

**VERNIER CALLIPERS, IME TYPE**

Chrome plated steel, heavy type, scale 150 x 0.1 mm & 6 x 0.01 inch, sliding jaw with thumb movement for fine adjustment, in velvet lined box.

**CM2028**



CM2028

**CALLIPER, DEMONSTRATION**

Made of polished wood with aluminium channel, 600 mm long.

**CM2029**



CM2029

**MICROMETER SCREW GAUGE**

Brass body, with steel screw of 0.5 mm pitch, thimble with ratchet stop, range 0 to 25 mm, reading to 0.01 mm, in plastic pouch.

**CM2041**



CM2041

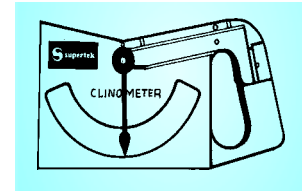
**CLINOMETER**

For measuring angle of elevation of a tall object and to check angle of inclination of vertical or horizontal surface.

**CM2121**



CM2130



CM2121

**CALLIPER, BOW**

Steel, for measuring diameter of circular and spherical objects, length 150 mm approx.

**CM2130**

**CALLIPERS, COMBINED**

Steel, for internal and external measurements, length 100 mm approx.

**CM2138**



CM2138

**METRE RULE**

Non-warping wood, 25 mm wide, double scale in mms, figured every cm. The scales on the two edges read in opposite directions.

<b>CM2212/1</b>	1 metre
<b>CM2212/3</b>	1/2 metre



CM2212

**METRE RULE**

Non-warping wood, 25 mm wide, double scale in mms, figured every cm. Both scales read from bottom to top.

<b>CM2215/1</b>	1 metre
<b>CM2215/3</b>	1/2 metre

**MEASURING TAPE**

Steel, in unbreakable case, self re-winding. graduated in mms, figured every cm.

	Length
<b>CM2240/1</b>	1 metre
<b>CM2240/2</b>	2 metre
<b>CM2240/3</b>	3 metre
<b>CM2240/5</b>	5 metre



CM2215

**MEASURING TAPE**

Woven metal wired tape in ABS case, with handle for rewinding.

<b>CM2245/1</b>	5 metre
<b>CM2245/2</b>	10 metre
<b>CM2245/3</b>	20 metre
<b>CM2245/4</b>	30 metre
<b>CM2245/5</b>	50 metre



CM2240



CM2245



CM2310



CM2314



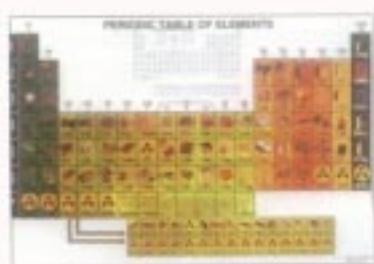
CM2405



CM2410



CM2415



CM2430

### MELTING POINT APPARATUS

Useful for determining melting points upto 300°C. Consists of an aluminium block which accepts three capillary tubes and a thermometer. The block is heated by two heating elements which are provided with a built-in energy regulator. The lamp provides uniform & shadowless illumination of samples. A lens is provided for the capillaries. Heating block & controls are enclosed in a metal box. Works on 220 V, 50 Hz supply.

**CM2310**

### ACCESSORY

#### COOLING PLUG

Water cooled metal plug which can be inserted in thermometer pocket for rapid cooling of heating block to reduce cooling time.

**CM 2312**

### MELTING POINT APPARATUS, Thiele

Borosilicate glass, with side tube, overall size 182 x 84 mm.

**CM2314**

### MELTING POINT TUBES

Thin walled capillary tubes, 100 x 1.8 mm approx. pack of 100 tubes

**CM2317**

### CRYSTAL MODEL SET

Made of hard wood, set of 20, in box.

**CM2405**

### GEOMETRICAL MODELS & FIGURES

Made of hard wood, set of 16, in box.

