The Calibration Reference







Test benches are ideal for maintenance shops, repair shops and calibration labs, designed to full respond to all customer needs, thanks to the modules system implemented in to the bench structure, standard or customized modules are available.

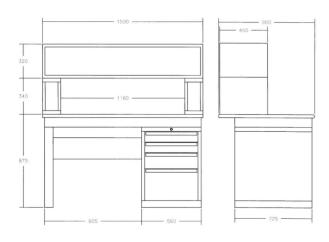
Ergonomic and easy to use, our test benches contribute to highlight a quality system, rational and net.

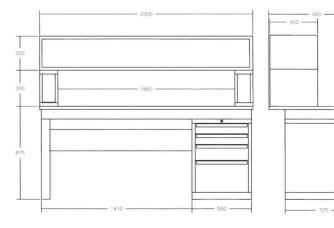
They are assembled following the customer's specific request, to ensure the best solution, as a tailored suit.

Specific modules are assembled if requested, or integrated with pre-existent instrumentation.

Metal work structure and components undergo a degreasing process before the painting, the painting is done with an epoxy powder coating with an oven polymerization around 180° C, thickness $\geq 50 \mu m$, colour Grey RAL 7035, different colour at request.

The main structure is heavy duty, load capacity 300 kg, work tables can be in Multilayer wood (40 mm thickness), or in a waterproof stratified board laminated on both sides (30 mm thickness), and if requested, fireproof & ESD version.





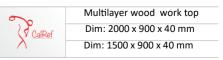






0	Bi-Laminated work top
CalRef	Dim: 2000 x 900 x 30 mm
\wedge	Dim: 1500 x 900 x 30 mm

5	ESD work top
CalRef	Dim: 2000 x 900 x 30 mm
	Dim: 1500 x 900 x 30 mm





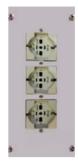
















MAINS POWER SUPPLY MODULE MODULE A6C001-XX SERIES

All model with differential / magnetotermic swich, with or whithout emergency swich.

- 1 & 3 Phase Supply Unit
- Automatic Main switch 16A or 32A
- 230Vac or 110Vac 50/60Hz
- Green indicator light for Each Phase
- Emergency switch manual reset
- Fault current protection 0.03A for all module connected at the supply unit

AC STANDARD SOCKETS MODULE MODULE A6C002-XX SERIES

AC fixed sockets module that provides to supply instruments under test.

Output to the four mains sockets at different standards.

supply: 120 V AC to 230 V AC up to 15A

RCB protected with main supply module

INDUSTRIAL SOCKETS MODULE MODULE A6C002-XX SERIES

AC fixed sockets module that provides to supply instruments under test.

Output to two mains sockets at CEE standards.

supply: 1ph 230 Vac or 3ph 400V ac 16A

RCB protected with main supply module

Models

• A6C001-01: 120/230 Vac + Emergency

• A6C001-02: 120/230 Vac

• A6C002-03: 400Vac 3Ph + Emergency

A6C002-04: 400Vac 3Ph

Models

• A6C002-01: 4 x ITA & VDE 230 Vac

• A6C002-02: 3 x ITA10/16, DIN_VDE, NEMA

• A6C002-03: 4 x BS1393 220Vac

• A6C002-04: 4 NEMA 110/120 Vac

• A6C002-05: 4 x NEMA 220/240 Vac

Models 1Ph

• A6C002-06: 2 x 120 Vac 16A 2P+N

• A6C002-07: 2 x 230 Vac 16A 2P+N

Models 3Ph

• A6C002-08: 2 x 400 Vac 16A 3P+N

• A6C002-09: 2 x 400 Vac 16A 3P+N+G



Dimensions: 122x266 x 150 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 122 x266 x 150 mm

Rack Unit: 6U

Warranty: 1 year, extendible to24 months



Dimensions: 122 x266 x 150 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months

DESCRIPTION

EXTRAS







VARIABLE AC POWER SUPPLY MODULE A6C003-XX SERIES

Automatic Main switch, Overload protection Input voltage 120 or 230Vca 50/60 Hz Output voltage 0 / 250Vac Variable Autotransformer up to 3A Digital indicator up to 500 Vca for Voltage Resolution 0.1/1V Digital indicator up to 10 Aca for Current Resolution 0,01A Outout:

