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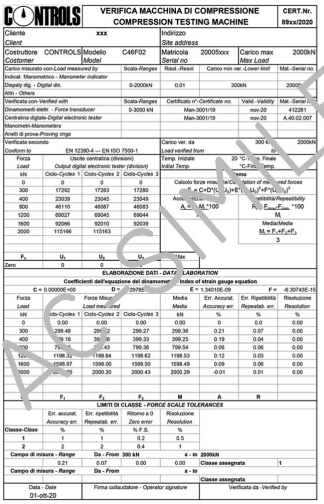
DATA SHEET

Special Calibration Procedures



VERIFICA MACCHINA DI COMPRESSIONE
COMPRESSION TESTING MACHINE
CERT.Nr. 89xx/2020

Cliente / Client: xxx
Indirizzo / Site address:
Costruttore / Costomer: CONTROLS — Modello / Model: C46F02 — Matricola / Serial no: 2000/xxx — Carico max / Max Load: 2000kN

FACSIMILE

Calibration Certificate

General description

These procedures can be applied to Concrete, Cement and Flexural testing machines fitted with WIZARD Auto, PILOT Pro, AUTOMAX Pro and AUTOMAX Multitest testing systems.
The special calibrations are useful to extend the Class 1 load measurement accuracy in the lower part of the scale. It is suggested when other test methods (flexure, indirect tensile) or low strength material testing shall be performed in the compression machine. To be specified at the time of order.

50-C0050/CAL
Special calibration of load digital readout unit assuring class 1 from 1% of testing machine full scale (maximum load). Suitable for:

- All testers from 1500 to 5000 kN cap.
- All cement testers 300 and 600 kN cap.
- All flexural testing frames fitted with load cell

50-C0050/CAL5
Special calibration of load digital readout unit assuring class 1 from 5% of testing machine full scale (maximum load). Suitable for:

- All cement double chamber frames for 15 kN cap.
- All flexural testing frames fitted with pressure transducers

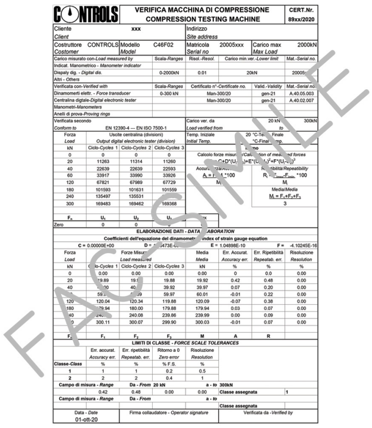
50-C0050/1CAL
Special calibration of load digital readout unit assuring class 1 from 0.5 kN.
Available only for 300kN and 500 kN capacity (with load cell) PILOT Pro or AUTOMAX Pro PCS systems.

Standards

- EN 12390-4
- ASTM E74

DATA SHEET

Specifications



CONTROLS — VERIFICA MACCHINA DI COMPRESSIONE / COMPRESSION TESTING MACHINE — CERT.Nr. 89xx/2020

Cliente / *Client*	xxx	Indirizzo / *Site address*	
Costruttore / *Costomer* CONTROLS	Modello / *Model* C46F02	Matricola / *Serial no* 20005xxx	Carico max / *Max Load* 2000kN

Carico misurato con-*Load measured by*	Scala-*Ranges*	Risol.-*Resol.*	Carico min.ver.-*Lower limit*	Mat.-*Serial no.*
Indicat. Manometrico - *Manometer indicator*				
Dispaly dig. - *Digital dis.*	0-2000kN	0.01	20kN	20005[illegible]
Altri - *Others*				

Verificata con-*Verified with*	Scala-*Ranges*	Certificato n°-*Certificate no.*	Valid.-*Validity*	Mat.-*Serial no.*
Dinamomerti elettr. - *Force transducer*	0-300 kN	Man-300/20	gen-21	A.40.05.003
Centralina digtale-*Digital electronic tester*		Man-300/20	gen-21	A.40.02.007
Manometri-*Manometers*				
Anelli di prova-*Proving rings*				

Verificata secondo / *Conform to* EN 12390-4 --- EN ISO 7500-1
Carico ver. da / *Load verified from* 20 kN *to* 300kN
Temp. Iniziale / *Initial Temp.* 20 °C-Te[illegible] Finale / °C-Final [illegible]mp.