Size, mm

**CM2410/1**

40 x 25

**CM2410/3**

50 x 30

### GEOMETRICAL MODELS

Set of plane & solid geometric shapes. Plane shapes include triangles, figures with four, five, six, seven, eight, nine and ten sides, circle, semi-circle and quadrant. The solid shapes include cylinder, sphere, cube, tetrahedron, pyramid, cone, prism. Cube size 30 mm, cylinder height 50 mm.

**CM2413**

### ATOMIC MODEL SET

With plastic balls in various sizes and colours, and link lugs, in box.

**CM2415/1**

Set of 60 balls

**CM2415/3**

Set of 120 balls

**CM2415/5**

Set of 360 balls

### PERIODIC CHART OF ATOMS

Multi-coloured, showing solids, liquids, gases in separate distinctive colours with symbols & names, density, atomic radii, melting points, boiling points, atomic numbers, atomic weights, electronic structure, crystal structure, valency, ionisation potential, electro-negativity etc. Information about 105 elements is given. Size 140 x 100 cm, mounted, with rollers,

**CM2430/1**

**MOLECULAR MASS**

**OIL FILM KIT**

To estimate the molecular size & for surface tension investigations, using an oil film on water. Consists of 2 trays, 4 metal booms, 8 levelling wedges, 16 mounted wire loops, 8 graticules & special holders, olive oil, 8 beakers 10 ml, lycopodium powder, 2 dispensers, camphor & paraffin wax, vegetable black, one paint brush, one paint can and 2 sponges.

**CM2502**

**MOLAR MASS APPARATUS, CRYOSCOPIC, Beckmann's**

Freezing tube enclosed in an air jacket which fits in a cooling vessel, with stirrer and thermometer. Supplied without thermometer.

**CM2531**

**VAPOUR DENSITY APPARATUS, Victor Meyer**

Borosilicate glass, for determination of vapour density of volatile liquids. Comprises a 100 ml bulb with vapourising tube and side delivery tube. An outer jacket surrounds the vapourising tube. Without vapour density bottle.

**CM2560**

**VAPOUR DENSITY BOTTLE**

With stopper, for use with Vapour Density Apparatus.

**CM2562**

**OSTWALD VISCOMETER**

Glass U-tube with two bulbs, connected by a capillary tube 120 x 1 mm bore. Overall height 237 mm approx.

**CM2570**

**MORTAR AND PESTLE**

**MORTAR AND PESTLE**

Glass, with spout,

Diam., mm

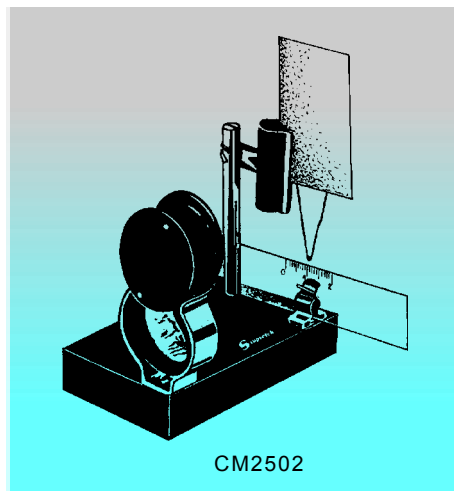
<b>CM3010/2</b>	60
<b>CM3010/4</b>	90
<b>CM3010/6</b>	115
<b>CM3010/8</b>	150

**MORTAR AND PESTLE**

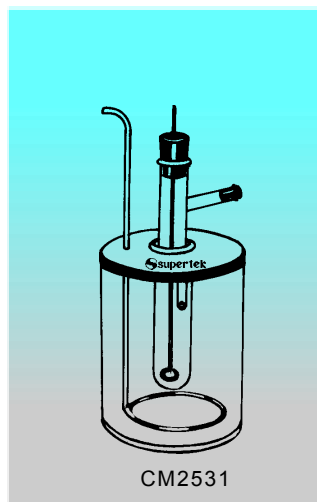
Porcelain, with spout, glazed outside, unglazed inside.

