

## GENERAL EQUIPMENT



# 5.3

## GENERAL LABORATORY APPARATUS

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C 384/01

## ELECTRIC WATER BATHS: AMBIENT TO 100°C

Max. temperature 100°C. Thermostatic control.  
Made of stainless steel with double-wall and cover.  
Electric heating with immersion heaters.

### 8 LITRE CAPACITY

C 384/01

POWER SUPPLY: 220 V, 50 Hz, single phase, 300 W  
INTERNAL DIMENSIONS: 300 x 150 x 190 (h) mm  
OVERALL DIMENSIONS: 440 x 220 x 290 (h) mm  
WEIGHT: 7 kg

### 13 LITRE CAPACITY

B 539/E

POWER SUPPLY: 220 V, 50 Hz, single phase, 500 W  
INTERNAL DIMENSIONS: 280 x 280 x 170 (h) mm  
OVERALL DIMENSIONS: 430 x 340 x 270 (h) mm  
WEIGHT: 9 kg



B 539

B 539/E

### 20 LITRE CAPACITY

B 539

POWER SUPPLY: 220 V, 50 Hz, single phase, 800 W  
INTERNAL DIMENSIONS: 280 x 280 x 260 (h) mm  
OVERALL DIMENSIONS: 430 x 340 x 370 (h) mm  
WEIGHT: 10 kg

### 40 LITRE CAPACITY

B 539/P

Fitted with digital thermostatic and motorized stirrer.  
Temperature: from ambient to 100°C ± 1°C



B 539/P

POWER SUPPLY: 220 V, 50 Hz, single phase, 1200 W  
INTERNAL DIMENSIONS: 550 x 360 x 200 (h) mm  
OVERALL DIMENSIONS: 830 x 440 x 500 (h) mm  
WEIGHT: 30 kg

### 40 LITRE CAPACITY - REFRIGERATED

B 539/S

Fitted with digital thermostat and motorized stirrer.  
Refrigeration copper coil which is located on the bottom of the tank.  
Temperature: from ambient to 100°C ± 1°C

POWER SUPPLY: 220 V, 50 Hz, single phase, 1200 W  
INTERNAL DIMENSIONS: 550 x 360 x 200 (h) mm  
OVERALL DIMENSIONS: 830 x 440 x 500 (h) mm  
WEIGHT: 30 kg

### 40 LITRE CAPACITY - REFRIGERATOR UNIT

B 539/F

Equipped with a 0.25 hp refrigerator unit located under the tank.  
Condenser, ventilating fan and switch for the refrigerator.  
Temperature: from 5° to 100°C ± 1°C

POWER SUPPLY: 220 V, 50 Hz, single phase, 1200 W  
INTERNAL DIMENSIONS: 550 x 360 x 200 (h) mm  
OVERALL DIMENSIONS: 830 x 440 x 850 (h) mm  
WEIGHT: 40 kg



B 539/S

## LARGE CAPACITY TANKS

### **CURING TANK 20°C - 200 LITRE CAPACITY C 387/01**

200 litre tank made of stainless steel, supplied complete with lid. Temperature settings are made on a digital selector, whilst actual temperature is displayed on a 3 digit LED display. The electronic PD circuit ensures an accuracy of temperature ( $20 \pm 2^\circ\text{C}$ ) with a high precision probe. No cooling device, should be used in ambient temperatus lower than  $20^\circ\text{C}$ .

**POWER:** 220 V, 50 Hz, single phase, 1000 W  
**TANK DIMENSIONS:** 900 x 600 x 300 (h) mm  
**OVERALL DIMENSIONS:** 1070 x 670 x 470 (h) mm  
**WEIGHT:** 49 kg

### **CURING TANK 100°C - 200 LITRE CAPACITY C 388/01**

Same as C 387/01. Manufactured in stainless steel. Double-wall with cover. Electrical immersion-type heating element. Digital thermostat and controls. Maximum temperature from ambient to  $100^\circ\text{C}$  ( $\pm 2^\circ\text{C}$ ).

**POWER:** 220 V, 50 Hz, single phase, 2400 W  
**INNER DIMENSIONS:** 900 x 600 x 300 (h) mm  
**OUTER DIMENSIONS:** 1070 x 670 x 470 (h) mm  
**WEIGHT:** 55 kg



C 387/01



C 388/01

## ELECTRIC DISTILLER

Internal and external surfaces in stainless steel. Wide surface condenser with outlet tube for the gas still contained in the water after pre-heating in the condenser skirt or in the over-flow unit. Telescopic assembly enables the entire unit to be disassembled into three parts for cleaning purposes.

Heating elements are in stainless steel and are armoured. The apparatus makes use of heat recovery and the cooling water is sent to the boiler which is fitted with an automatic constant level device (cut off) that, in addition to maintaining the correct level, disconnects the electricity supply if the level falls too low and reconnects it when the correct level is restored.

### **DISTILLER FOR 5 LITRES WATER/HOUR D 796/5**

**POWER:** 220 V, 50 Hz, single phase, 3700 W  
**DIMENSIONS:** 490 x 225 x 715 (h) mm  
**WEIGHT:** 13 kg

### **DISTILLER FOR 10 LITRES WATER/HOUR D 796/10**

**POWER:** 220 V, 50 Hz, single phase, 7000 W  
**DIMENSIONS:** 550 x 320 x 775 (h) mm  
**WEIGHT:** 18 kg

### **DISTILLER FOR 10 LITRES WATER/HOUR D 796/9**

**POWER:** 380 V, 50 Hz, 3 phase, 7000 W  
**DIMENSIONS:** 550 x 320 x 775 (h) mm  
**WEIGHT:** 18 kg



D 796/5



D 842

**MICROPROCESSOR MULTIUSE pH METER D 842**

It measures the pH, the temperature and the redox potential (ORP) in mV. Large LCD display.

Calibration on one, two or three points (13 buffers).

The Max, Min and Avg function calculate the maximum, minimum or average values. Other functions include: the relative measurement REL, the Auto-HOLD function, and the automatic turning off function that can also be disabled.

Operating temperature: -5...50°C

Warehouse temperature: -25...65°C

Relative humidity: 0...90% RH without condensation

Protection degree: IP67

Power: 1.5V type AA batteries (4 pcs)

Measurement of pH: 0 ÷ 14

Resolution 0.01 or 0.001pH selectable from menu

Accuracy ±0.001pH ±1 digit

Measurement of mV: -1999.9...+1.999.9mV

Resolution: 0.1 mV

Accuracy: ±0.1 mV

Measurement of temperature: Pt100 -200...+650° C

Resolution: 0.1° C

Accuracy: ±0.1° C ±1 digit

**DIMENSIONS:** 185 x 90 x 40 mm

**WEIGHT:** 470 g (complete with batteries)

The carrying case contains: instrument, 2 buffer solutions, temperature probe (for immersion) and one electrode.

**ELECTRONIC pH METER****D 843**

Simple version; cheaper than D 842.

It measures the pH, the temperature and the redox potential (ORP) in mV.

Calibration on one, two or three points.

Large LCD display.

The Max, Min and Avg function calculate the maximum, minimum or average values. Other functions include: the relative measurement REL, the Auto-HOLD function, and the automatic turning off that can also be disabled.

Operating temperature: -5...50°C

Warehouse temperature: -25...65°C

Relative humidity: 0...90% RH without condensation

Protection degree: IP67

Power: 1.5V type AA batteries (3 pcs)

Measurement of pH: -2.000...+19.999pH

Resolution 0.01

Accuracy ±0.01pH ±1 digit

Measurement of mV: -1999.9...+1.999.9mV

Resolution: 0.1 mV

Accuracy: ±0.1 mV

Measurement of temperature: Pt100 -200...+650° C

Resolution: 0.1° C

Accuracy: ±0.1° C ±1 digit

**DIMENSIONS:** 140 x 88 x 38 mm

**WEIGHT:** 160 g (complete with batteries)

The carrying case contains: instrument, 2 buffer solutions, temperature probe (for immersion) and one electrode.



D 844

**POCKET pH METER****D 844**

0.00 to 14.00 pH range. 0.01 pH resolution.

## ELECTRIC HEATERS FOR FLASKS

In coated aluminium steel sheet.  
Upper ring made of stainless steel.  
Built-in controls: thermostat, switch and warning light.  
Electric voltage switches; complete with cable and plug.