CEE socket and 4 mm safety terminal

VARIABLE AC POWER SUPPLY MODULE A6C004-XX

Automatic Main switch, Overload protection Input voltage 120 or 230Vca 50/60 Hz Output voltage 0 / 250Vac Variable Autotransformer up to 10A Digital indicator up to 500 Vca for Voltage Resolution 0.1/1V Digital indicator up to 10 Aca for Current Resolution 0,01A Output:

CEE socket and 4 mm safety terminal

VARIABLE AC & DC SUPPLY MODULE A6C005-XX

Input voltage 120 or 230Vca 50/60 Hz
Output 1 = 0 - 250 Vac 50/60Hz
Output 2 = 0 - 250 Vdc full wave rectified
Current 3 or 5 A
Input voltage 230V ca 50/60 Hz
Motorized Variable Autotransformer
Separate Output for AC & DC 4mm safety
terminal
Selector Ac or dc output
Digital Voltmeter for ac and dc,
Digital Ammeter for ac and dc

Model	Voltage Input	Voltage Output	Power
-01	230 Vac	0/250Vac	3 A
-02	120Vac	0/140Vac	3 A
-03	120Vac	0/230Vac	3A

Model	Voltage Input	Voltage Output	Power
-01	230 Vac	0/250Vac	5 A
-02	230Vac	0/250Vac	10 A
-03	120Vac	0/140Vac	5A
-04	120Vac	0/140Vac	10A

Model	Voltage Input	Voltage Output	Power
-01	230 Vac	0/250Vac 0/250Vac	3 A
-02	120Vac	0/140Vac 0/140Vcc	3 A
-03	120Vac	0/230Vac	3A

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature: +5 to +40°C 20% to 80% RH not condensing

Other sockets on request

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature: +5 to +40°C 20% to 80% RH not condensing

Other sockets on request

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature: +5 to +40°C 20% to 80% RH not condensing

Other sockets on request



Dimensions: 242 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to24 months



Dimensions: 242 /380 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 242 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months









VARIABLE DC STABILIZED POWER SUPPLY MODEL A6C006-XX

Constant voltage / constant current
Output values: see table
Load regulation CV: 2mV + 0.005% Over 0100% load
Line regulation CV: 1mV + 0,005%
Load regulation CC: 0,01% + 5mA
Line regulation CC: 0.01% + 2mA
Digital indicator for Voltage and current
Embedded microprocessor controller
RS 232 & 485 interface, GPIB on request

LINEAR DC STABILIZED POWERC SUPPLY MODEL A6C006-XX

Linear regulation For ultra-low noise
Output values: see table
Load regulation CV: 0.01% + 2mV
Load regulation CC: 0,01% + 500 uA
Line regulation CV: 0,01% + 2 mV for 10%
Line regulation CC: 0,01% + 250 uA for 10%
Ripple: 0,4 mV rms
Digital indicator for Voltage and current

RS 232, USB and LAN interface

VARIABLE DC RECTIFIED POWER SUPPLY MODEL A6C007-XX

Automatic switch overload protection Rectified & filtered Output values: see table Digital indicator for Voltage and current Output 4 mm safety terminal and CEE sockets for CC

Model	Voltage	Current	Power	Model	Voltage	Current	Power	Model	Voltage Input	Voltage Output	Power
-01	0—36 Vcc	0—6 A	216 W	-04	0—15 Vcc	0—5 A	75 W	-01	230 Vac	0/50Vcc	15 A
-02	0—60 Vcc	0—7 A	420 W	-05	0—30 Vcc	0—3 A	90 W	-02	120Vac	0/140Vcc	3 A
-03	0—120 Vcc	0—3,6 A	432 W	-06	0—60 Vcc	0—1,5 A	90 W	-03	230Vac	0/250Vcc	3A

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: +5 to +40°C Humidity: 20% to 80% RH not condensing