Inside Diam., mm      Capacity, ml

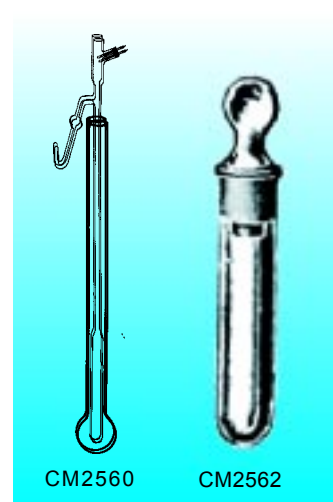
<b>CM3020/1</b>	60	60
<b>CM3020/2</b>	75	100
<b>CM3020/3</b>	85	150
<b>CM3020/4</b>	100	275
<b>CM3020/5</b>	125	550
<b>CM3020/6</b>	150	900
<b>CM3020/7</b>	175	1500
<b>CM3020/8</b>	200	2000



CM2502

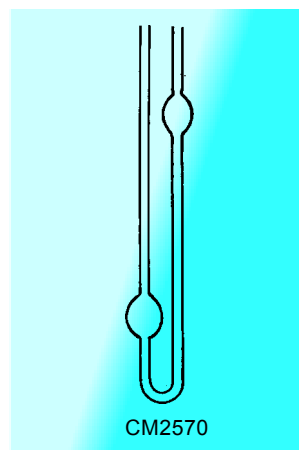


CM2531



CM2560

CM2562



CM2570



CM3010



CM3020

**ORGANIC CHEMISTRY  
LABORATORY GLASSWARE WITH  
INTERCHANGEABLE STANDARD JOINTS  
(All Borosilicate glass)**

The joints are ground to international specifications and are ideal for inter-connecting laboratory apparatus. Only a few items/sizes are given hereunder. We can, however, fabricate and supply many other items with various standard joints e.g. adaptors, receivers, condensers etc. We can also supply various sets and assemblies employing standard joints.

**AIR CONDENSER**

Borosilicate glass,

	Effective Length, mm	Socket	Cone
CO1005/1	100	10/19	10/19
CO1005/3	200	14/23	14/23

**LIEBIG CONDENSER**

Borosilicate glass,

	Effective Length, mm	Socket	Cone
CO1025/1	65	10/19	10/13
CO1025/3	165	14/23	14/23
CO1025/7	200	19/26	19/26
CO1025/8	200	24/29	24/29
CO1025/9	350	19/26	19/26

**CONDENSER, SPIRAL, GRAHAM**

Borosilicate glass,

	Effective Length, mm	Socket	Cone
CO1040/1	150	14/23	14/23
CO1040/3	200	19/26	19/26
CO1040/5	250	19/26	19/26
CO1040/7	300	19/26	19/26
CO1040/8	300	24/29	24/29



CO1040



CO1057

**CONDENSER, ALLIHN'S**

Borosilicate glass,

	Effective Length, mm	Socket	Cone
CO1057/1	200	—	19/26
CO1057/3	200	—	24/29
CO1057/5	300	19/26	19/26
CO1057/7	300	24/29	24/29

**CONDENSER, COLD FINGER**

Borosilicate glass, effective length 120 mm. Cone 14/23.

**CO1065**
**SOXHLET EXTRACTOR ASSEMBLY**

Borosilicate glass, interchangeable joints, comprising Soxhlet extractor, Allihn's condenser and flask

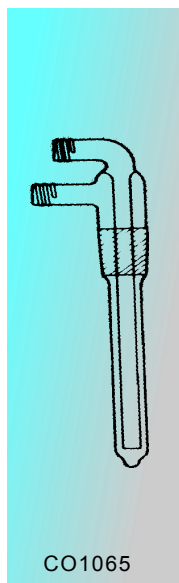
	Extractor cap., ml	Extractor socket	Flask cone ml	Flask Cap. ml	Condenser eff. length mm
CO1105/1	20	24/29	19/26	50	200
CO1105/3	40	29/32	24/29	100	200
CO1105/5	60	34/35	24/29	150	200
CO1105/7	100	40/38	24/29	250	200
CO1105/9	200	34/35	24/29	500	300



CO1005



CO1025



CO1065



CO1105

**FLASK, BOILING**

Borosilicate glass, short neck.

