020-015

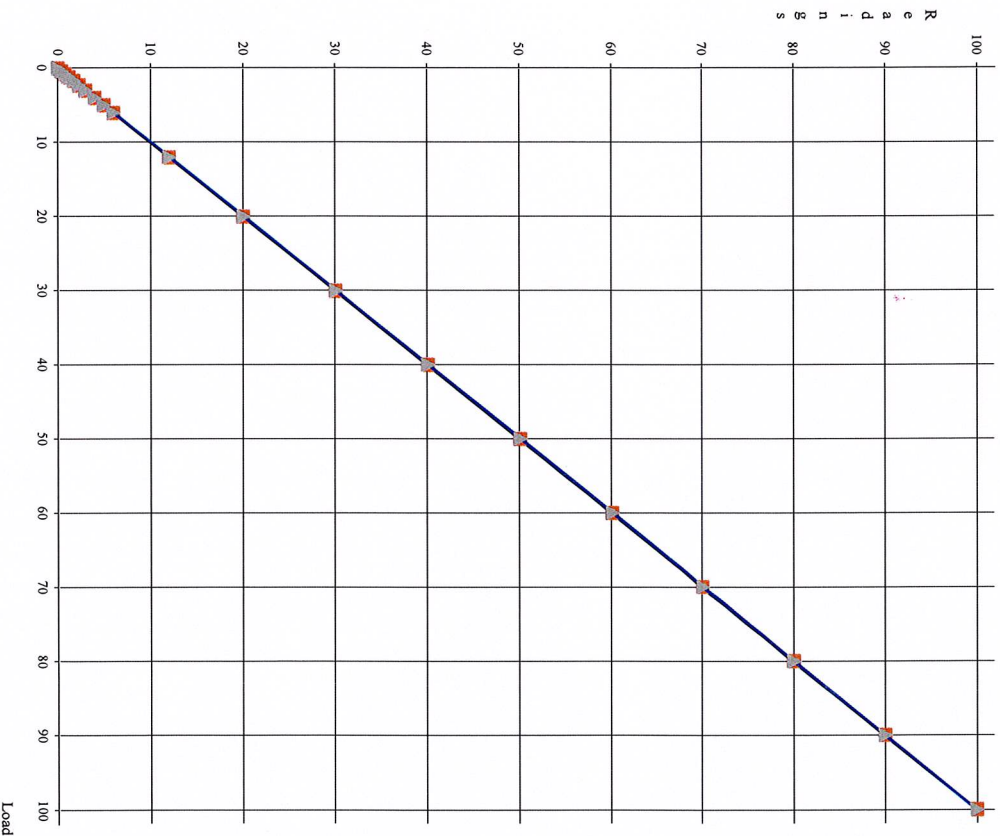
Temperature of calibration

22°C

Humidity

45%

Factory calibration in accordance with **ASTM D5778-12**



	Ascending		Descending	
	Load	Readings	Load	Readings
1	0,00	0,03	0,00	0,02
2	0,06	0,04	0,06	0,05
3	0,40	0,39	0,40	0,40
4	0,80	0,79	0,80	0,79
5	1,20	1,19	1,20	1,20
6	1,70	1,69	1,70	1,70
7	2,30	2,29	2,30	2,30
8	3,00	2,99	3,00	3,01
9	4,00	3,99	4,00	4,01
10	5,00	5,00	5,00	5,03
11	6,00	6,00	6,00	6,03
12	12,00	12,02	12,00	12,06
13	20,00	20,05	20,00	20,10
14	30,00	30,08	30,00	30,15
15	40,00	40,12	40,00	40,19
16	50,00	50,13	50,00	50,20
17	60,00	60,13	60,00	60,19
18	70,00	70,10	70,00	70,17
19	80,00	80,09	80,00	80,13
20	90,00	90,05	90,00	90,07
21	100,00	100,00	100,00	100,00

Unit: Mpa

Zero-load error:	=	0,005	% FSO
Zero-load thermal stability:	<=	1,000	% FSO
Nonlinearity:	=	0,131	% FSO
Hysteresis:	=	0,068	% FSO
Calibration error:	=	0,000	% MO
Apparent load:	=	0,010	% FSO

The adopted calibration procedure has been developed according to the suggestions given by Prof. Paul W. Mayne (Georgia Institute of Technology) and Prof. Diego Lo Presti (University of Pisa)

Cone calibrated by

Date of issue

10/12/2020

CONE CALIBRATION CERTIFICATE

N° Z221/20

Calibrated system (Sistema tarato):

Serial number

MKS724

Sensor

SLEEVE FRICTION

Max. Capacity [kPa]:

1600

Scaling Factor:

31463

Addressee (destinatario):

TESTLAND Laboratorium Materiałów Budowlanych

ul. Chwarznińska 87A

81-602 Gdynia, Poland

Applied load measurement system:

(Sistema di rilevamento del carico applicato)

Load cell:

