



ENGINEERING EDUCATION EQUIPMENT



TEQUIPMENT

PHYWE
excellence in science

Neotech AMT



FESTO



Schneider
Electric



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TECQUIPMENT



TecQuipment is the leading provider of high quality educational equipment for engineering disciplines. The products allow students and educators to perform practical experiments to illustrate engineering principles relating to aerodynamics, control engineering, process control, hydraulics and fluid mechanics, material testing and properties, structures, renewable energies, mechanics and dynamics, thermodynamics and heat transfer, along with electrical power systems.

The company was founded over 60 years ago by the Head of Mechanical Engineering at the University of Nottingham and the Managing Director of a clock making company. Over this period, TecQuipment has grown in recognition of its reliable and robust products that are all designed and manufactured to the ISO9001 standard in Nottinghamshire, UK, delivered with a 5-year warranty. The products are used by students and educators across the world, in over 1500 establishments in more than 100 countries.

TecQuipment product range:

- Engineering Science
- Control Engineering
- Fluid Mechanics
- Statics Fundamentals
- Theory of Machines
- Engines
- Solar Energy
- Aerodynamics
- Process Control Engineering
- Materials Testing and Properties
- Next Generation Structures
- Thermodynamics
- Environmental Control
- Electrical Power Systems
- Alternative Energy



ENGINEERING EXCELLENCE

IN EDUCATION



TECQUIPMENT



ENGINEERING SCIENCE



Friction & Inclined Plane Kit (ES8) Engineering Science Full Set (ESF)

THERMODYNAMICS



Heat Exchange Service Module (TD360) Advanced HVAC & R Trainer (EC1550V)

STRUCTURES



Pin Jointed Frameworks (STS8) Simple Suspension Bridge (STS19)

MATERIALS TESTING



Strain Gauge Trainer (SM1009) Universal Testing Machine (SM1000)

AEROSPACE



Subsonic Wind Tunnel (AF1300) Flight Demonstration Wind Tunnel (AF41V)

FLUID MECHANICS



Flow Measurement Methods (H10) Two-Stage (Series & Parallel) Pumps (H83)

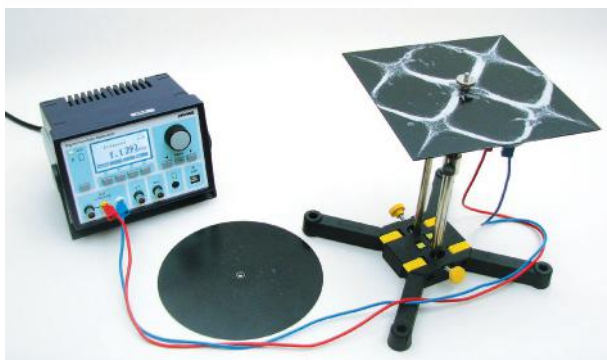
PHYWE

excellence in science



Oscillations & Mechanical Waves, Acoustics

- Oscillatory Motion
- Wave Motion
- Sound Waves



Chladni Figures

Light Optics

- Nature and Propagation of Light
- Geometric Optics
- Diffraction and Interference
- Applied Optics - Photonics
- Polarisation