	Capacity, ml	Socket
<b>CO1311/1</b>	5	10/19
<b>CO1311/2</b>	25	14/23
<b>CO1311/3</b>	50	14/23
<b>CO1311/4</b>	100	14/23
<b>CO1311/5</b>	100	24/29
<b>CO1311/6</b>	150	24/29
<b>CO1311/7</b>	250	24/29

**FLASK, BOILING**

Borosilicate glass, medium neck, socket 24/29.

	Capacity, ml
<b>CO1351/1</b>	100
<b>CO1351/2</b>	250
<b>CO1351/3</b>	500
<b>CO1351/4</b>	1000
<b>CO1351/5</b>	2000

**FLASK, BOILING**

Borosilicate glass, two necks, centre socket 24/29, side socket 14/23, Capacity 1000 ml.

**CO1370**

**FLASK, BOILING**

Borosilicate glass, three necks. One centre neck and two side necks at angle.

	Capacity ml	Centre socket	Side sockets
<b>CO1379/1</b>	250	24/29	14/23
<b>CO1379/3</b>	250	24/29	19/26
<b>CO1379/5</b>	500	24/29	14/23



CO1311



CO1351



CO1512



CO1515



CO1370



CO1379



CO1520



CO1525

**FLASK, CONICAL**

Borosilicate glass, Capacity, ml Socket

<b>CO1512/1</b>	50	14/23
<b>CO1512/2</b>	100	14/23
<b>CO1512/3</b>	100	19/26
<b>CO1512/4</b>	250	19/26
<b>CO1512/5</b>	500	24/29
<b>CO1512/6</b>	1000	24/29

**FLASK, FILTER, BUCHNER**

Borosilicate glass, conical.

	Capacity, ml	Socket
<b>CO1515/1</b>	100	19/26
<b>CO1515/2</b>	100	24/29
<b>CO1515/3</b>	250	24/29
<b>CO1515/4</b>	250	29/32
<b>CO1515/5</b>	500	24/29
<b>CO1515/6</b>	500	29/32

**FLASK, PEAR SHAPE**

Borosilicate glass, single neck.

	Capacity, ml	socket
<b>CO1520/1</b>	25	10/19
<b>CO1520/3</b>	50	14/23
<b>CO1520/5</b>	100	14/23

**FLASK, PEAR SHAPE, TWO NECK**

Borosilicate glass, with one centre neck and one angled side neck, centre socket 14/23, side socket 14/23, Capacity 50 ml.

**CO1525**



CO1530



CO1550



CO1570



CO1590



CO1601



CO1613



CO1621



CO1638



CO1653



CO1666

**FLASK, PEAR SHAPE, THREE NECK**

Borosilicate glass, with one centre neck, one angled side neck and one parallel side neck.

	Capacity ml	Centre socket	Side sockets
CO1530/1	25	10/19	10/19
CO1530/3	50	14/23	14/23

**FUNNEL, SEPARATING**

Borosilicate glass, cylindrical type. with socket 19/26.

	Capacity, ml
CO1550/1	50
CO1550/3	100

**AIR LEAK TUBE**

Borosilicate glass, Cone

CO1570/1	10/19
CO1570/3	14/23

**CONE, WITH BENT STEM**

Borosilicate glass, Cone

CO1590/1	14/23
CO1590/3	19/26

**STOPPER**

Borosilicate glass, Cone

CO1601/1	10/19
CO1601/3	14/23
CO1601/5	19/26
CO1601/7	24/29

**REDUCTION ADAPTOR**

Borosilicate glass, Socket Cone

CO1613/1	14/23	19/26
CO1613/2	14/23	24/29
CO1613/3	14/23	29/32
CO1613/4	19/26	24/29
CO1613/5	19/26	34/35
CO1613/6	19/26	40/38

**EXPANSION ADAPTOR**

Borosilicate glass, Socket Cone

CO1621/1	19/26	14/23
CO1621/2	24/29	14/23
CO1621/3	24/29	19/26

**ADAPTOR**

Borosilicate glass, T-piece connection, socket 14/23, cone 14/23.