### FOR FLASKS UP TO 250 CC D 176

POWER SUPPLY: 220 V, 50 Hz, single phase, 150 W  
DIMENSIONS: diametro 160 x 185 mm  
WEIGHT: 1 kg

### FOR FLASKS UP TO 500 CC D 176/1

POWER SUPPLY: 220 V, 50 Hz, single phase, 250 W  
DIMENSIONS: diametro 180 x 215 mm  
WEIGHT: 1 kg

### FOR FLASKS UP TO 1000 CC D 176/2

POWER SUPPLY: 220 V, 50 Hz, single phase, 400 W  
DIMENSIONS: diametro 220 x 235 mm  
WEIGHT: 1 kg

### FOR FLASKS UP TO 2000 CC D 176/3

POWER SUPPLY: 220 V, 50 Hz, single phase, 520 W  
DIMENSIONS: diametro 250 x 245 mm  
WEIGHT: 1 kg

### FOR FLASKS UP TO 6000 CC D 176/5

POWER: 220 V, 50 Hz, single phase, 1050 W  
DIMENSIONS: diametro 340 x 305 mm  
WEIGHT: 1.5 kg

V 786	METAL BASE 185 x 260 mm
V 787	CHROMIUM PLATED ROD dia. 12 x 650 mm
V 788	UNIVERSAL PRONG WITHOUT CLAMP Maximum opening capacity 80 mm
V 788/1	CLAMP WITH PRONG Maximum opening capacity 50 mm
V 789	DOUBLE FIX CLAMP For rods up to 16 mm dia.

### ELECTROMAGNETIC STIRRER (without heating element) D 855

Variable speed for titrations and cold stirrings.  
Electronic speed regulation up to 1200 r.p.m. which ensures constant revolutions at any speed.  
Stirring capacity: 8 litres.

POWER SUPPLY: 220 V, 50 Hz, single phase, 40 W  
DIMENSIONS: 170 x 190 x 90 mm.  
WEIGHT: 1.2 kg.

### ELECTROMAGNETIC STIRRER (with heating element) D 855/H

Same features as the D 855 plus electric heating element.  
Electronic speed regulation up to 1200 rpm and ventilating fan; 155 mm diameter plate with electronic thermoregulator (up to 370°C).  
Stirring capacity: 15 litres.

POWER SUPPLY: 220 V, 50 Hz, 1ph, 780 W.  
DIMENSIONS: 165 x 280 x 115 mm.  
WEIGHT: 2.3 kg.

D 855/A	SUPPORTING BAR (23 cm high)
D 855/M	MAGNETIC BAR



D 176/2



V 786 with V 787



D 855/H



## BOTTLE ROLLER-JAR MILL

Suitable for mixing of liquids and, using the special jar, for grinding small specimens. Metal frame.

Rollers covered in rubber (second roller can be placed in various positions so as to accept different size bottles).

Model with 0.5 hp motor

**DIMENSIONS:** 640 x 350 x 140 (h) mm.

**WEIGHT:** 20 kg.

**D 768/2** Drive roller speed 73 rpm  
Power supply: 220 V, 50 Hz, single phase

**D 768/S** Variable roller speed: 0-95 rpm  
Power supply: 220 V, 50 Hz, single phase



D 812

## GRADUATED GLASS BOTTLES

**V 760** 250 ml bottle with lid

**V 761** 500 ml bottle with lid

**V 759** 1000 ml bottle with lid

## JARS IN PORCELAIN COMPLETE WITH BALLS CHARGE

	Jar	Balls (ALUBIT)
<b>D 813/1</b>	1.5 litres	Ø 25 mm - 1.5 kg
<b>D 813/2</b>	3 litres	Ø 25 e 30 mm - 3 kg
<b>D 813/3</b>	5 litres	Ø 30 e 35 mm - 5 kg
<b>D 813/4</b>	10 litres	Ø 30 e 35 mm - 10 kg
<b>D 813/5</b>	15 litres	Ø 30 e 35 mm - 15 kg

**D 813/A** Alubit balls for jars (1 kg)

## RAPID JAR MILL

**D 812**

Mounted on bearing table, placed in a sound-proof case, protected by safety micro-switch.

Low voltage electric control on the front panel.

Timer with memory (0-120 min.). Safety switch and pilot lights.

1500 cc capacity rotating group.

Complete with 1500 cc porcelain jar (dry material 1 kg) and alumina balls dia. 18 mm (1.1 kg).

**POWER SUPPLY:** 380 V, 50 Hz, three phase

**DIMENSIONS:** 760 x 660 x 1100 (h) mm.

**WEIGHT:** 90 kg

## SPARE:

**D 812/A** 1500 cc JAR

Models available on request: 300 and 1000 cc

## LABORATORY MIXER

**C 367/01**

Planetary mixer with 6.4 litre capacity; stainless steel bowl.

Motor (47 to 200 rpm) with thermal insulation. Electronic speed variator.

Synchronised rotation and revolution movements of the beater enable optimum mixes to be obtained.

At the lowest speed the beater performs 47 rpm.

Safety microswitch stops the motor when the cover is raised.

**POWER SUPPLY:** 220 V, 50 Hz, single phase, 650 W

**DIMENSIONS:** 500 x 300 x 400 (h) mm.

**WEIGHT:** 11 kg.



**DIGITAL THERMOMETER: -200 +650°C DB 840**

Resolution 0.1° C. Display LCD.

Accuracy  $\pm 0.05^\circ$  C.

Complete with immersion probe -50 + 400°C.

**ACCESSORIES AND SPARE PARTS:**

<b>DB 840/1</b>	Immersion probe, dia. 3 x 230 (h) mm. (temperature -50 + 400°C)
<b>DB 840/2</b>	Air probe, dia. 4 x 230 (h) mm. (temperature -50 + 250°C)
<b>DB 840/3</b>	Contact probe, dia. 5 x 230 (h) mm. (temperature -50 + 400°C)



DB 840

**DIGITAL THERMOMETER: -50 +150°C DB 840/E**

Resolution: 0.1°C.

Supplied with probe: dia. 3 x 100 mm. Precision: 0.4°C. Working environment temperature: -10 +50°C.

9 V battery: autonomy for 700 hours use.

DIMENSIONS: 83 x 180 x 40 (h) mm.

WEIGHT: 226 g.



DB 840/E

**DIGITAL THERMOMETER (°C/°F): -60 +1200°C and -76 +2000°F DB 829**

Large LCD display. 0.1°C resolution.

Supplied without probes.

Power: 3 x 1.5 V battery.

Automatic change of scale (°C/°F).

<b>DB 830/1</b>	Penetration probe: $\varnothing$ 4.5x150 mm long Temperature: AMBIENT to 400°C
<b>DB 830/2</b>	Immersion probe: $\varnothing$ 3x180 mm long Temperature: AMBIENT to 800°C
<b>DB 830/3</b>	Air probe: $\varnothing$ 4x180 mm long Temperature: AMBIENT to 400°C
<b>DB 830/4</b>	Surface probe: $\varnothing$ 5x180 mm long Temperature: AMBIENT to 500°C
<b>DB 830/5</b>	Immersion probe: $\varnothing$ 6x700 mm long Temperature: AMBIENT to 1200°C

**DB 831** 8-WAY CONNECTOR FOR THERMOCOUPLE K type PROBES

Complete with cable and plug for connection to the thermometer. It allows the connection of thermocouple probes (cable type) and the reading of each probe (alternatively) on the display.

**THERMOCOUPLE K TYPE CABLE PROBE max. temperature 400°C**

**DB 831/5** 5 m cable. Complete with connection plug



DB 829



DB 837

**ELECTRONIC POCKET THERMOMETER DB 837**

Stainless steel probe (120 mm). Range - 50 + 300° C.

Div. 0,1°. Max-min memory.

DIMENSIONS: 152 x 38 mm.

**POCKET DIGITAL THERMOMETER DB 842**

Ideal also for liquid and air. Scale: -50 +150°C (0.1°C).

Accuracy:  $\pm 0.5^\circ$  C. Probe: stainless steel, dia. 3 x 160 mm.

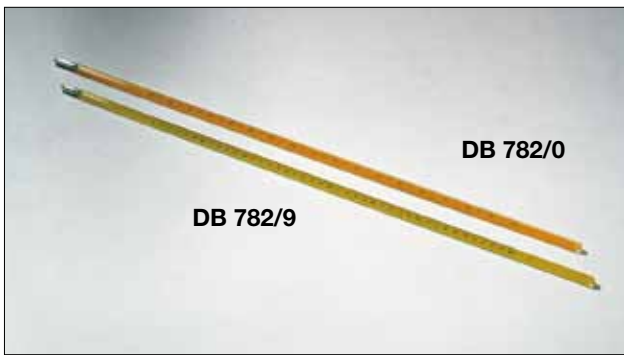
Battery: 1.5 V - 1 m cable.