Cooling: smart variable-speed low noise fan

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: $+5 \text{ to } +40^{\circ}\text{C}$

Humidity: 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing

CalRef

Dimensions: 120 /240 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 240 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 240 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to24 months









FIXED DC POWER SUPPLY MODULE A6C008-XX SERIES

1AC input 230Vac, (110Vac option)
DC output adjustable range ±1%
Ripple see table model selection
Overload Protection range 05% - 130%
Constant current limit, autorecovery
Overvoltage protection, shut-down 0/P
voltage, re-power on recovery
Over temperature protection
Working temperature -20 °C to 60 °C
four isolated 4 mm safety terminal

PRESSURE INDICATOR MODULE CUBE-P & CUBE-PP

stainless steel

Configurable with one or two channels each or both for pressure. Accuracy up to 0.02 % FS pressure Ranges up to 700 bar

Pressure Resolution better than 0.001 % FS Fully temperature compensated -10...50 °C Data-logger & RS232 Connection Measuring Fluid: Any fluid compatible with

20 measuring unit: mbar - bar - Pa - hPa - kPa - MPa - kg/cm2 - kg/m2 - mmHg - cmHg - mHg- mH2O - cmH2O - mH2O - torr - atm-psi - inHg - inH2O - ftH2O

AUTOMATIC PRESSURE GENERATOR DPC 3800

Automatic pressure controller for absolute, relative and differential pressures in gas media. Several ranges are available from vacuum up to 250 bar. Accuracies up to 0.01% FS for each range. Thanks to the Ethernet port more controllers can be connected in a network to manage complex situations (multiple fields, productions, etc.). The controller has an integrated web-server that can publish pages dedicated to the calibration or testing without the need to install additional software on individual PCs.

Model	Voltage V	Current A	Ripple mV	Model	Range bar	Resolu- tion bar	Accuracy
-01	3,3	5	80	-01	-0.5 / 0.5	0.0001	0.02%f.s.
-02	5	5	80	-02	-1/1	0.0001	0.02%f.s.
-03	12	5	80	-03	-1/7	0.0001	0.02%f.s.
-04	24	5	100	-04	-1/20	0.0001	0.02%f.s.
-05	48	2	100	-05	0/50	0.0001	0.02%f.s.
-06	120	2	100	-06	0/100	0.0001	0.02%f.s.
				-07	0/200	0.0001	0.02%f.s.
				-08	0 / 400	0.0001	0.02%f.s.
				-09	0 / 700	0.0001	0.02%f.s.

Specifications

Medium: air, nitrogen (other on request) Accuracy: 0,01 % FS

Ranges relative (bar): -1...1; 0...2; -1...3; 0...5; -1...10; 0...20; -1...30;

0...60; -1...100
Ranges absolute (bar):
0...1; 0...3; 0...10; 0...30

Ranges differential (mbar): -30...30; -100...100; -300...300

Communication: RS-232, Ethernet RJ-45, (optional: IEEE-488.2 or output 4-20 mA)

Display: Color Touchscreen

Optional: software DynaCal for the calibration

reports generation Compatible with LabVIEW

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature: +5 to +40°C 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing

Safety: compliance with EN61010-1

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing



0	Dimensions: 483 x 132 x 350 mm
CalRef	Rack Unit: 3U
\wedge	Warranty: 1 year, extendible to 24 months















VACUUM GENERATION & REGULATION MODEL P6C002-XX

Module is designed to generate vacuum, from external electrical vacuum pump. Module includes precision fine adjustment, increase vacuum valve, decrease vacuum valve, two plug.in connectors, 60 mm dial gauge to monitoring vacuum.

Electric Supply: 230 Vac 50Hz, (110 Vac opt)

Power: 0.25 KVa Pumping speed: $4.6 \text{ m}^3/\text{h}$

Stages: 2

Ultimate vacuum:1 mbar residual

HAND PUMP VACUUM / PRESSURE MODEL P6C003

Module is designed to generate pressure and vacuum signals, for testing pressure instruments and precision pressure air supply.