CO1638
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**PLAIN BEND, LONG**

Borosilicate glass, socket 14/23.

CO1653
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**PLAIN BEND**

Borosilicate glass, Socket Cone

CO1666/1	19/26	19/26
CO1666/2	24/29	19/26
CO1666/3	24/29	24/29
CO1666/4	34/35	34/35

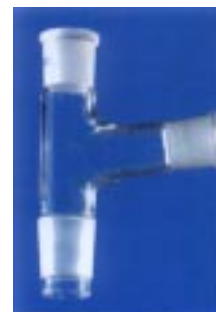
**BEND WITH VENT**

Borosilicate glass, receiver adaptor. socket 10/19, cone 10/19.

**CO1668**



CO1668



CO1678

**STILLHEAD, PLAIN**

Borosilicate glass, with thermometer socket and matching cones for flask and condenser.

	Cone to fit flask	Cone to fit condenser	Thermometer pocket
<b>CO1678/1</b>	10/19	10/19	10/19
<b>CO1678/2</b>	14/23	14/23	14/23
<b>CO1678/3</b>	19/26	19/26	14/23

**THERMOMETER POCKET**

Borosilicate glass, cone 14/23. Closed end type.

**CO1695**



CO1695



CO1715

**DRYING TUBE**

Borosilicate glass, bent type. Cone 14/23

**CO1715**

**ORGANIC CHEMISTRY SETS**

**A RANGE OF COMPATIBLE SETS FOR LEARNING DISTILLATION, REFLUX DISTILLATION, DISTILLATION WITH ADDITION, STEAM DISTILLATION ETC.**

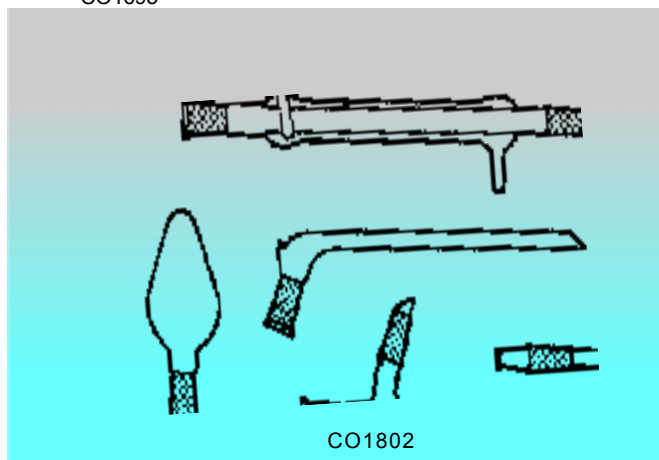
For preparation on 30 gm scale, all cones and sockets being of 14/23 size

**STUDENT ONE-JOINT SET, SET A**

Basic set, comprising five items

	Socket	Cone
Liebig condenser, effective length 150mm	14/23	14/23
Receiver Adaptor	14/23	
Pear shaped flask 50 ml	14/23	
Stillhead, with all three		14/23
Thermometer Pocket, closed end,		14/23