DB 842



DB 541/1



DB 782/9

DB 782/0



DB 237 DB 237/B



DB 833

## ARMoured GLASS THERMOMETERS

The thermometers are contained in a brass or stainless steel protective casing.

### 130 mm long stem (POCKET type)

DB 541/1	Glass thermometer (0 to +100°C)
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### 250 mm long stem

DB 573/2	Glass thermometer (0 to +250°C)
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DB 573/1	Glass thermometer (-10 to +100°C)
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## GLASS THERMOMETERS 1°C div.

General purpose. Graduated for partial immersion.

DB 782/1	Mercury (-30° to +50°C)
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DB 782/3	Mercury (-30° to +110°C)
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DB 782/5	Mercury (-10° to +150°C)
----------	--------------------------

DB 782/7	Mercury (-10° to +200°C)
----------	--------------------------

DB 782/9	Mercury (-10° to +250°C)
----------	--------------------------

DB 782/0	Mercury (-10° to +360°C)
----------	--------------------------

DB 782/4	Alcohol (-10° to +110°C)
----------	--------------------------

DB 782/2	Alcohol (-30° to +50°C)
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## BIMETALLIC THERMOMETERS

Code	Temperature	Dial Ø	Stem
DB 237	0 + 60°C	60 mm	200 mm
DB 237/2	0 + 120°C	60 mm	200 mm
DB 237/1	0 + 200°C	60 mm	200 mm
DB 237/3	0 + 250°C	60 mm	200 mm
DB 237/A	0 + 80°C	100 mm	900 mm
DB 237/B	0 + 200°C	100 mm	900 mm
DB 532/B	0 + 500°C	60 mm	200 mm

## INFRA-RED THERMOMETER

DB 833

Range - 33 + 500° C. Accuracy  $\pm 2^\circ$  C.

DIMENSIONS: 200 x 100 x 50 mm.

WEIGHT: 600 gr.

## STOPWATCHES AND TIMING DEVICES

DB 501/D	DIGITAL STOP WATCH (0.01 second) 59 minutes, 59 seconds
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DB 501	STOP WATCH (0.1 second) 15 minutes, 30 seconds
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DB 501/A	STOP WATCH (0.2 second) 30 minutes, 60 seconds
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DB 501/S	TIMING DEVICE 0 to 60 minutes, 1 min. div.
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DB 501/SD	DIGITAL TIMING DEVICE 0-19 hours; 0-59 min.
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## PRECISION GLASS THERMOMETERS

Code	Range °C	Graduation °C	Immersion	ASTM Reference
B 531/T	from 23 to 27	0.1	Total	-
B 540/2	from 0 to 44	0.2	65 mm	-
B 552/T	from -38 to +30	0.5	250 mm	-
B 550/7	from -2 to 300	1	Total	7C
B 548/T	from -2 to 400	1	Total	8C
B 522/C	from -5 to 110	0.5	57 mm	9C
B 522/D	from 90 to 370	2	57 mm	10C
B 526/1	from -6 to 400	2.0	Total	11C
B 538/A	from 150 to 175	0.5	Total	13C
B 527/T - B 530/A	from -2 to 80	0.2	Total	15C
B 530/B	from 30 to 200	0.5	Total	16C
B 531/17	from 19 to 27	0.1	Total	17C
B 528/18	from 34 to 42	0.1	Total	18C
B 528/19	from 49 to 57	0.1	Total	19C
B 528/20	from 57 to 65	0.1	Total	20C
B 528/21	from 79 to 87	0.1	Total	21C
B 529/23	from 18 to 28	0.2	90 mm	23C
B 529/24	from 33 to 54	0.2	90 mm	24C
B 529/25	from 95 to 105	0.2	90 mm	25C
B 526/33	from -38 to 42	0.2	50 mm	33C
C 361/T	from -10 to 50	1	-	-

### **HYGRO-THERMOGRAPH DAILY/MONTHLY ROTATION DB 900/S**

For temperature and relative humidity recording.

The sensor is made up of a Bourdon type of bimetal which guarantees maximum stability in time and has accuracy rate of  $\pm 0.5\%$ .

Quartz watch movement.

The hair hygrometer is made up of carefully selected and treated strands of hair in order to guarantee an accuracy rate of  $\pm 3\%$  of relative humidity. Both readings are separately recorded by two felt-tipped pens.

All materials used for the making of the instrument are specially chosen and treated to prevent oxidation.

RANGES: Relative humidity: 0 - 100%

Temperature reading: - 15°C + 65°C

The instrument is equipped with two spare felt-tipped pens; the charts are not supplied and have to be ordered.

POWER SUPPLY: 1.5 V battery

DIMENSIONS: 140 x 280 x 280 mm.

WEIGHT: 2.5 kg.



**DB 900/S**

**DB 900/S1** Set of 55 charts

**DB 900/P** Set of 10 felt-tipped pens

## 5.3.2 THERMOMETERS AND METEOROLOGY



DB 503

DB 835

### TECNOTEST

#### **HYGROMETER (for wall mounting) DB 503**

Direct reading. Relative humidity from 0 to 100% at temperatures from -35 to + 65°C. Dial diameter 10 cm.

Accuracy:  $\pm 3\%$  (50 - 100 % humidity)  
 $\pm 5\%$  (0 - 50% humidity)

**DIMENSIONS:** 110 diameter x 20 mm.

**WEIGHT:** 100 g

#### **THERMO-HYGROMETER DB 503/1**

Similar to DB 503 but with temperature reading from 0 - 40°C. Dial diameter 85 mm.

#### **MINIMUM-MAXIMUM THERMOMETER DB 835**

For air readings. Temperature -30 to +50°C. Indicates the current temperature as well as the highest and lowest temperatures since the last zero setting of the index.

**DIMENSIONS:** 200 x 70 x 10 mm.

**WEIGHT:** 200 g.

#### **RAIN GAUGE (Hellman type) DB 860**

For measuring up to 10 mm of rainfall. Comprising upper and lower parts, a support and a 200 ml graduated glass cylinder, measuring range 0 - 10 mm (0.1 mm divisions).

**DIMENSIONS:** diameter 120 x 255 mm.

**WEIGHT:** 1.25 kg.

#### **PSYCHROMETER DB 503/P**

For air readings. Wet and dry bulb thermometers. Special aluminium box. Range -10 to +60°C (div. 0.5°C). Supplied complete with a psychrometric table for obtaining relative humidity and the weight of water in one cubic meter of air.

**DIMENSIONS:** 200 x 100 x 20 mm.

**WEIGHT:** 250 g.

#### **SLING TYPE PSYCHROMETER DB 503/F**

Similar to DB 503/P it has to be rotated in the air. Two thermometers. Psychrometric table. Temperature - 10 + 60° C.

#### **WEATHER STATION DB 870**

Battery operated. Digital display. Thermometer, hygrometer, barometer functions.

#### **ANEMOMETER DB 867/S**

Cup anemometer for measuring the speed and intensity of wind on four scales: m/s, km/h, knots and Beaufort.

Scales: 0-35 m/s  
 0-120 km/h  
 0-66 knots  
 0-12 Beaufort

**DIMENSIONS:** 100 x 100 x 205 (h) mm.

**WEIGHT:** 0.3 kg.



DB 503/P



DB 860



DB 870



DB 503/F



DB 867/S

**DIGITAL THERMOMETER (-50 +150°C) AT 297/T**

Large LCD display. Accuracy  $\pm 0.4^{\circ}\text{C}$  (range  $-20 +120^{\circ}\text{C}$ ).  
 Temperature probe with 2 m cable.  
 Kit: paper rolls (10 pcs) + ink cartridge.  
 Printer for automatic recording (user-selectable printing intervals).  
 Batteries operated. 220 V, 12 VDC adaptor.

**ACCESSORIES AND SPARE PARTS:**

<b>AT 297/TP</b>	Temperature probe with cable
<b>AT 297/S</b>	Kit: paper rolls (10 pcs) + ink cartridge

**THERMO-HYGROMETER****(-20 +60°C 5-95% R.H.) AT 297/TU**

Large LCD display. Accuracy  $\pm 0.4^{\circ}\text{C}$  and  $\pm 2\%$  R.H..  
 N. 2 probes (temperature and R.H.) with 2 m cables.  
 Printer for automatic recording (user-selectable printing intervals).  
 Batteries operated. 220 V, 12 Vdc adaptor.