Forza / *Load* kN	Uscite centralina (divisioni) / *Output digital electronic tester (division)* Ciclo-*Cycles* 1	Ciclo-*Cycles* 2	Ciclo-*Cycles* 3
0	0	0	0
20	11263	11314	11260
40	22639	22639	22593
60	33917	33990	33926
120	67821	67989	67729
180	101593	101631	101559
240	135497	135531	[illegible]
300	169483	169462	169368
F_n	U_1	U_2	U_3
Zero	0	0	[illegible]

Calcolo forze misur[illegible]/*Calc*[illegible]*tion of mea*[illegible]*ed forces*
$F_i = C+D*(U_i-U_0)+E*(U_i-U_0)^2+F*(U_i-U_0)^3$
Accura[illegible] $A_i = (F_i - M_i) / M_i * 100$
R[illegible]tibilità/*Repeatability* $R_i = (F_{max} - F_{min}) / M_i * 100$
Media/*Media* $M_i = (F_1+F_2+F_3) / 3$

ELABORAZIONE DATI - *DATA* [illegible]*ABORATION*

Coefficienti dell'equazione del dinamometr[illegible] index of strain gauge equation

C = 0.00000E+00 D = [illegible]473E-0[illegible] E = 1.04898E-10 F = -4.10245E-16

Forza / *Load* kN	Forze Misur[illegible] / *Load measured* Ciclo-*Cycles* 1	Ciclo-*Cycles* 2	Ciclo-*Cycles* 3	Media / *Media* kN	Err. Accurat. / *Accuracy err.* %	Err. Ripetibilità / *Repeatab. err.* %	Risoluzione / *Resolution* %
0	0.00	0.00	0.00	0.00	0	0.0	0.00
20	[illegible]9.89	19.[illegible]	19.88	19.92	0.42	0.48	0.00
40	[illegible]00	40[illegible]	39.92	39.97	0.07	0.20	0.00
[illegible]	59.[illegible]	[illegible]09	59.97	60.01	-0.01	0.22	0.00
120	120.04	120.34	119.88	120.09	-0.07	0.38	0.00
180	[illegible]79.94	180.00	179.88	179.94	0.03	0.07	0.00
[illegible]40	240.[illegible]	240.08	239.86	239.99	0.00	0.09	0.00
[illegible]0	300.11	300.07	299.90	300.03	-0.01	0.07	0.00
F_n	F_1	F_2	F_3	M	A	R	

LIMITI DI CLASSE - *FORCE SCALE TOLERANCES*

Classe-*Class*	Err. accurat. / *Accuracy err.* %	Err. ripetibilità / *Repeatab. err.* %	Ritorno a 0 / *Zero error* % F.S.	Risoluzione / *Resolution* %
1	1	1	0.2	0.5
2	2	2	0.4	1

Campo di misura - *Range* Da - *From* 20 kN a - *to* 300kN
0.42 | 0.48 | 0.00 | 0.00 | Classe assegnata 1
Campo di misura - *Range* Da - *From* a - *to*
Classe assegnata

Data - *Date*	Firma collaudatore - *Operator signature*	Verificata da -*Verified by*
01-ott-20		

FAC-SIMILE

Calibration Certificate 2

Products

50-C0050/CAL

Special calibration of load digital readout unit assuring class 1 from 1% of testing machine full scale (maximum load)

50-C0050/CAL5

Special calibration of load digital readout unit assuring class 1 from 5% of testing machine full scale (maximum load)

50-C0050/1CAL

Special calibration of load digital readout unit assuring class 1 from 0.1% of testing machine fullscale (Class 1 accuracy from 0.5 to 500 kN). Available only for C92P1x machines.