Manufacturer AEP transducers

Model KAL 50 KN

Serial Number 65495

Power press: Easydur Italiana

Manufacturer Aura 10T

Model 29002

Serial Number

The measurement system is periodically checked in a SIT calibration center. (Il sistema di rilevamento è sottoposto a verifica periodica presso un centro SIT)

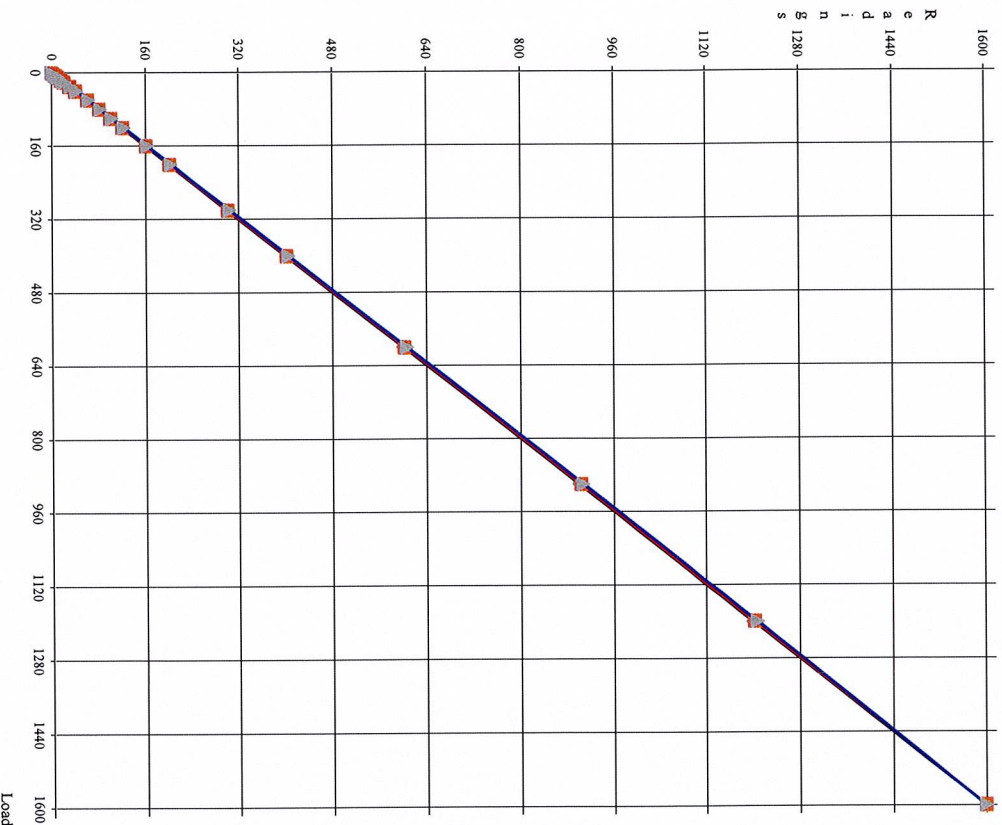
Last verification date: 16/01/2020

Certificate N. LAT 091 2020-014

Temperature of calibration 22°C

Humidity 45%

Factory calibration in accordance with **ASTM D5778-12**



	Ascending		Descending	
	Load	Readings	Load	Readings
1	0,00	0,13	0,00	0,47
2	2,00	1,67	2,00	2,33
3	5,00	4,73	5,00	5,47
4	7,00	6,73	7,00	7,53
5	10,00	9,87	10,00	10,80
6	16,00	15,87	16,00	16,93
7	20,00	19,87	20,00	21,13
8	30,00	30,00	30,00	31,53
9	40,00	39,93	40,00	41,67
10	60,00	60,00	60,00	62,13
11	80,00	80,07	80,00	82,47
12	100,00	100,20	100,00	102,73
13	120,00	120,33	120,00	123,00
14	160,00	160,60	160,00	163,47
15	200,00	200,87	200,00	203,93
16	300,00	301,40	300,00	304,93
17	400,00	401,87	400,00	405,67
18	600,00	602,67	600,00	606,80
19	900,00	903,13	900,00	907,67
20	1200,00	1202,47	1200,00	1207,00
21	1600,00	1600,00	1600,00	1600,33

Unit: kPa

Zero-load error:	=	0,021	% FSO
Zero-load thermal stability:	<=	1,000	% FSO
Nonlinearity:	=	0,196	% FSO
Hysteresis:	=	0,283	% FSO
Calibration error:	=	0,000	% MO
Apparent load:	=	0,091	% FSO

The adopted calibration procedure has been developed according to the suggestions given by Prof. Paul W. Mayne (Georgia Institute of Technology) and Prof. Diego Lo Presti (University of Pisa)

Cone calibrated by

Date of issue 10/12/2020

CONE CALIBRATION CERTIFICATE

N° Z221/20

Calibrated system (Sistema tarato):

Serial number

MKS724

Sensor

PORE PRESSURE

Max. Capacity [kPa]:

2500

Scaling Factor:

10464

Sensor

TILT ANGLE

Max. Inclination [°]:

20

Scaling Factor:

281279

Address (destinatario):

TESTLAND Laboratorio Materialów Budowlanych

ul. Chwarznińska 87A

81-602 Gdynia, Poland

Applied load measurement system:

(Sistema di rilevamento del carico applicato)

Pressure Generator:

Manufacturer

MENSOR

Model

CPC 4000

Serial Number

41000V56

Sensor Descr

Silicon Pressure Transducer

Sensor Serial Number

41000V3Y

The measurement system is periodically checked in a SIT calibration center. (Il sistema di rilevamento è sottoposto a verifica periodica presso un centro SIT)

Last verification date:

13/02/2020

Certificate N.