**ACCESSORIES AND SPARE PARTS:**

<b>AT 297/U1</b>	Temperature probe with cable
<b>AT 297/U2</b>	R.H. probe with cable
<b>AT 297/S</b>	Kit: paper rolls (10 pcs) + ink cartridge

**PRINTING AND LOGGING THERMO-HYGROMETER****(-20 +60°C 5-95% R.H.) - RS 232 PORT AT 297/U**

Identical to AT 297/TU model, but provided with RS 232 port for transferring data (up to 8000) to a PC.

**MULTIRANGE CONDUCTIVITY METER****WITH PROBE D 845**

For quick measurement of conductivity in soils from 0 to 199.9  $\mu\text{S}/\text{cm}$ . Accuracy:  $\pm 1\%$  full scale.

Measuring ranges	Resolution
$\mu\text{S}/\text{cm}$ : 0.0 to 199.9	0.1
$\mu\text{S}/\text{cm}$ : 0.0 to 1999	1
$\mu\text{S}/\text{cm}$ : 0.00 to 19.99	0.01
$\mu\text{S}/\text{cm}$ : 0.0 to 199.9	0.1

Temperature compensation: automatic from 0 to  $50^{\circ}\text{C}$ .  
 Complete with probe (1 m cable). Manual calibration.  
 Battery: 1x9 V / approx. 100 hours of continuous use.  
 Dimensions: 185 x 82 x 45 mm. Weight approx: 355 g.

**POCKET DIGITAL CONDUCTIVITY METER-THERMOMETER****D 845/E**

For measurements of the conductivity in soils.  
 Measuring scale: 0 - 3999  $\mu\text{S}/\text{cm}$  - Resolution 1  $\mu\text{S}/\text{cm}$  - Accuracy 1%. Feeding: battery.  
 Temperature in  $^{\circ}\text{C}$  and  $^{\circ}\text{F}$ , range 0 -  $60^{\circ}\text{C}$ , resolution  $0.1^{\circ}\text{C}$ .  
 Temperature calibration and compensation: automatic.  
 Use conditions: 0 to  $50^{\circ}\text{C}$ ; R.H. 100%.

WEIGHT: 100 g.

**DIGITAL THERMO-HYGROMETER****D 836**

Complete with combined probe (humidity 5 - 98% temperature  $-20 +80^{\circ}\text{C}$ ). 2 m cable.



AT 297/TU



D 845



D 845/E

Probe  
 Temperature sensor



DB 836



DV 850

**LABORATORY FUME EXHAUST CUPBOARD DV 850**

Built in sheet metal with work top in solid grès with upturned edges.

Highly resistant to chemicals, abrasives, shocks, fire or variations in temperature.

Cupboard with two doors in laminated, fire-retardant plastic, metal frame and wheels.

Frame above fume hood in coated laminated plastic. Counter-weighted safety shutter with frame in stainless steel and shock-proof glass.

Dual aspiration via ceiling (without aspirator).

Neon lamp, sealed electrical system with switches for aspirator, lamp and sockets.

Two UNEL 220V, 2-pin + E 16A sockets.

Steel control panel housed beneath the work top.

**DIMENSIONS:** 1265 x 800 x 2500 (h) mm

**WEIGHT:** 360 kg.

**ELECTRIC ASPIRATOR DV 850/B93**

Electric aspirator for fume exhaust cupboard DV 850.

**POWER SUPPLY:** 230 V, 50 Hz, three phase

**WORK BENCH: 2 m long DV 808/L2**

Steel sheet worktop, with four drawers, two lockers and two cupboards. Very robust construction.

**DIMENSIONS:** 2000 x 670 x 900 (h) mm.

**WEIGHT:** 100 kg.

**WORK BENCH: 2 m long DV 808/F2**

Wooden worktop (38 mm thick), exceptionally strong, covered in sheet steel. Two drawer units and two doors.

**DIMENSIONS:** 2000 x 750 x 900 (h) mm.

**WEIGHT:** 120 kg.



DV 808/F2

**LABORATORY TROLLEY** **DV 826/M**

Fitted with two fixed wheels and two swivelling wheels (80 mm diameter) in rubber. Lower vane fitted with doors and lock. Load capacity kg 40/shelf.

**DIMENSIONS:** 910 x 450 x 800 (h) mm.  
**WEIGHT:** 30 kg.



DV 826/M

**TILTING SKIP ON WHEELS** **DV 828**

Two fixed and two rotating wheels (dia. 175 mm). Load capacity: kg 1000. Volume: 450 litres.

**INTERNAL DIMENSIONS:** 900 x 270/935 x 610 (h) mm.  
**OVERALL DIMENSIONS:** 1010 x 1300 x 1025/1125 (h) mm.  
**WEIGHT:** 160 kg.



DV 828

**“JOLLY” HANDTRUCK** **DV 822**

This truck adopts three different positions for various uses in the laboratory. Maximum load 200 kg. Wheels 200 mm and 140 mm in diameter.

**DIMENSIONS:** 530 x 555 x 1250 (h) mm.  
**WEIGHT:** 23.5 kg.



DV 822

**METAL DESK** **DV 809**

Classic model. Top 1600 x 800 mm.

**FILING CABINET ON WHEELS (3 DRAWERS)** **DV 809/C****CHAIR ON WHEELS** **DV 805****STOOL** **DV 804****METAL CUPBOARD** **DV 807/1**

In cold-rolled sheet steel, stove enamelled in pearl grey colour. Sliding doors. Complete with five adjustable shelves.

**DIMENSIONS:** 1200 x 500 x 2000 (h) mm.  
**WEIGHT:** 79 kg.



DV 807/1



DV 809 - DV 809/C



DV 227/1... /7



DV 227/A.../F



DV 228/1.../3



DV 227/G.../M



DV 226/A.../D



DV 941...949



DV 226.../3

## TRAYS AND PANS

MODEL	DIMENSIONS mm	MADE OF
DV 227/1	180 x 250 x 55	aluminium
DV 227/2	220 x 300 x 60	aluminium
DV 227/3	250 x 350 x 65	aluminium
DV 227/4	280 x 400 x 80	aluminium
DV 227/5	330 x 500 x 100	aluminium
DV 227/7	430 x 650 x 100	aluminium
DV 227/8	360 x 550 x 100	aluminium
DV 227/A	dia. 220 x 50	aluminium
DV 227/B	dia. 240 x 60	aluminium
DV 227/C	dia. 260 x 65	aluminium
DV 227/D	dia. 300 x 70	aluminium
DV 227/E	dia. 340 x 70	aluminium
DV 227/F	dia. 360 x 75	aluminium
DV 228/1	180 x 250 x 70	stainless steel
DV 228/2	210 x 300 x 70	stainless steel
DV 228/3	250 x 350 x 70	stainless steel
DV 228/6	dia. 180 x 80	stainless steel
DV 228/7	dia. 240 x 110	stainless steel
DV 228/8	dia. 280 x 130	stainless steel
DV 228/9	dia. 340 x 160	stainless steel
DV 226	250 x 200 x 60	plastic
DV 226/1	320 x 260 x 70	plastic
DV 226/2	350 x 300 x 85	plastic
DV 226/3	430 x 330 x 95	plastic
DV 226/A	420 x 320 x 200	plastic
DV 226/B	600 x 370 x 290	plastic
DV 226/C	740 x 440 x 210	plastic
DV 226/D	740 x 440 x 400	plastic
DV 227/G	600 x 600 x 60	galvanised steel
DV 227/H	760 x 760 x 60	galvanised steel
DV 227/L	900 x 900 x 70	galvanised steel
DV 227/M	450 x 650 x 100	galvanised steel

## SCOOPS

Model	Dimensions mm	Characteristics	cc (ml)
DV 941	245 x 80	metal, round bottom	300
DV 942	335 x 120	metal, round bottom	1000
DV 943	420 x 160	metal, round bottom	2500
DV 944	210 x 70	metal, flat bottom	200
DV 945	310 x 110	metal, flat bottom	450
DV 946	400 x 150	metal, flat bottom	1500
DV 947	length 290	plastic, round bottom	500
DV 948	length 220	plastic, round bottom	300
DV 949	length 160	plastic, round bottom	250