The module includes: manual pump to generate from-0.9 to 20 bar, precision pressure regulator vent button pressure/vacuum switch N° 2 pneumatic connections

PRESSURE REGULATION LOW & HIGH MODULE P6C001-XX

Module is designed to generate pressure signals, for testing pressure instruments and precision pressure air supply, module include a gauge and a precision pressure regulator. Regulated pressure circuit by external air supply through the built in precision pressure regulator.

Two plug-in output and input connectors.

Model	Voltage	Residual Vacuum	Power
-01	230V 50Hz	1 mbar	250 VA
-02	110V 60Hz	1 mbar	500 VA

iviodei	INPUT Bar	OUTPUT bar	iviedia
-01	35	0.03/2	Clea Air
-02	35	0.1/10	Clea Air
-03	35	0.1/14	Clea Air
-04	35	0.1/21	Clea Air
-05	35	01/28	Clea Air
-06	415	0.7/105	Nitrogen
-07	415	1/170	Nitrogen
-08	415	1.7/275	Nitrogen
-09	415	3.5/410	Nitrogen

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: $+5 \text{ to } +40^{\circ}\text{C}$

Humidity: 20% to 80% RH not condensing

Safety: compliance with EN61010-1

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing

Safety: compliance with EN61010-1

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing

CalRef

Dimensions: 121 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 121 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 121 x266 x 350 mm

Rack Unit: 6U

 $\textbf{\it Warranty: 1 year, extendible to 24 months}$









GAS / HIDRAULYC PRESSURE BOOSTER MODEL P6C004

The Pressure Booster transforms low input pressures into high output pressures due to variable section pistons. Extremely quiet is also suitable for laboratory applications.

Nominal pressure from 300 up to 1500 bar (Available 16 different ranges)
Single effect, double effect or dual stage
Low noise levels even at high cycle rate
Optional: Hydraulic command
For use with nitrogen, helium, and most of

TEMPERATURE INDICATOR MODULE CUBE-T & CUBE-TT

Configurable with one or two channels each or both for Temperature RTD PT 100 4W
Temperature Resolution better than 0.001 °C Fully temperature compensated -10...50 °C Data-logger & RS232 Connection

SECONDARY LEVEL Resistance Temperature Probe Models: RTD2-385 & RTD2-392

Working temperature: -80...450 $^{\circ}$ C Nominal resistance at 0 $^{\circ}$ C: 100 $^{\circ}$ C RTD2-385: 0.00385 $^{\circ}$ C RTD2-392: 0.00392 $^{\circ}$ C

Stability: 0.07 °C Extension wires length and material: 4 wires in silvered copper, 2500 mm long shielded-

teflon/teflon insulated

Outer sheath material: Stainless steel AISI 316 Sheath diameter and length: 6x500 mm

Measurement current: 1 mA

Case: Wooden

Safety: compliance with EN61010-1

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing

CalRef

Dimensions: 483 x266 x 550 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 483 x132 x 350 mm

Rack Unit: 3U

Warranty: 1 year, extendible to24 months



Dimensions: Dia 8mm x 600 lenght

Rack Unit: N.A.

Warranty: 1 year, extendible to 24 months







MULTIFUNCTION CALIBRATOR MODULE SECON1

Up to 4 CHANNEL MEASURE / SOURCE

Simulation & Measurement

Temperature (mV) Up to 0.008% RDG+0.002%FS Resistance Up to 0.008% RDG + 0.002%FS Current: Up to 0.007% RDG and 100 mA range + Loop Supply 24 V

Voltage: Up to 0.008 % RDG + 0.002%FS

Frequency: Up to 0.01 %

MULTIFUNCTION CALIBRATOR MODULE \$6C002

Up to 4 CHANNEL MEASURE / SOURCE

Simulation & Measurement

Temperature Up to 0.005 % RDG Resistance Up to 0.006 % RDG and 50 K Ω range Current: Up to 0.007 % RDG and 100 mA range Loop Supply 24 V

Voltage: Up to 0.005 % RDG and 50 V range Frequency: Up to 0.01 % RDG and 100 KHz range

DECADE RESISTIVE MODULE S6C003-XX

Adjustment accuracy: ± 0.02%

The precision indicated refers to the terminals, and then is that which considers the overall resistance of zero.