**CO1802**



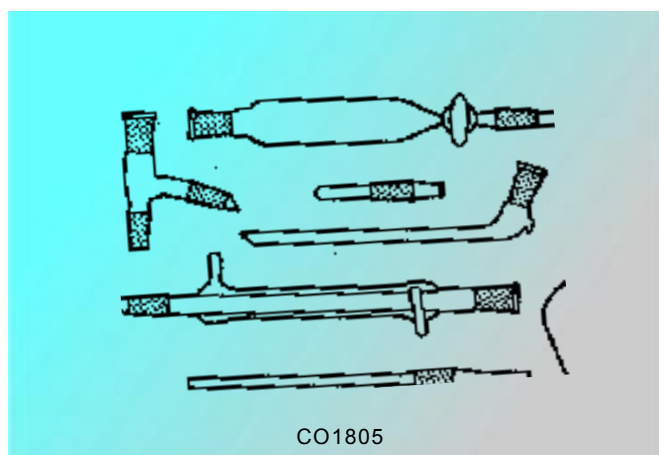
CO1802

**STUDENT ONE JOINT SET, SET B**

Comprising eight items

	Socket	Cone
Liebig condenser effective length 150 mm	14/23	14/23
Air leak steam inlet tube		14/23
Receiver adaptor, plain bend	14/23	
Cylindrical funnel, 50 ml	14/23	14/23
Pear shaped flask, cap 50 ml	14/23	
Stopper		14/23
Stillhead, all joints	14/23	14/23
Thermometer pocket, closed end		14/23

**CO1805**



CO1805

**STUDENT ONE JOINT, SET C**

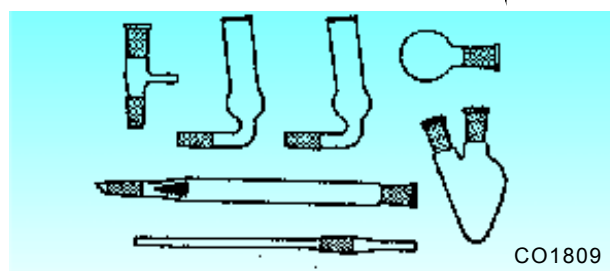
14/23 joints, comprising seven items to convert set B to complete set (in two boxes)

	Socket	Cone
Air leak steam inlet tube		14/23
Pear shaped flask, 50 ml, with angled side neck		2 x 14/23
Adaptor with T connection	14/23	14/23
2 Drying tubes bent		14/23
Air condenser effective length 250 mm	14/23	14/23
Round bottom flask 25 ml	14/23	

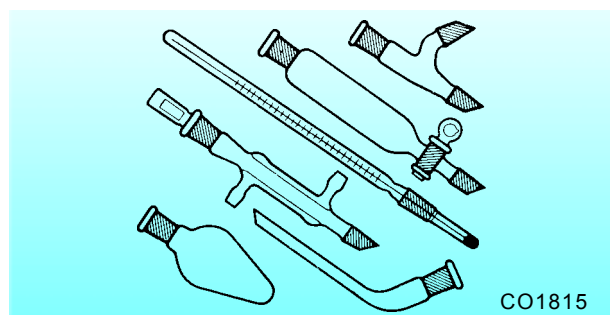
**CO1809****STUDENT'S ASSEMBLY, SET OF 7,**

10/19 Joint, for preparations on the 15 gm scale for construction of numerous pieces of apparatus (equivalent to Quickfit 17BU set), comprising

	socket	cone
Liebig condenser, effective length 65 m	10/19	10/19
Tap Funnel 20 ml	10/19	10/19
Flask, pear shaped 25 ml	10/19	–
Thermometer, 0-250°C	10/19	
Receiver adaptor	10/19	–
Stopper	–	10/19
Stillhead	10/19	10/19

**CO1815**

CO1809



CO1815

**STUDENT'S ASSEMBLY, ADVANCED, SET OF 9**

14/23 Joints, For preparative chemistry upto an advanced level. (equivalent to Quickfit 27BU)

**Contents**

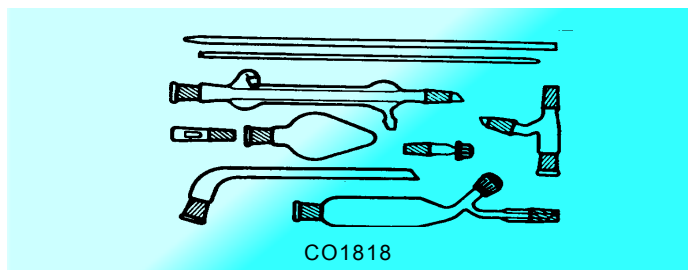
	socket	cone
Pear shaped flask 50 cm	14/23	
Stillhead	14/23	2x14/23
Liebig Condenser, eff. length 150 cm	14/23	14/23
Screw cap adaptor	14/23	
Receiver adaptor	14/23	
Thermometer 0-360°C x 2°C	14/23	
Dropping funnel, 50 ml	14/23	14/23
Stopper		14/23