## TOOLS

<b>DV 229/3</b>	Fine wire brush 60 x 30 x 270 mm
<b>DV 229/4</b>	Wire brush 185 x 70 x 50 mm
<b>DV 229/6</b>	Nylon brush 40 x 80 x 350 mm
<b>DV 229/7</b>	Bristle-Nylon brush 30 x 100 x 220 mm
<b>DV 229/8</b>	Bristle-Nylon brush 10 x 50 x 210 mm
<b>DV 229/9</b>	Bristle-Nylon brush dia. 30 x 230 mm
<b>DV 681</b>	Steel trowel with blade 70 x 130 x 3 mm
<b>DV 680</b>	Steel trowel with pointed blade 70 x 130 x 3 mm
<b>DV 676</b>	Steel trowel with rounded blade 70 x 220 x 3 mm
<b>DV 671</b>	Sampling spoon, 36 cm
<b>DV 229/1</b>	Stainless steel float 280 x 120 mm
<b>DV 229/2</b>	Plastic float 280 x 120 mm
<b>DV 904</b>	Rubber hammer
<b>DV 904/M</b>	Steel hammer
<b>DV 904/P</b>	Steel pointed rod
<b>DV 674</b>	Rock chisel 25 cm long
<b>DV 675</b>	Trimming knife, 250 x 50 mm
<b>DV 677/1</b>	Dibber tool
<b>DV 677/2</b>	Scraper
<b>DV 260/1</b>	Anti-acid and solvents gloves
<b>DV 260</b>	High temperature resistant gloves
<b>DV 260/2</b>	Suede gloves
<b>DV 260/3</b>	Rubber gloves (cotton inside)
<b>DV 260/5</b>	Heat-resistant gloves
<b>DV 960</b>	Hack saw narrow type. 20 x 270 mm
<b>DV 961</b>	Hack saw open type (12 blades, 13 cm)
<b>DV 908</b>	Rock pick pointed tip (28 cm)
<b>DV 908/Z</b>	Rock pick chisel edge
<b>DV 905</b>	Shovel, 20 x 25 x 65 cm
<b>DV 909</b>	Shovel/Pick
<b>DV 907</b>	Pick, heavy-duty
<b>DV 672</b>	Pick
<b>DV 261</b>	Steel scoop, 10 x 40 cm



DV 229/2

DV 229/1



DV 229/3 - DV 229/4 - DV 229/6



DV 229/9 - DV 229/8 - DV 229/7



DV 676-DV 680-DV 681-DV 671



DV 908/Z



DV 908



DV 260

DV 260/1

DV 260/3

DV 260/2



DV 905



DV 909



DV 961



DV 960



DV 677/2

DV 677/1

DV 904-DV 671-DV 904/P-DV 674-DV 672-DV 904/M



DV 907

DV 261



## 5.3.4 HARDWARE AND MEASURING INSTRUMENTS



DV 790/5

DV 790/AS



DV 790/0

DV 790/S



DV 737



DV 722

DV 721

DV 719

DV 670



DV 262/A



A 168



## TECNOTEST

### SAMPLE CONTAINERS TIN

DV 790/AS	Capacity 250 ml, dia. 75 x 80 mm (6 pieces)
DV 790/1	Capacity 0.5 litres, dia. 90 x 90 mm
DV 790/2	Capacity 1 litre, dia. 110 x 130 mm
DV 790/3	Capacity 2.5 litres, dia. 160 x 140 mm
DV 790/4	Capacity 5 litres, dia. 170 x 220 mm
DV 790/5	Capacity 10 litres, dia. 220 x 280 mm (approximate measurements)

### SAMPLE CONTAINERS ALUMINIUM

DV 790/0	Capacity 68 cc, dia. 50 x 35 mm
DV 790/S	Capacity 83 cc, dia. 55 x 35 mm (6 pieces)

### SEMIFLEXIBLE RULES IN STAINLESS STEEL mm/inch div.

DV 737	Rule: length 300 x 30 x 1 mm
DV 738	Rule: length 500 x 30 x 1 mm

### STRAIGHT EDGE 30 x 300 mm

DV 739

### SPATULAS IN STAINLESS STEEL

DV 719	SPATULA, blade 33 x 120 x 3 mm
DV 721	SPATULA, blade 35 x 200 x 3 mm
DV 722	SPATULA, blade 27 x 270 x 3 mm
DV 723	SPATULA, blade 35 x 350 x 3 mm
DV 670	DOUBLE-ENDED SPATULA 23 x 180 mm

### TOOL KIT

DV 700

The kit contains the most required items for general use: wrenches, screwdrivers, pliers, bushes, etc.

### WHEELBARROW - capacity 75 litres

A 168

Frame in metal tube. One rubber wheel.  
Dimensions: 1300 x 600 x 800 (h) mm. Weight: 40 kg.

### TONGS

DV 262/A	Tongs, length 210 mm
DV 262	Tongs, length 300 mm
DV 262/B	Tongs, length 500 mm

## VERNIER CALIPERS

DV 890	Vernier caliper 200 mm (1/20 mm)
DV 890/3	Vernier caliper 250 mm (1/50 mm)
DV 890/5	Vernier caliper 300 mm (1/50 mm)



DV 890

## LCD DIGITAL CALIPERS accuracy 0.01 mm

DV 892	LCD caliper, useful measurement 150 mm
DV 894	LCD caliper, useful measurement 200 mm



DV 892

## EXTERNAL MICROMETER

0-25 mm x 0.01 mm

DV 895



DV 895

## PRECISION DIAL GAUGES

### ANALOG - RAMBOLD (GERMANY)

DV 922/C	10 mm travel, 0.01 mm sensitivity
DV 922	30 mm travel, 0.01 mm sensitivity
DV 922/50	50 mm travel, 0.01 mm sensitivity
DV 922/M	5 mm travel, 0.001 mm sensitivity
DV 922/A	Rear clamping device

### ANALOG - STANDARD TYPE

T 628/E	30 mm travel, 0.01 mm sensitivity
T 628/E1	10 mm travel, 0.01 mm sensitivity
T 628/E2	50 mm travel, 0.01 mm sensitivity
DV 924	12 mm travel, 0.002 mm sensitivity

### DIGITAL - HIGH PRECISION. RS 232. BATTERY OPERATED

DV 922/D	12.5 mm travel, 0.001 mm sensitivity
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### DIGITAL - STANDARD TYPE

DV 923/12	12.5 mm travel, 0.001 mm sensitivity
DV 923/10	10 mm travel, 0.01 mm sensitivity
DV 923/30	30 mm travel, 0.01 mm sensitivity



DV 923



DV 922/D



DV 922

T 628

## MAGNETIC DIAL GAUGE HOLDER

T 630/1

Micrometric dial gauge positioning.  
Magnetic base 50 x 70 x 65 mm.  
Vertical rod dia. 14 x 200 mm.  
Horizontal rod dia. 12 x 250 mm.



T 630/1

## TAPE MEASURES (STAINLESS STEEL)

DV 963/5	Tape measure, 5 m
DV 963/10	Tape measure, 10 m
DV 963/20	Tape measure, 20 m

## POCKET TAPE 3 m long (mm/inches)

DV 965

### 5.3.4 HARDWARE AND MEASURING INSTRUMENTS

TECNOTEST



T 620

#### SPECIFIC GRAVITY TEST SET

T 620

ASTM C 128 BS 812 EN 1097-6

##### THIS SET CONSIST OF:

<b>V 753</b>	GLASS PYCNOMETER For sands and fine aggregates, 1000 cc capacity with conical top
<b>T 620/2</b>	SAND ABSORPTION CONE AND TAMPER or fine aggregates. Chrome-plated brass cone (dia. 40 and 90 mm); 25 mm dia. tamping rod.
<b>T 620/1</b>	WIRE BASKET FOR SAMPLES Made of stainless steel N.100 mesh (0.15 mm), dia. 140 mm, height 150 mm

#### VOLUMEASURE

AT 207

Used to determine specific weight of coarse aggregates.  
Made of sheet steel with water outlet.

**DIMENSIONS:** 200 x 200 x 350 (h) mm.

**WEIGHT:** 6 kg.



AT 207

#### WATER BATH FOR HYDROSTATIC WEIGHING

T 621

Made of stainless steel, complete with handles.