177482

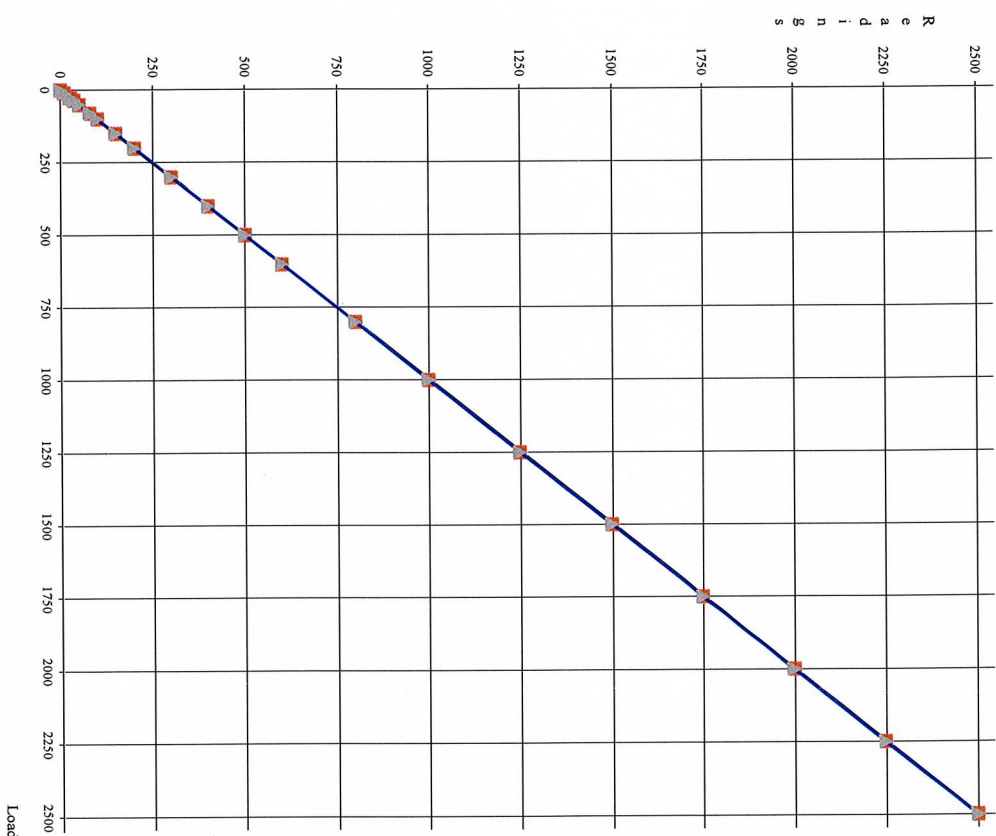
Temperature of calibration

22°C

Humidity

45%

Factory calibration in accordance with **ASTM D5778-12**



	Ascending		Descending	
	Load	Readings	Load	Readings
1	0,10	0,00	0,10	0,10
2	10,00	9,80	10,00	9,90
3	25,00	24,80	25,00	24,90
4	35,00	34,80	35,00	35,10
5	50,00	49,70	49,90	50,30
6	80,00	79,90	80,00	80,70
7	100,00	100,10	100,00	100,80
8	150,00	150,40	150,00	150,90
9	200,00	200,70	200,00	200,80
10	300,00	300,60	300,00	300,60
11	400,00	400,40	400,00	400,30
12	500,00	500,20	500,00	500,10
13	600,00	599,80	599,90	599,70
14	800,00	799,40	799,90	799,30
15	1000,00	999,00	1000,00	999,00
16	1250,00	1248,60	1250,00	1248,60
17	1500,00	1498,50	1500,00	1498,60
18	1750,00	1748,50	1750,00	1748,60
19	2000,00	1998,90	2000,00	1998,80
20	2250,00	2249,20	2250,00	2249,20
21	2500,00	2500,00	2500,00	2500,00

Unit: kPa

Zero-load error:	=	0,004	% FSO
Nonlinearity:	=	0,060	% FSO

The adopted calibration procedure has been developed according to the suggestions given by Prof. Paul W. Mayne (Georgia Institute of Technology) and Prof. Diego Lo Presti (University of Pisa)

Cone calibrated by

Date of issue

10/12/2020