**CO1818****MULTI-JOINT, SET OF 16**

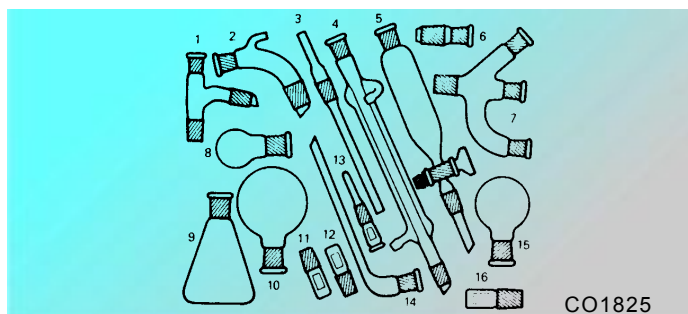
For preparations on the 150 gm scale

**Contents**

	socket	cone
Liebig Condenser, eff. length, 200 ml	19/26	19/26
Air leak tube	19/26	
Receiver adaptor	19/26	24/29
Cylindrical funnel, 100 ml	19/26	19/26
Flask, R.B., 50 ml	24/29	
Flask, R.B., 100 ml	24/29	
Flask, R.B., 250 ml	24/29	
Reduction adaptor	19/26	24/29
Multiple adaptor	19/26	24/29
Receiver adaptor bent	19/26	
Stillhead	14/23	19/26
Flask, Erlenmeyer, 250 ml	24/29	
Thermometer pocket	14/23	
2 No. Stoppers	19/26	
1 No. Stopper	24/29	

**CO1825**

CO1818



CO1825

**OVENS**

**UNIVERSAL OVEN**

For heating upto 250°C. Inside chamber made of thick aluminium or stainless steel sheet. Outside made of mild steel, the gap between the walls being filled with glass wool. Heating elements are placed in ribs at the bottom and sides of chamber for uniform heating. Thermostatic control is provided which gives a temperature fluctuation of not more than ±1°C read by an L-shape thermometer. The insulated door closes firmly against heat resistant gasket and is provided with a handle with spring latch. Front panel has ON/OFF switch, 2 neon indicators and dial for temperature setting. Unit provided with 1.5 m of 3-core cable. Works on 220-240 V A.C.

Size, inside chamber (mm)	Number of Shelves	Aluminium	Stainless steel
300 x 300 x 300	2	<b>CO5010/1</b>	<b>CO5020/1</b>
350 x 350 x 350	2	<b>CO5010/2</b>	<b>CO5020/2</b>
450 x 450 x 450	2	<b>CO5010/3</b>	<b>CO5020/3</b>
450 x 600 x 450	2	<b>CO5010/4</b>	<b>CO5020/4</b>
600 x 600 x 600	2	<b>CO5010/5</b>	<b>CO5020/5</b>
600 x 900 x 450	3	<b>CO5010/6</b>	<b>CO5020/6</b>
600 x 900 x 600	3	<b>CO5010/7</b>	<b>CO5020/7</b>

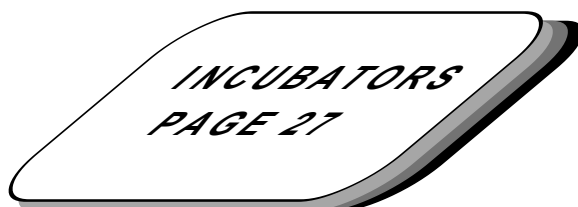
**OPTIONAL ACCESSORIES**

Factory fitted, to be ordered alongwith the oven.

<b>CO5025/1</b>	Timer
<b>CO5025/3</b>	Air Circulating fan
<b>CO5025/5</b>	Digital temperature indicator
<b>CO2520/7</b>	Digital temperature controller-cum-indicator



CO5010



**pH METER, DIGITAL**

For laboratory work, 0 to 14 pH with resolution of 0.01 pH, accuracy ±0.1 pH, 0 to 2000 mV with resolution of 1 mV ±0.2% reading on 3½ digit LED display. Temperature compensation 0 to 100°C standardisation and slope adjustment preset control for re-calibration, 230 V ±10%, 50 Hz.