**DIMENSIONS:** 450 x 300 x 300 (h) mm.

**WEIGHT APPROX.:** 8 kg.

**N.B.:** PLASTIC CONTAINERS MAY ALSO BE USED FOR HYDROSTATIC  
WEIGHING. SEE OUR MODELS DV 226/A-B-C, T 622

### WIRE BASKETS (STAINLESS STEEL)

<b>T 620/9</b>	Made of ASTM N. 30 Mesh (0.6 mm) 100 mm diameter, 120 mm height
<b>T 620/8</b>	Made of ASTM N.12 Mesh (1.7 mm) 140 mm diameter, 160 mm height
<b>T 620/3</b>	Made of ASTM N.6 Mesh (3.35 mm) 200 mm diameter, 200 mm height
<b>T 620/5</b>	Made of ASTM N. 12 Mesh (1.7 mm) 200 mm diameter, 200 mm height
<b>T 620/1</b>	Made of ASTM N.100 Mesh (0.15 mm) 140 mm diameter, 150 mm height
<b>T 620/6</b>	Made of ASTM N. 16 Mesh (1.18 mm) 100 mm diameter, 120 mm height
<b>T 620/7</b>	Made of ASTM N. 30 Mesh (0.6 mm) 140 mm diameter, 150 mm height



T 620/1

T 620/3

T 621

SEE SECTION 5.1 FOR BALANCES AND HYDROSTATIC WEIGHING TABLES

**DE-AIRING STAND** **V 900**

The stand can be completely disassembled: it has a robust steel frame, laminated bearing plate and 6 holders of adjustable height for pycnometers with capacities from 50 to 2000 ml. Independant deaeration tubes with tap, for connection to the vacuum pump. A vacuum manometer measures the depressurization.

**DIMENSIONS:** 1330 x 580 x 1900 (h) mm

**WEIGHT:** 73 kg

**NOTE: VACUUM PUMP (V 899) AND PYCNOMETERS ARE EXCLUDED AND SHOULD BE ORDERED SEPARATELY.**



V 900

**VACUUM PUMP (66.6 litres/minute)** **V 899**

Small-sized, it is particularly suitable for laboratory use. Manometer with vacuum indication.

Max. vacuum 1 Torr.

**ELECTRIC MOTOR:** 220 V, 50 Hz, single phase, Kw 0.30

**DIMENSIONS:** 350 x 450 x 280 mm

**WEIGHT APPROX.:** 13 kg

**WATER JET SUCTION PUMP** **V 791**

Made of chrome plated brass. It can be used on minimum water pressures of approx. 0.7 kg/cm<sup>2</sup>.

**DIMENSIONS:** 250 x 80 x 30 (h) mm

**WEIGHT APPROX.:** 500 g



V 899

**WATER JET SUCTION PUMP (VACUUM METER TYPE)** **V 791/M****RUBBER BUNG (Ø 75 mm cylinder)** **V 638/T****RED RUBBER TUBING: Ø 8-16 mm - 5 m** **V 793****PVC RUBBER TUBING: Ø 6-9 mm - 2 m** **V 791/T****SUCTION PUMP, PLASTIC BODY** **V 791/P****KIT OF 12 CONICAL STOPPERS** **V 792**

Red rubber, upper diameter 15 - 18 - 20 - 26 - 30 - 32 - 37 - 42 - 45 - 48 - 54 - 60 mm.



V 791/M



V 791



V 791/P

### 5.3.5 GLASSWARE AND PLASTIWARE

TECNOTEST



V 724

V 725

V 726

## PYCNOMETERS, GAY-LUSSAC TYPE

ASTM D 854 BS 812-2 BS 1377 EN 1097-7

Made of glass complete with capillary vent stopper.

V 725/T	100 ml capacity (calibrated)
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V 726/T	50 ml capacity (calibrated)
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## HUBBARD-CARMICK DENSITY BOTTLE V 724

For specific gravity determination. 25 ml capacity. Pyrex glass. Height 45 mm, base dia. 40 mm, neck dia. 25 mm. Frosted stopper with 1 mm hole.



V 756

V 755

V 765

V 767/1

## GLASS VOLUMETRIC FLASKS calibrated at 20°C

V 758	100 ml with plastic stopper
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V 755	250 ml with plastic stopper
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V 756	500 ml with plastic stopper
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V 757	1000 ml with plastic stopper
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V 758/1	2000 ml with plastic stopper
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## BEAKERS

V 764/1	25 ml capacity. Graduated glass
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V 764/2	50 ml capacity. Graduated glass
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V 764	100 ml capacity. Graduated glass
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V 767	250 ml capacity. Graduated glass
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V 767/1	300 ml capacity. Aluminium
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V 765	600 ml capacity. Graduated glass
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V 766	1000 ml capacity. Graduated glass
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V 766/1	2000 ml capacity. Graduated glass
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## GLASS PYCNOMETERS

Glass calibrating funnel, frosted cone.

### NARROW NECK (frosted cone 29/32)

V 752/1	250 ml spherical
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V 752	500 ml spherical
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V 751	1000 ml spherical
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V 751/2	2000 ml spherical
---------	-------------------

V 750/1	500 ml conical
---------	----------------

V 750/2	1000 ml conical
---------	-----------------

V 750	2000 ml conical
-------	-----------------

V 750/A	GLASS FUNNEL 29/32
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### WIDE NECK (frosted cone 55/44)

V 751/3	1000 ml spherical
---------	-------------------

V 751/4	2000 ml spherical
---------	-------------------

V 750/3	1000 ml conical
---------	-----------------

V 750/4	2000 ml conical
---------	-----------------

V 750/B	GLASS FUNNEL 55/44
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V 751/4

V 751/2

V 750/3

V 750/2

V 750/1

## WEIGHING BOTTLES

Cover is ground in the Pyrex models.

V 728/1	Pyrex. Dia. 40 x 30 mm
V 728/2	Pyrex. Dia. 50 x 30 mm
V 728/3	Pyrex. Dia. 60 x 35 mm
V 728/4	Pyrex. Dia. 70 x 40 mm
V 728/A	Pyrex. Dia. 25 x 40 mm
V 728/B	Pyrex. Dia. 30 x 50 mm
V 728/C	Pyrex. Dia. 35 x 70 mm
V 732	Plastic. Dia. 50 x 30 mm
V 732/1	Plastic. Dia. 60 x 90 mm
V 732/2	Plastic. Dia. 40 x 70 mm
V 732/3	Plastic. Dia. 70 x 120 mm



V 728



V 732

## PETRI DISHES

V 736	Pyrex type 80 mm dia.
V 736/2	Pyrex type 100 mm dia.
V 736/3	Pyrex type 120 mm dia.
V 740/2	Plastic type 100 mm dia. (10 pcs)



V 736

## GLASS FILTER FLASKS

V 748	1000 cc
V 748/1	500 cc
V 748/2	250 cc

## GLASS FLASKS

V 735	250 cc
V 734	500 cc
V 733	1000 cc



V 733

V 748/2

V 763

## GLASS FUNNELS

V 985/1	Larger diameter 50 mm
V 985/2	Larger diameter 70 mm
V 985/3	Larger diameter 100 mm

## GRADUATED STOPPERED BOTTLES

V 760	250 ml capacity
V 761	500 ml capacity
V 759	1000 ml capacity
V 762	250 cc capacity (conical)
V 763	500 cc capacity (conical)



V 759

V 761

V 760

## FILTER PAPERS

100 pieces per box

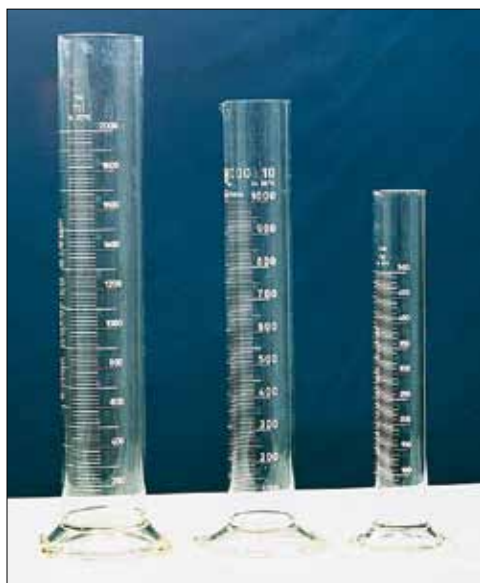
B 570	Filters No. 1 x 11 cm diameter
B 570/1	Filters No. 40 x 15 cm diameter
B 570/3	Filters No. 1 x 15 cm diameter
B 570/4	Filters No. 2 x 15 cm diameter
B 570/5	Filters No. 5 x 15 cm diameter
B 570/7	Filters No. 44 x 15 cm diameter
B 570/B	Filters No. 40 x 11 cm diameter
B 570/D	Filters No. 44 x 11 cm diameter
B 570/E	Filters No. 540 x 11 cm diameter