The resistors are in manganin wire (±10 ppm/°C temperature coefficient) wrapped in uninductive way.

A suitable curing process guarantees longterm stability: 10 ppm in the first year and max 20 ppm in three years.

The switches have a contact resistance less than 0.02Ω in time invariant.

Reading / Simulation Range:

RTD PT 100, 200, 500, 1000, NI 100, 120, CU10, 100

TC J,K,T,F,R,S,B,U,L,N,E,C

mA -100 / 100 (reading)

mA 0-20 (simulation)

mV +/- 100

V 2, 80

Ohm 0 / 10 KOhm (reading)

Ohm 0 / 10 Kohm (simulation)

Hz 50 KHz

Hart Hart Module

Reading / Simulation Range:

RTD PT 100, 200, 500, 1000, NI 100, 120, CU10, 50

TC k, T, J, E, R, S, B, N, Mo, NiMo/NiCo

mA 0-20, 4-20, -100 / 100 (reading)

mA 0-20 (simulation)

mV -10 / 100

V 1. 10. 50

Ohm 400, 3600, 50KOhm (reading)

Ohm 400, 3600 (simulation)

Hz 1000Hz, 100KHz

Hart N. A.

code SECTION Ω

-01 10 x (1+10+100+1K+10K+100K+1M)

-02 10 x

(0.1+1+10+100+1K+10K+100K)

-03 10 x (1+10+100+1K+10K+100K) -04 10 x (0.1+1+10+100+1K+10K)

-04 10 x (0.1+1+10+100+1K+10K)

-05 10 X (1+10+100+1K+10K)

-06 10 x (0.1+1+10+100+1K)

-07 10 x (1+10+100+1K)

-08 10 x (0.1+1+10+100) -09 10 x (1+10+100)

-10 10 x (0.1+1+10)

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing

CalRef

Dimensions: 483 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 483 x266x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 483 x 132, 177, 266 x 350 mm

Rack Unit: 3, 4, 6 U

Warranty: 1 year, extendible to24 months







ARBITRARY FUNCTION GENERATOR S6C004-XXXX

General Features AFG3000 series

AFG3000C Series of Function, Arbitrary Waveform, and Pulse Generators the most useful instruments in the industry.

DIGITAL MULTIMETER MODULE \$3,0005

6.5 Digit Resolution
Basic VDC Accuracy of up to 0.0024% $100 \, \text{mV}$ to $1000 \, \text{V}$ Voltage Range $100 \, \mu \text{A}$ to $10 \, \text{A}$ Current Range $10 \, \Omega$ to $1 \, \text{G}\Omega$ Range
Volts, Ohms, and Amps Measurements
True RMS (AC, AC + DC)
Measurements Diode
Temperature and Capactiance Measurements $2 \times 4 \, \text{Ohms} \, 4$ -wire Measurement

DIGITAL STORAGE OSCILLOSCOPE MODULE S6C006-XXXX

The TBS2000 Series oscilloscopes help you get more done in less time.

USB 2.0 device port on the rear panel for easy connection to a PC or for direct printing to a PictBridge® -compatible printer.

Includes National Instrument's LabVIEW SignalExpress™ TE Limited Edition and Tektronix OpenChoice® Software for connecting to the bench

Model	3011C	3021C
Frequency range	1uHz - 10MHz	1uHz - 100MHz
Channels	1	1
Waveforms	Sine, Square, Pulse, Ramp, Triangle, Gaussian, Lorentz, Hav- ersine, DC, Noise	Sine, Square, Pulse, Ramp, Triangle, Gaussian, Lo- rentz, Haver- sine, DC, Noise
Setting	1uHz – or	1uHz – or
resolution	12 digits	12 digits
Memory dept	128k	128k

Model	8845A	8846A
Vac	750V ca	750V ca
Vdc	1000V cc	1000Vcc
l ac	10A ac	10A ac
I dc	10A cc	10A cc
Ohm	1GOHM	1GOHM
Frequency	300KHz	300KHz
Diode	yes	Yes
Capacitance	-	Yes
Temperature	-	600°C
USB memory	-	yes