**CP1002**

**SPARE ELECTRODE FOR PH METER**

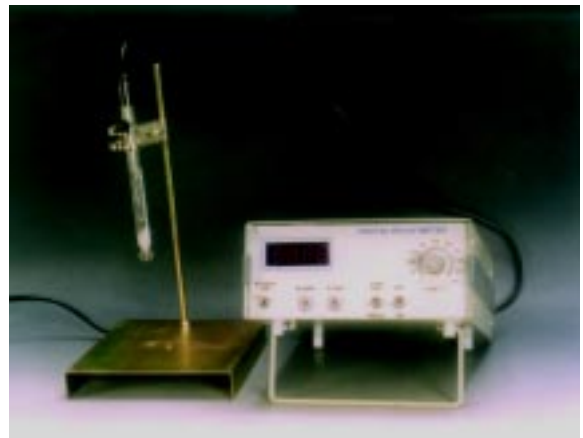
**CP1003**

**PIPETTES**

**PIPETTE**

Routine quality, bulb form, with one mark capacity, ml

<b>CP1010/1</b>	1
<b>CP1010/2</b>	2
<b>CP1010/3</b>	5
<b>CP1010/4</b>	10
<b>CP1010/5</b>	20
<b>CP1010/6</b>	25
<b>CP1010/7</b>	50
<b>CP1010/8</b>	100



CP1002



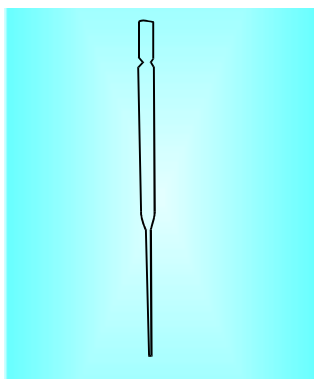
CP1010



CP1026



CP1035



CP1042



CP1052



CP1055



CP1057



CP1060



CP1121



CP1131



CP1150

**PIPETTE**

Class 'B' accuracy, bulb form, with one mark on upper stem.

Capacity, ml	Neutral glass	Borosilicate glass
1	CP1016/1	CP1026/1
2	CP1016/2	CP1026/2
5	CP1016/3	CP1026/3
10	CP1016/4	CP1026/4
20	CP1016/5	CP1026/5
25	CP1016/6	CP1026/6
50	CP1016/7	CP1026/7
100	CP1016/8	CP1026/8

**PIPETTE**

Borosilicate glass, serological, graduated to tip to deliver total capacity when last drop is blown out, colour coded.

Capacity ml	Sub.division. ml	Neutral glass	Borosilicate glass
1	0.01	CP1030/1	CP1035/1
2	0.02	CP1030/3	CP1035/3
5	0.05	CP1030/5	CP1035/5
10	0.1	CP1030/7	CP1035/7
25	0.2	CP1030/9	CP1035/9

**PIPETTE, PASTEUR**

Soda glass, disposable, without teat.

CP1042

**PIPETTE, DROPPING**

Pipette with rubber teat, length approx 40 mm.

CP1052

**TEATS FOR PIPETTES**

Rubber, with rolled edges, for use with dropping pipettes, pack of 100

CP1055

**PIPETTE BULB**

Made of rubber, with thick walled neck

CP1057

**PIPETTE FILLER**

Comprises a rubber bulb and three pinch valves, for use with pipettes upto 50 ml.

CP1060

**PIPETTE STAND**

To hold 12 pipettes horizontally.

CP1121	Wood
CP1124	Plastic

**PIPETTE STAND**

To hold 24 pipettes vertically.

CP1128	Wood
CP1131	Plastic

**PIPETTE STERILIZING BOX**

Accommodates pipettes vertically. Stainless steel, tall cylindrical can with lid, size 350 x 50 mm (ht. x diam).

CP1150