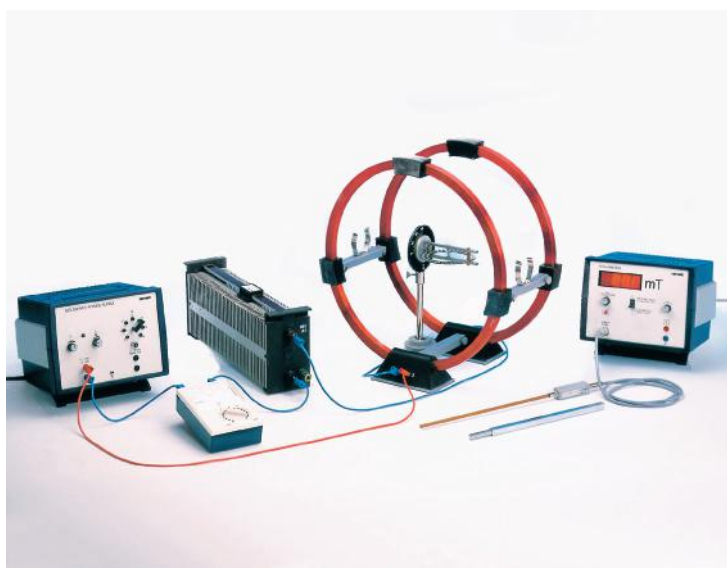
Laws of Lenses and Optical Instruments



Cobra SMARTSense

Electricity & Magnetism

- Electric Charge and Electric Field
- Capacitance, Dielectrics, Electric Energy, Storage
- Magnetic Field and Magnetic Forces
- Sources of Magnetic Field
- Electromagnetic Induction and Faraday's Law
- Inductance, Electromagnetic Oscillations, AC circuits
- Maxwell's Equation, Magnetism, Electromagnetic Waves
- Electric Current & Resistance
- Direct-Current Circuits



Determination of Earth's Magnetic Field

Quality made in Germany. Worldwide. For you. PHYWE

PHYWE supplies more than.....

30 Nobel Prize awarded experiments



With a 100-year tradition of excellence, PHYWE Systeme GmbH & Co. KG stands for tradition, partnership, innovation and quality—made in Germany. Phywe's aim is to facilitate the best possible teaching and training for the knowledge-based, independent and advanced society of tomorrow. That is why Phywe are constantly working to improve their products, keeping a close watch on developments in the education and research sectors and expanding their program with new innovations.



XR 4.0 expert unit

Modern Physics

- Quantum Physics
- Atomic Physics
- Molecular and Solid State Physics
- Nano Physics
- Nuclear Physics—Radioactivity
- X-ray Physics



Visualisation of Radioactive Particles/
Diffusion Cloud Chamber

Mechanics

- Measurement Techniques
- Motion in one Dimension
- Motion in two and three Dimensions
- Rotational Motion
- Static Equilibrium and Elasticity
- Mechanics of Fluids and Gases
- Gravity



Laws of gyroscopes/
3-axis gyroscope

More than 100 years experience - for higher education



Origins of the LabVolt Series by Festo Didactic

For over 55 years, Festo Didactic has been recognised worldwide for the development of high quality, intuitive learning systems for technical education.

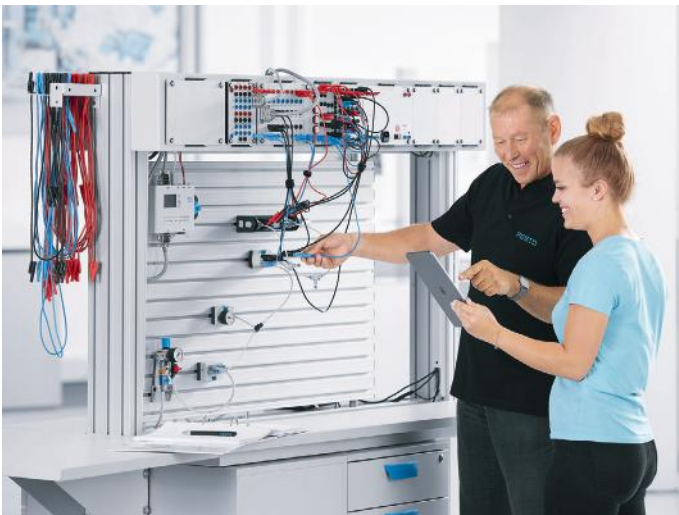
Festo Didactic further strengthened its leadership position as a worldwide supplier of technical education solutions through the acquisition of the US-Canadian manufacturer, LabVolt Systems, in June 2014. LabVolt's portfolio of products is now part of the global offering of Festo Didactic and is referred to as the "LabVolt Series."



Pumps Training System



PLC Training System



Pneumatics/ Hydraulics Training System

FESTO

World-leading equipment provider for technical education

Festo Didactic develops solutions for fast learning and successful retention for the entire spectrum of automation and technology.

Festo Didactic training systems are 100% modular. You can select components to design a program that achieves their instructional goals and achieve the greatest impact within their budget. You can expand the systems flexibly and make investments future-proof without reaching a dead end.

Ergonomics, didactic concepts and design go hand-in-hand at Festo Didactic. Numerous awards underline their commitment.