Model	2102	2104
Bandwidth	100 MHz	100 MHz
Channels	2	4
External	Each channel	Each channel
Trigger		
Sample rate each	2.0 GS/s	2.0 GS/s
channel		

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: $+5 \text{ to } +40^{\circ}\text{C}$

Humidity: 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temperature:

+5 to +40°C 20% to 80% RH not condensing

Safety: compliance with EN61010-1 EMC: compliance with EN61326

Operating temp.: +5 to +40°C

Humidity: 20% to 80% RH not condensing



Dimensions: 483 x266 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 483 x132 x 350 mm

Rack Unit: 6U

Warranty: 1 year, extendible to 24 months



Dimensions: 483 x266 x 350 mm

Rack Unit: 6U

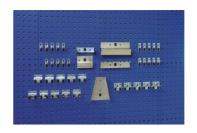
Warranty: 1 year, extendible to 24 months





Cable Support

Comfortable support mountable on the structure of the bench that helps maintain a work station clean and net.



Hook Kit:

Hook kit for supporting tools, accessory available only for bench series with perforated panel.



Magnifier Lamp:

Classic round 22w daylight lamp with round glass lens and quick positioning handle, ideal for close-up and intricate work.



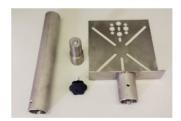
Soldering/Desoldering Station:

Ideally suited for use in repair and laboratory environments as well as for production, design and R&D application.



ESD Bench Mat:

Available in different colours and size, low reflection, easy to clean, manufactured from rubber.



Support:

Support for external transducer, manometers or other, consisting in a support attached to the work table and two different type of braces, ideals for bulky and heavy tools.



Calref offers a turnkey design and supply service for customer requiring.

Heavy-duty versions of CalRef are available in 2m or 1.5m width system. Each bench is made up of a bearing metal structure, ideal for industrial workshops. This provides a solid basis, making these benches suitable for maintenance work on electromechanical instruments.





electronic laboratory, corner frame





electromechanical workshop, linear frame



Electrical workshop, linear frame



Electrical workshop test bench



Pressure workshop test bench



Pressure laboratory test bench





modular configuration for testing and calibration in workshop and laboratory



Power supply ac & dc



User friendly



Calibration of a electronic pressure transmitter



Compact & rugged



Reference Instruments



Typical electrical test bench



Typical electro-pneumatic and temperature test bench



Who we are, What we do

CalRef is a dynamic company strongly oriented to problem solving and Customer needs satisfaction. The market sector in which CalRef works is the industrial and laboratory instruments calibration. The CalRef team has twenty years experience in the measurement and calibration field. Among the offered services: realization of turn-key calibration laboratories with support for the accreditation; metrology consulting; quality management systems consulting; training courses; calibration, maintenance and repair of measuring instruments. Among the products we offer: calibration equipments for pressure measurements; calibration instruments for temperature measurements; air data testers; custom calibration benches; ttings and valves for high pressure; tools.

Metrological Training

CalRef offers training courses in Italy and abroad on a wide range of topics. The courses can be both group and customized according to customer requirements.

Among the courses offered: basic metrology; metrological laboratories management; ISO 17025 requirements; pressure measurements; operation and maintenance of pressure balances, temperature measurements, others.

Metrological and Quality System Consulting

CalRef can assist you or take charge of your needs in the eld of Metrology & Quality.

With twenty years of experience as Accredited Calibration Centers Managers and Quality Management Systems Manager, according to different standards (ISO 17025, ISO 9001, ATEX Directive), CalRef is a trusted advisor for the realization of calibration laboratories and the set up of quality systems. The assistance during any phase of certification and /or accreditation completes the counseling.

Calibration Services & Repairs

To fulfill the needs of maintaining reliable the instruments operation, we offer calibration and repair services as well. Please contact us for additional information.

Autorized dealer:



Calref Srl — Via Ambrosoli 8/B — 20090 Rodano (Milano) Italy

Phone +39 0270301324 — info@calref.eu — www.calref.eu