



CalCube

Portable Vacuum Calibration Stand

Chell Instruments

- **Complete vacuum calibration stand in portable case.**
- **Complete with dry backing pump, turbo pump and wide range gauge.**
- **Symmetrical all welded calibration chamber .**
- **Gas control for rising and falling calibrations.**
- **Includes 4 ports (KF25) for standards and UUT.**
- **Includes CCD100 displays for standards and UUT.**
- **Rugged portable enclosure with removable top and side.**
- **Supplied with fitting set suitable for most vacuum applications.**



The CalCube is a complete vacuum calibration stand built into a rugged portable enclosure. The CalCube features an all welded stainless steel calibration chamber with the necessary pumping symmetry built into it to ensure an equal pressure at all four ports.

The calibration chamber is mated with a turbo pump via a butterfly valve. This coupled with gas inlet and butterfly bypass controls enables the pressure to be quickly set to the appropriate calibration pressures within the chamber. The butterfly bypass control also enables the unit to perform falling as well as rising calibration runs.

Included in the unit is a wide range gauge to give an indication of the pressures and a number of Chell CCD100's that can be used for standards and the devices undergoing calibration. Options include 2 or 4 CCD100's and also a calibration chamber temperature measurement to ensure full compliance to BS ISO3567:2011.

When assembled, the CalCube is protected on every face by the lightweight aluminium case. The top and side of the case are then removed when the unit is powered up.



CalCube Specifications

Pump types	Turbo : Air cooled DN40 Compound turbomolecular pump Backing : Diaphragm pump (ultimate <2mbar)
Pumping speed	Turbo : 42 l/s (N ₂) backing : 1.2m ³ /hr
Ultimate pressure	1 x 10 ⁻⁶ mbar
Calibration chamber volume	1.1 Litres
Pump down time (typical)	to <1 x 10 ⁻⁴ mbar : < 2 minutes to <1 x 10 ⁻⁶ mbar : < 5 minutes
Dimensions (width x depth x height in mm)	530 x 604 x 836 (including castors)
Weight	Nett : 53.5 Kg, Shipping : 60Kg
Input supply	110 to 120 <i>or</i> 220 to 240 VAC
Operating temperature range	+5 to+35°C
Storage temperature range	-20 to+90°C

CalCube Case Configuration



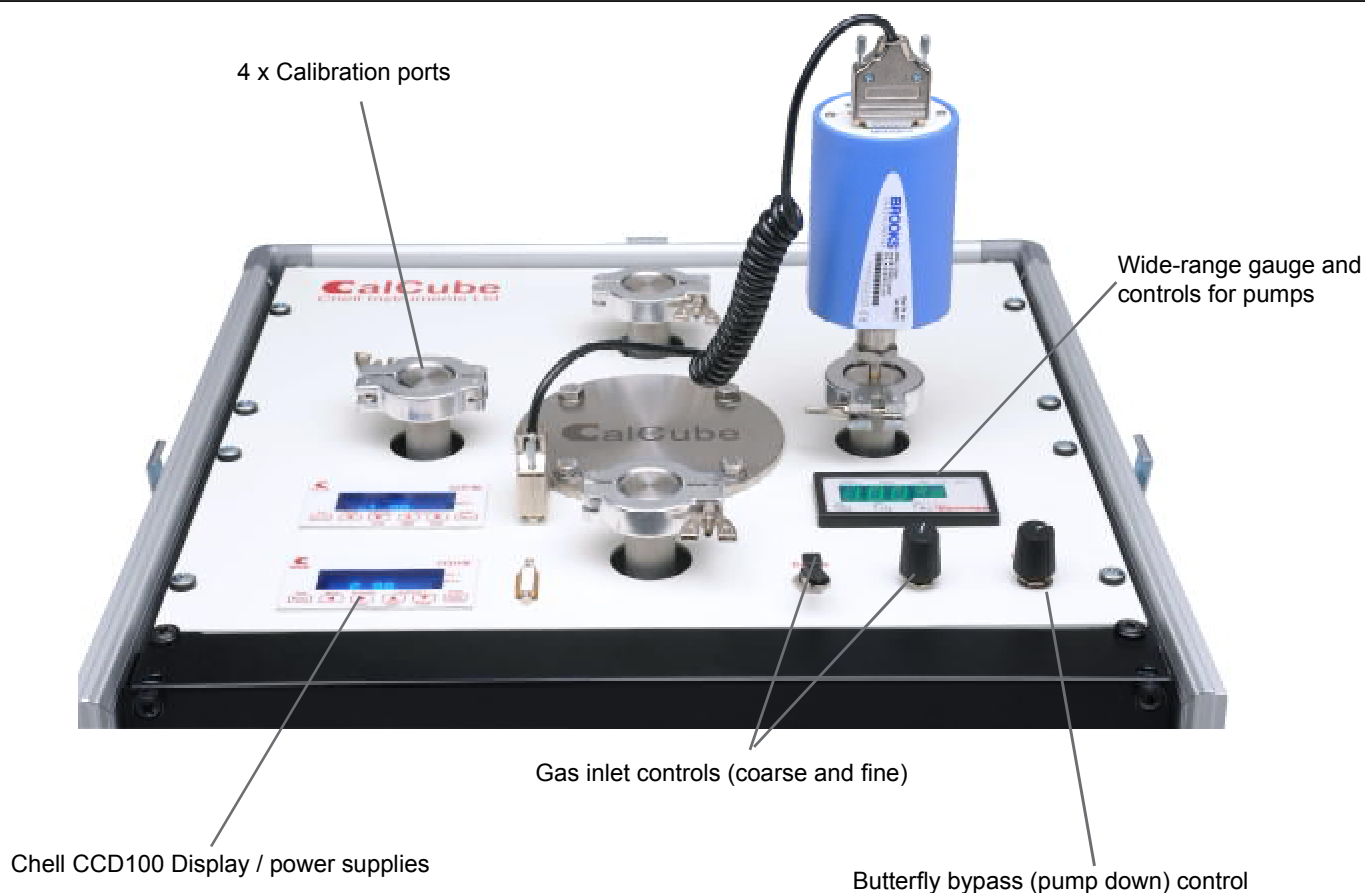
List of Fittings Supplied (standard set, please contact us if your requirements are different):

- 1 x KF25 to ¼" VCR® Male
- 1 x KF25 to ½" VCR® Male
- 2 x KF25 to ½" Swagelok® male
- 1 x KF25 to ½" Ultratorr®
- 1 x KF25 to KF40
- 2 x KF25 to KF16
- 4 x KF25 Blanks

- 2 x KF40 Seal
- 4 x KF25 Seal
- 2 x KF16 Seal

- 1 x KF40 Clamp
- 2 x KF25 Clamp
- 2 x KF16 Clamp

Technical Details



Standard Available	Range	Accuracy
Unheated capacitance manometer	10 to 1000 mbar	0.5% RDG
Temperature stabilised capacitance manometer	0.1 to 1000 mbar	0.25% RDG

Ordering Codes	
Options	CalCube-AA-BB-CC
AA : Number of CCD100 displays incorporated (2 or 4)	AA = 02 - 2 x CCD100's incorporated into panel AA = 04 - 4 x CCD100's incorporated into panel
BB : Optional chamber temperature measurement (for compliance to BS ISO3567:2011)	BB = 00 - No temperature measurement BB = 01 - With panel mounted temperature measurement
CC : Vacuum fittings included	DD = 00 - No vacuum fittings included DD = 01 - Full st of vacuum fittings included in foam lid
Special options such as automated pressure control are available - please contact us for further information.	



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