



CBP-TRN1: Process Instrumentation Trainer CalBench Package

A pre-configured CalBench for training instrumentation technicians and engineers



About the Package

The CBP-TRN1 CalBench can be used to demonstrate and practice pressure, process, and temperature instrumentation calibration. It is suitable as a teacher workstation that is easy to operate manually, but can also perform software driven calibration. Educate trainees on applications relating to commissioning, calibration and maintenance of the typical devices used for measurement in industrial systems.

The 8060+ module sits centrally in the console, providing source, simulation and measurement of process signals, HART communication and 24 V loop power. It features an integral multimeter, and a PC control centre with 12.1" touch screen display. Both manual control and EasyCal software driven calibration can be performed. EasyCal communicates with pressure modules and dry block calibrator.

For pressure, pneumatic and hydraulic calibration can be performed. A regulated pneumatic module with high accuracy digital gauge is used for vacuum to 7 bar (100 psi). Then gauge modules for 20 bar (300 psi) and 350 bar (5000 psi) are used with supplied pumps.

The package has various extras to aid training applications and create an ergonomic workspace. These include on-bench storage with drawers, holders, perf panel hooks, document holder, and shelves. Calibration accessories include an adaptors/fittings kit, and an instrumentation test stand with manifold, vice and transmitter bracket.

Features

- Process/pressure instrumentation test & trainer CalBench
- Multifunction process calibrator module with 6.5 digit multimeter
- Control centre module with 12.1" touch screen display
- Regulated vacuum to 7 bar (100 psi) module with digital gauge
- Digital gauge modules for 20 bar (300 psi) & 350 bar (5k psi)
- All pressure modules have control centre readback interface
- Electrical vacuum pump in housing, power switch on bench
- Pneumatic & hydraulic benchtop pumps, adaptor kit, UUT stand
- Fixed and variable DC power supply modules
- Control centre oscilloscope module, decade box module
- Automated calibration with EasyCal software, peripherals supplied
- Under bench drawer unit & holder, perforated panel fittings, tool kit





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Item #	Qty	Code	Basic Description	Basic Purpose
1	1	7080-HD	CalBench Heavy Duty Version (W 2000 x D 850 x H 1568 mm) Framework bench style with worktop, perforated panel, primary console with 7082 mains power controller module.	Provides an ergonomic workspace for various calibration applications. Modules below to be fitted to the primary console for testing workload.
2	1	7125	Perfo Panel Option: 20 piece Tool Hook Kit	For holding various tools and accessories.
3	1	7139	Perfo Panel Option: Shelf (W 450 x D 250 x H 130 mm)	Suitable for storing equipment and tools.
4	1	7143	Perfo Panel Option: Document Holder (W 450 x H 360 mm)	For placing instructions, user manuals, guides etc.
5	1	7132	5 Drawer Unit (W 525 x D 550 x H 600 mm)	For storage of equipment, tools, components and extras.
6	3	7134	Slotted Divider Kit for drawers inside 7132	Partitions the drawer units for parts and components.
7	1	7123	CPU/Dry Block Calibrator Holder	For storing dry block calibrators when not in use.
8	1	8060+	Process Calibrator and Control Centre Module Advanced system package for precision source and measure capabilities. Integral process calibrator, 6.5 digit multimeter, PC and EasyCal software. Operation via 12.1" touch screen display. Built-in communication with pressure modules.	Source and measure process signals for electrical, frequency, temperature. Enables users to calibrate process instrumentation like transmitters. HART communication and integral 24 V DC supply. EasyCal software and accessories included for automation, administration and certificate generation.
9	1	CCPAD	Control Centre Numeric Keypad Module with jog dial	Ergonomic method of data entry to EasyCal software.
10	1	RMTEG-CV7b/0.02	Digital Pressure Gauge Module with Regulator Vacuum to 7 bar (100 psi), 0.02 % FS accuracy.	For pneumatic calibration from vacuum to 7 bar (100 psi), used with the 7149 electrical vacuum pump and external air supply. Can be used manually with pump also (measure mode).
11	1	MTEG-CV20b/0.02	Digital Pressure Gauge Module Vacuum to 20 bar (300 psi), 0.02 % FS accuracy.	For mid range pneumatic calibration and testing work. Pressure input to the module from the 7192 benchtop pump.
12	1	MTEG-G350b/0.02	Digital Pressure Gauge Module 0 to 350 bar (5000 psi), 0.02 % FS accuracy.	For accurate hydraulic pressure measurement to 350 bar. Pressure input to the module from the 7195 benchtop pump.
13	1	1051B	Resistance Decade Box Module (0.01 Ω to 1 M Ω)	For testing work, Pt100 simulation for checking RTD transmitters.
14	1	CCSCOPE-2208B	Integral Oscilloscope with Connection Module 100 MHz, 2 channel, operation via control centre.	For basic R&M applications, fault finding and diagnostic work.
15	1	7056	Dual Adjustable Power Supply Module 2 x 30 V DC 3 A.	A variable DC supply to supplement various applications.
16	1	7087	Quad DC Power Supply Module 6 V (20 A), 12 V (10 A), 24 V (6 A), 48 V (3 A).	Provides a DC power supply to various loop instrumentation under test.
17	1	7149	Electrical Vacuum Pump	Provides a vacuum that connects to the RMTEG-CV7b module, enabling regulation for negative pressure calibration work.
18	1	7149-HCO	Housing and Connectivity Option for the 7149 vacuum pump	Compact housing for the 7149 pump, situated under bench. Sound proofed and power control via 7082 module on CalBench.
19	1	7195	Benchtop Hydraulic Pressure Calibration Pump Vacuum to 700 bar (10,000 psi).	Hydraulic pressure to 700 bar. Used with MTEG-G350b module, with a dual output manifold for both UUT & module connection.
20	1	7192	Benchtop Pneumatic Pressure Calibration Pump Vacuum to 25 bar (350 psi).	Pressure generation to 25 bar. Used with MTEG-CV20b module, with a dual output manifold for both UUT & module connection.
21	1	7198	Pressure Calibration Accessories Kit A comprehensive selection of fittings, adaptors and hoses.	Provides all the required pressure connections and fittings for modules and pumps to UUTs.
22	1	8100	Instrumentation Test Stand	For positioning of UUTs like transmitters & gauges on benchtop.
23	1	8070	Dry Block Calibrator (-23 to 155 $^{\circ}$ C) With metric multi hole insert (1x3, 2x4, 1x5, 1x6, 1x9 mm), blank insert, EasyCal software driver pre-configured on control centre.	Temperature source for the calibration of probes, RTDs, and thermocouples. Manual control and EasyCal software compatible to automate calibration applications.
24	1	8070-METP	Pack of 11 Metric Inserts for 8070: 3,4,5,6,7,8,9,10,11,12, 13 mm	Inserts for use with different probe sizes, used with 8070.
25	1	CERTS	Traceable Calibration Certificates. For all test modules and additional test equipment.	Certifies all calibration modules and additional test instruments have been tested in the TE factory to international standards.