Geothermal Training System



Electromechanical Training System



Electric Power Technology Training System

- Electronics
- Electricity and Renewables
- Fluid Power
- HVAC-R
- Industrial Maintenance
- Mechatronics
- Telecommunications
- Smart Grid



Customised laboratory furniture systems for your needs

Founded in 1963, Wesemann is one of the leading producers of high-quality laboratory furnishings in Europe and is steadily expanding. Innovative, user-oriented and flexible laboratory furnishings are the answer to the many demands and, rapid changes in science and research. Wesemann's goal is to precisely understand the ideas of their customers in order to best assist them in their work with their design concept. Wesemann achieve this with their Wesemann Group, an association of medium-sized companies, specialising in the design and manufacture of sophisticated furniture systems.

Wesemann Product Range:

System DELTA 30

Professional Laboratory Furnishing systems:

- Service systems
- Table systems
- Fume cupboards
- Storage systems
- Colour palette



LABOdacta

Science Classroom Furnishings:

- Experimentation space for teachers and students
- Ceiling anchored experimentation space
- Fume cupboards
- Storage systems
- Colour palette



LABterminal

Laboratory System

- Modular and mobile
- Space saving and flexible
- Multi-use



Ergoline

Ceiling Mounted Services

- Ergonomically designed
- Key activated deployment and retraction
- Allowing free arrangement of floor space and furniture





Cutting edge laboratories and equipment for technical training

Elettronica Veneta designs, manufactures and installs didactic equipment for technical education since 1963.

In addition to being used in formal learning, EV laboratories and teaching technologies are also suitable for tertiary education, lifelong learning and personnel retraining and re-qualification.

EV didactic solutions cover a wide range of technology subjects in the educational programs not only of vocational and technical institutes, but also of universities and colleges.

- Electronics and systems
- Telecommunications and Telematics
- Electrical Engineering
- Chemical Engineering
- Industrial Process Control
- Automation Technologies
- Thermotronics
- Renewable Energies
- Food Processing Technologies
- Autotronics
- Biomedical Equipment Maintenance Technician
- Ecology
- Fluid Mechanics
- Thermodynamics
- Electric Power
- Physics
- Chemistry
- Fluid Machines
- Transport and Logistics



Batch distillation pilot plant



Absorption Refrigeration Trainer
SSC/EV



Computerised Solar Concentration Trainer
TAR-C/EV



Schneider Electric France - Energy Training

Schneider Electric have been leaders in the industrial field for more than 175 years.

Their experience has brought them to the education field, with product development in this area for over 50 years.

Designed for ease of instruction and learning, Schneider Electric's teaching apparatus achieve optimum student learning outcomes, at both vocational and profession levels, preparing them for their future.

Schneider Electric is committed to supporting teachers and trainers in the technical education field by sharing their expertise in new and emerging energy technologies.

- Safety
- Distribution
- Power Quality
- Renewable Energy
- Electric Vehicles
- Building Management
- Building Communication
- Energy Efficiency
- Residential



Solar-Thermal System



Automatic Part Sorting System



Earthing System Bench



Residential Modular Panel



Electrical Network Interference Bench



Ventilation Energy Efficiency Case

Didactic equipment & teaching solutions by Schneider Electric



The ELABO Training Systems

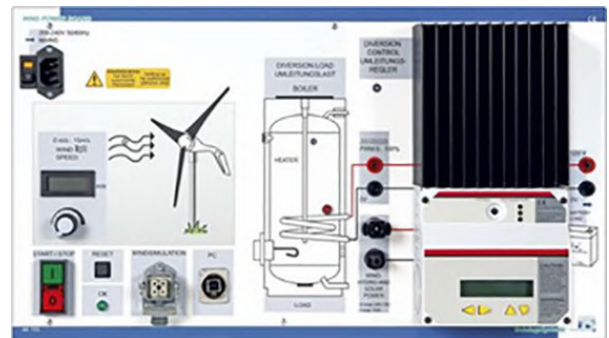
The ELABO Training Systems GmbH – now ETS DIDACTIC GmbH - was founded in Germany in 1997 and specialises in the development, production, and sale of vocational training systems covering electrical engineering, mechatronics, and metal sectors. ETS DIDACTIC supplies educational solutions to industry, vocational schools, polytechnics, and universities.

ETS DIDACTIC is a symbol of high quality and outstanding flexibility. ETS DIDACTIC solutions are convertible, and – thanks to the modular conception and the versatile range of accessories – they can be quickly and efficiently matched to your requirements and extended almost without limits.

ETS DIDACTIC’s high-quality standards refer not only to the products but also to the quality of the training that customers achieve thanks to the use of ETS DIDACTIC products.