V 985



B 570



V 701... V 707



V 233

## GRADUATED CYLINDERS

Model	Capacity	Characteristics
V 232/6	10 cc	GLASS WITH SPOUT
V 232/2	25 cc	GLASS WITH SPOUT
V 232/5	50 cc	GLASS WITH SPOUT
V 232/1	100 cc	GLASS WITH SPOUT
V 232/A	250 cc	GLASS WITH SPOUT
V 232/B	500 cc	GLASS WITH SPOUT
V 232/C	1000 cc	GLASS WITH SPOUT
V 232/D	2000 cc	GLASS WITH SPOUT
V 701	25 cc	GLASS WITH STOPPER
V 702	50 cc	GLASS WITH STOPPER
V 703	100 cc	GLASS WITH STOPPER
V 704	250 cc	GLASS WITH STOPPER
V 705	500 cc	GLASS WITH STOPPER
V 706	1000 cc	GLASS WITH STOPPER
V 707	2000 cc	GLASS WITH STOPPER
V 233/A	25 cc	TRANSPARENT PLASTIC
V 233/B	50 cc	TRANSPARENT PLASTIC
V 233/C	100 cc	TRANSPARENT PLASTIC
V 233/D	250 cc	TRANSPARENT PLASTIC
V 233/E	500 cc	TRANSPARENT PLASTIC
V 233/F	1000 cc	TRANSPARENT PLASTIC
V 233/G	2000 cc	TRANSPARENT PLASTIC

## DESICCATORS

Glass and transparent plastic models; with and without vacuum tap on the cover. Complete with porcelain plate.



V 776



V 777

### GLASS WITH VACUUM TAP ON THE COVER

V 776/1	Diameter 150 mm
V 776/2	Diameter 200 mm
V 776/3	Diameter 250 mm
V 776/4	Diameter 300 mm

### GLASS WITHOUT TAP ON THE COVER

V 776/A	Diameter 150 mm
V 776/B	Diameter 200 mm
V 776/C	Diameter 250 mm
V 776/D	Diameter 300 mm

### PLASTIC WITH TAP ON THE COVER

V 777/1	Diameter 150 mm
V 777/2	Diameter 200 mm
V 777/3	Diameter 250 mm

**GLASS RODS (20 pcs)**

V 730

**WATCH GLASSES**

V 731/1	Watch glasses dia. 100 mm
V 731/2	Watch glasses dia. 60 mm
V 731/3	Watch glasses dia. 80 mm



V 774

**MOHR GLASS PIPETTES  
20°C calibration****Graduated:**

V 774/1	Capacity 1 cc - 1/10 Division
V 774/2	Capacity 5 cc - 1/20 Division
V 774/3	Capacity 10 cc - 1/10 Division
V 774/4	Capacity 25 cc - 1/10 Division

**Volumetric:**

V 775	Capacity 5 cc - 1 Mark
V 775/1	Capacity 10 cc - 1 Mark
V 775/2	Capacity 25 cc - 1 Mark
V 775/3	Capacity 50 cc - 1 Mark
V 775/4	Capacity 100 cc - 1 Mark



V 775



V 772

**GLASS BURETTES GRADUATED**

V 772/1	Capac. 10 cc - divis. 1/50
V 772/2	Capac. 25 cc - divis. 1/20
V 772/3	Capac. 50 cc - divis. 1/10
V 772/4	Capac. 100 cc - divis. 1/5

**BURETTE HOLDER WITH ROD (50 cm h)** V 775/P**REAGENT GLASS BOTTLE (1000 cc)** V 763/1**DROPPING BOTTLE (100 cc) polyethylene** V 763/3**BURETTE BRUSH Ø 10 x 120 mm** V 763/7**BOTTLE BRUSHES  
(bristle)**

V 763/5	Diameter 20 mm. Total length 300 mm
V 763/6	Diameter 50 mm. Total length 400 mm

**DRIP TRAY FOR GLASSWARE 460 x 600 mm** V 931**LABORATORY JACK** V 781

It supports up to 15 kg. Elevation up to 20 cm.  
Plate 160 x 160 mm. Made of aluminium.



V 763/1



V 775/P - V 772/3



V 781



V 763/3

### 5.3.5 GLASSWARE AND PLASTICWARE



V 981

V 980



V 745/P

V 744



V 502

V 502/5

V 502/D



V 982/A

V 982/B

V 982/C



V 982-983/A



V 987 - V 988

### TECNOTEST

#### POLYPROPYLENE BUCHNER FUNNEL

V 980/1	Filter Ø 42.5 mm. Holes: 1.2 mm. Capac.: 40 ml
V 980/2	Filter Ø 55 mm. Holes: 1.1 mm. Capac.: 70 ml
V 980/3	Filter Ø 70 mm. Holes: 2 mm. Capac.: 180 ml
V 980/4	Filter Ø 80 mm. Holes: 2 mm. Capac.: 285 ml
V 980/5	Filter Ø 90 mm. Holes: 2.5 mm. Capac.: 390 ml
V 980/6	Filter Ø 110 mm. Holes: 2.5 mm. Capac.: 810 ml
V 980/7	Filter Ø 160 mm. Holes: 2.75 mm. Capac.: 2100 ml
V 980/8	Filter Ø 240 mm. Holes: 3 mm. Capac.: 6000 ml

#### BUCHNER FILTERS

##### 10 pieces per bag

V 981/1	Polyethylene net dia. 45 mm
V 981/2	Polyethylene net dia. 55 mm
V 981/3	Polyethylene net dia. 70 mm
V 981/4	Polyethylene net dia. 80 mm
V 981/5	Polyethylene net dia. 90 mm
V 981/6	Polyethylene net dia. 110 mm
V 981/7	Polyethylene net dia. 160 mm
V 981/8	Polyethylene net dia. 240 mm

#### PORCELAIN MORTAR, WITH PESTLE

V 744	80 mm dia.
V 745	100 mm dia.
V 745/5	130 mm dia.
V 747	180 mm dia.
V 743	200 mm dia.
V 745/P	Rubber-headed pestle

#### PORCELAIN DISHES

V 502/1	80 mm dia.
V 502/2	100 mm dia.
V 502/3	160 mm dia.
V 502/4	200 mm dia.
V 502/5	250 mm dia.

#### STAINLESS STEEL DISHES

V 502/A	60 mm dia.
V 502/D	120 mm dia.

#### PORCELAIN CRUCIBLES

V 982/A	Conical 25 mm dia.
V 982/B	Conical 50 mm dia.
V 982/C	Conical 87 mm dia.

#### CRUCIBLE HOLDERS

V 983/A	Side 4 cm
V 983/B	Side 6 cm
V 983/C	Side 8 cm

#### GOOCH CRUCIBLE (porcelain) V 987

Perforated bottom dia. 25 mm. Ø 41 mm x 43 (high).

V 988	FUNNEL FOR GOOCH CRUCIBLE (V 987)
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## PLASTIC BUCKET

### graduated type and with lid

V 971	9 litre capacity, 260 x 270 mm - graduated
V 972	12 litre capacity, 290 x 300 mm - graduated
V 973	15 litre capacity, 310 x 320 mm - graduated
V 970/A	5 litre capacity with cover
V 970/B	10 litre capacity with cover
V 970/C	28 litre capacity with cover

## PLASTIC CARBOYS

V 975	Capacity 5 litres, mouth dia. 85 mm Dimensions: dia. 167 x 350 mm, weight: 360 g
V 976	Capacity 10 litres, mouth dia. 100 mm Dimensions: dia. 212 x 420 mm, weight: 560 g
V 977	Capacity 15 litres, mouth dia. 115 mm Dimensions: dia. 240 x 460 mm, weight: 770 g
V 978	Capacity 20 litres, mouth dia. 130 mm Dimensions: dia. 265 x 500 mm, weight: 900 g
V 979	Capacity 25 litres, mouth dia. 130 mm Dimensions: dia. 275 x 550 mm, weight: 1 kg

## PLASTIC CARBOYS

### WITH SPIGOT

V 975/S	Capacity 5 litres, mouth dia. 51 mm Dimensions: dia. 167 x 355 mm
V 976/S	Capacity 10 litres, mouth dia. 51 mm Dimensions: dia. 212 x 430 mm
V 978/S	Capacity 20 litres, mouth dia. 51 mm Dimensions: dia. 266 x 520 mm

## PLASTIC FUNNELS

V 968/2	Dia. 80 mm, Sprue 10 mm
V 968/3	Dia. 120 mm, Sprue 11 mm
V 968/4	Dia. 150 mm, Sprue 14 mm
V 968/B	Dia. 120 mm, Sprue 30 mm
V 968/C	Dia. 150 mm, Sprue 36 mm

