PHYWE

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HANDBOOK

COBRA

Force

All experiments described in this handbook can be performed with the "COBRA-Interface" which has following specific features:

The versatile high performance computer interface basic unit can be extended by means of a series of supplementary modules.

● Intelligent, microprocessor controlled interface for the performance of measurements and experiments in physics, chemistry, biology and technology

● Can be connected directly to any modern computer over the standard serial interface (RS 232) without supplementary cards and without opening the computer housing

● Replaces devices such as 4-channel plotters, xyt-plotters, transient plotters, digital counters, temperature, conductivity, pH, pressure measuring devices, etc.

● No load on the computer power supply due to the interface, thus excluding computer failures due to partial power supply overloads

● High performance, adjustable direct voltage output to provide power for experiments and for programmable power outputs

● Continuous extension of the series of modules and of the software library keeps on providing new applications for the COBRA user

This handbook specially covers experiments which may be performed in conjunction with the COBRA force measuring module.

This HANDBOOK can be purchased separately. It contains the experiments listed below. Please ask for a complete equipment list. Ref No 26102

Handbook • COBRA – Force • No. 01210.02 • 10 described Experiments

CWN 1   (12470)
The force meter as laboratory balance

CWN 2   (12471)
Determination of the surface tension by the pull-out method

CWN 3   (12472)
Dependence of central force on angular velocity, track radius and mass

CWN 4   (12473)
Hooke's Law

CWN 5   (12474)
Dependence of the Lorentz force on the direction of the magnetic field

CWN 6   (12475)
Current balance, the dependence of the Lorentz force on current strength/conductor length

CWN 7   (12476)
Voltage balance – Force and voltage – Force and plate distance

CWN 8   (12477)
Coulomb's Law

CWN 9   (12478)
Using the force meter to measure length, proof of magnetostriction

CWN 10   (12479)
Measurement of minimal force differences

Voltage balance – Force and voltage – Force and plate distance (CWN 7)