Programmable logic controller



Wind Power Board



Smart Building Technologies

High-quality, versatile didactic learning systems

Neotech AMT



Neotech AMT GmbH is one of the leading companies developing systems for 3D Printed Electronics (3D PE). The company began developing this novel technology in 2006 and installed the worlds first 5 axis 3D PE system in 2010. This system expertly combines hard- and software elements into a unique solution capable of production complex circuitry on almost any 3D surface.

Rapid advances have led to the first commercial installation for mass production of printed 3D antennas. This high-throughput system is capable of printing millions of parts per year. Demand for this solution is being driven by the cost reduction potential coupled with technical and environmental benefits compared with current production processes. Additional applications are being developed for Mobile Devices, Automotive, Medical, and Industrial markets.



PJ 15X

The PJ 15X is an economic Rapid Prototyping system combining piezo-actuated printing technology with 5-axis motion control enabling complex 3D printing.



15X SA

The 15X SA is an economic large area Rapid Prototyping system for 3D Printed Electronics. This unique system combines diverse printing technology with 5-axis motion control enabling complex 3D printing.



45X G4

The 45X G4 is a compact, high throughput, mass production system for 3D Printed Electronics. With 4 print heads and 5 axes of simultaneous motion, rapid parallel processing of multiple parts is achieved. Designed specifically for 24/7 operation, the 45X is robustly constructed for minimal maintenance operation.



Advanced manufacturing technologies for 3D printed electronics



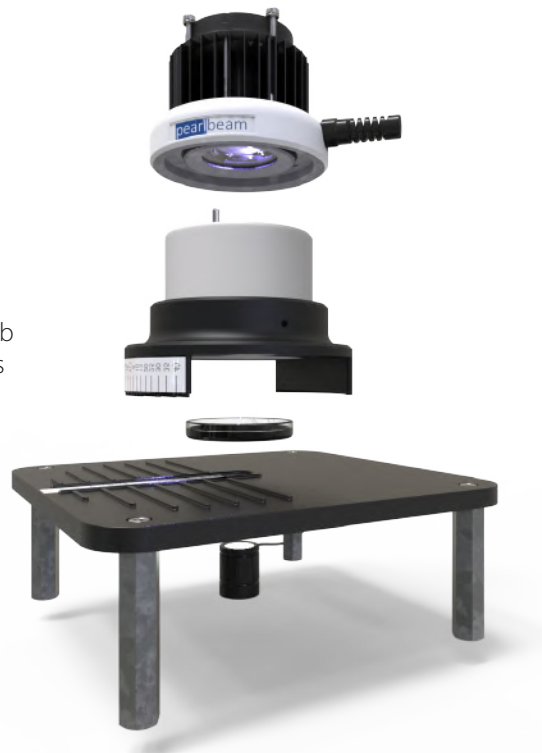
AquiSense Technologies is the global leader in UV-C LED systems design and manufacture that solves real-world problems in water, air, and surface disinfection applications.

AquiSense UV-C LEDs offer the benefits of Digital Disinfection. PearlLab UV Research Tools provide researchers with a variety of products for advanced UV disinfection.

PearlLab Beam

UV Dose Response Tool

Enables researchers to determine UV Dose response data. The PearlLab Beam is used in leading laboratories around the world.



Historically, these devices have used mercury-based lamps resulting in expensive, cumbersome, difficult to operate, and potentially dangerous systems. PearlLab Beam, from AquiSense Technologies, is a compact Collimated Beam Device which employs UV LEDs and emits radiation in the germicidal range. Its small size and ease of use allows the realization of a tabletop homogenized UV delivery system which can be operated in virtually any laboratory or field locations. The PearlLab Beam features a narrow band emission and is available in a suite of individually addressable wavelengths without the use of filters. As full UV-C intensity is reached in under 10mS, the use of a shutter is not necessary.



PearlLab Micro

UV Flow-through Research Tool

Enables flow-through or batch operation research with interchangeable UV wavelengths.



PearlLab ThinFilm

Low UVT Research Tool

Enables disinfection for low ultraviolet transmittance (UVT) or high UV Dose applications.



PearlLab Plasma

AOP Research Tool

Enables research below 230 nm without the use of mercury vapor.

World's largest supplier of UV-C LED Disinfection Systems

Our customers include:



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