V 905/A	Absorbent cloths (5 pcs)
V 905/P	Dust cloths (set of two)

## PLASTIC WASHING BOTTLES

100 cc capacity
250 cc capacity
500 cc capacity
1000 cc capacity

## SAMPLE BAGS, PLASTIC (100 pieces)

V 801	Sizes 250 x 450 mm
V 800	Sizes 400 x 700 mm
V 800/A	Sizes 1000 x 500 mm



V 975 - V 979



V 970/A - V 973



V 710 - V 713



V 968/2 - V 968/C



V 953 - V 958/S



V 770/1

### 5.3.6 CHEMICAL TESTS

TECNOTEST



V 779 + V 779/1



V 778



V 754/1



V 770/3



V 770/6



V 770/2

## PLASTIC BOTTLES

Article	Capacity cc	Mouth mm	Dimensions mm
V 953	50	24	40 x 75
V 954	100	24	50 x 90
V 955	250	36	60 x 130
V 956	500	36	75 x 160
V 957	1000	50	95 x 200
V 958	2000	50	115 x 250
V 953/S	50	24	35 x 35 x 70
V 954/S	100	36	45 x 45 x 90
V 955/S	250	36	60 x 60 x 110
V 956/S	500	50	75 x 75 x 140
V 957/S	1000	60	75 x 75 x 170
V 958/S	2000	60	130 x 130 x 210

## SEDIMENTATION PIPETTE METHOD

BS 1377

### ANDREASEN APPARATUS

V 778

For determining particle size distribution of sand and soil samples using the sedimentation rate method.

Consists of a graduated glass cylinder (0-20 cm) with a ground tapered neck (to NS 29-37), special stopper, two way tap and capillary suitable for transferring sediments of grain size smaller than 60 microns.

DIMENSIONS: 180 x 100 x 600 (h) mm.

WEIGHT: 1 kg.

### ANDREASEN PIPETTE STAND

V 779

Permits the micrometric movement of the pipette without transmitting vibrations to the sample.

### ANDREASEN PIPETTE: 10 cc

V 779/1

### ANDREASEN PIPETTE: 20 cc

V 779/2

### CHAPMAN FLASK

V 754/1

For values of approximate apparent specific gravity and surface moisture in fine aggregates.

Graduated to 200 ml between bulbs and from 375 to 450 ml above the second bulb.

### WATER ACIDITY TEST KIT

V 770/6

It is possible to evaluate the corrosive power of the water, by measuring its acidity. The box contains calibrated vessels, reagents and syringe.

DIMENSIONS: 250 x 120 x 70 (h) mm.

WEIGHT: 0.3 kg.

## WATER ANALYSIS KITS

V 770/1 KIT FOR ALKALINITY DETERMINATION

V 770/2 KIT FOR CHLORIDE DETERMINATION

V 770/3 KIT FOR CALCIUM DETERMINATION

V 908 GLASS MARKING PENS (12 pcs)

**COMPLETE TEST KIT FOR SOILS****V 770/06**

Complete, portable, mini laboratory which enables reliable soil analyses to be carried out. It contains all the required reagents and accessories for performing approximately 50 tests for each of the soil factors covered by this unit: pH value - Phosphorous - Potassium - Humus - Ammonia Nitrogen - Nitrites - Nitrates.

An instruction manual simplifies test procedure.

The kit is supplied in a case also containing a small balance, a sieve, a spatula, and a pestle.

DIMENSIONS: 470 x 330 x 200 (h) mm.

WEIGHT: 11 kg.

**V 770/06****CHLORIDE TEST KIT (HI 3815)****V 770/5**

With 30 and 100 ml calibrated containers, reagents, syringe, pipette and instructions.

DIMENSIONS: 200 x 120 x 60 mm.

WEIGHT: 460 g.

**INDICATOR PAPERS****4-7 pH, 5 m dispenser****V 771/1****INDICATOR PAPERS****1-14 pH, 5 m dispenser****V 771/3****INDICATOR PAPERS****0-14 pH, N. 200 strips****V 771/2****LITMUS PAPER RED****5-8 pH, 5 m dispenser****V 771/4****LITMUS PAPER BLUE****5 m dispenser****V 771/5****LITMUS PAPER NEUTRAL****5 m dispenser****V 771/6****SULPHATE CONTENT****V 770/7** Kit of 100 strips, 200-1600 mg/l**CHLORIDE CONTENT KIT**

BS 812 BS 1377

It is used for estimation on site of chloride content in sand and fine aggregates. The kit consists of 40 reagent strips and calibration chart.

**V 770/8** KIT 1175 QUANTAB (0.005 - 0.1%) Na Cl**V 770/9** KIT 1176 QUANTAB (0.05 - 1%) Na Cl**V 770/8****V 770/9****ORGANIC IMPURITIES IN FINE AGGREGATES**

ASTM C 40

**V 254** STANDARD COLOUR SCALE

Five permanent organic colour glasses mounted in a plastic holder. These glasses replace the standard colour reference solution.

**V 761** GLASS BOTTLE 500 cc**Z 55/A** SODIUM HYDROXIDE (1 kg pack)**V 761****Z 55/A****V 254**

## CHEMICAL REAGENTS

The following chemicals are those most commonly used in material testing laboratories. Many other reagents are available or the same reagents packed differently or having different grades of purity. Not all reagents may be transported without special precautions: the ones listed in column ADR are subject to limitations in types of transportation allowed. Special packing and freight costs may be calculated according to quantity and destination as and when required.

As far as safety and conservation are concerned (columns R and S), Tecnotest shall not be held liable for errors in handling: you are therefore recommended to consult "Dangerous chemical substances and proposal concerning their labelling" as published by the Council of Europe.

Labels nonetheless carry symbols indicating degree of hazard and other information.

CODE	DESCRIPTION	QUANTITY	NATURE	R (1)	S (2)	UN (3)	ADR (4)
Z 23	hydrochloric acid	1000 ml	corrosive	36/37/38	24/25-28-45	1789	8.0
Z 81	nitric acid GPR	1000 ml	corrosive	34	23-26-36-45 24/25-26-30	2301	8.2
Z 50	sulphuric acid 96%	1000 ml	corrosive	35-41	36/37/39-45	1830	8.0
Z 82	hydrogen peroxide 12 Vol	1000 ml	corrosive	34	26-28	2014	5.1
Z 22	distilled water	5000 ml					
Z 47	ammonium carbonate	1 kg	powder				
Z 25	ammonium ferric sulphate	1 kg					
Z 12	methyl orange	100 g					
Z 68	silver nitrate	500 g	solution 1%		26-37/39-45		
Z 65	barium chlorate	50 g	toxic comburent	9-20/22-51 53	2-13-27-61	1445	5.1+6.1
Z 69	barium chloride GPR	1000 g	toxic	20-22	28	1564	6.1
Z 85	bromthymol blue (jar)	500 g					
Z 98	methylene blue	500 ml	solution 1%				
Z 87	calcium chloride dihydrate	1000 g		36	22-24		
Z 99	kaolinite	500 g					
Z 43	calcium carbonate GPR	1 kg					
Z 31	sodium hexametaphosphate	1 kg					
Z 89	formaldehyde 37% GPR	2500 ml	toxic	40-43	36/37	1198	3.3
Z 28	silica gel (with indicator)	500 g					
Z 27	silica gel (no indicator)	1000 g					
Z 78	glycerol F. U. bidistillate	2500 ml					
Z 42	silicon grease	150 g	lubricant				
Z 55/A	sodium hydroxide - pellets	1 kg	corrosive	36	36-37/39-45	1823	8.0
Z 71	magnesium sulphate GPR	1 kg					
Z 45	mercury metal	1 kg	poison	23-33	45	2809	8.0
Z 97	vaseline oil (jar)	1000 ml					
Z 80	paraffin wax	5 kg					
Z 33	potassium dichromate	500 g	irritant	36/37/38-43	22/28	3288	6.1
Z 06	sodium oxalate	250 g	poison	21-22	24/25	3282	6.1
Z 08	sodium silicate	5 kg	technical				
Z 70	sodium sulphate RPE anhydrous	1 kg					
Z 66	trichloroethylene	10 kg	toxic fumes	40	23-36/37	1710	6.1
Z 13	zinc chloride	1 kg	corrosive	34	28-45-7/8	2331	8.0

### LEGEND:

R (1)	Classification of hazard: by contact, inhalation, etc.
S (2)	Special precautions required for storage
UN (3)	"UNITED NATIONS" identification
ADR (4)	Limitations on methods of transportation: road, railway, seafreight, airfreight



