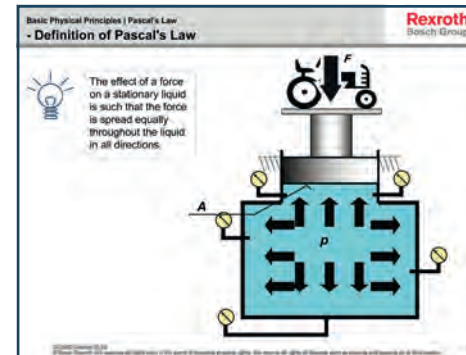


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eHTG – Basic hydraulic knowledge

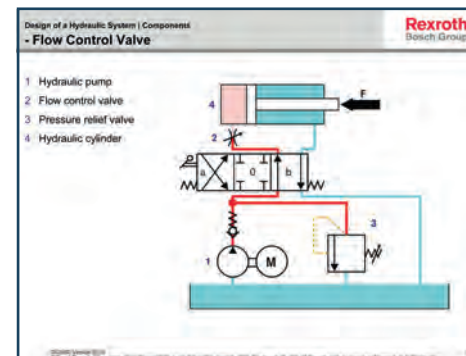
Examples of learning contents



Basic physical principles:
56 study pages
and
final test

Learning contents:

- ▶ Weight and force, pressure, Pascal's law
- ▶ Flow and flow law, flow types
- ▶ Origin and throttling of the flow



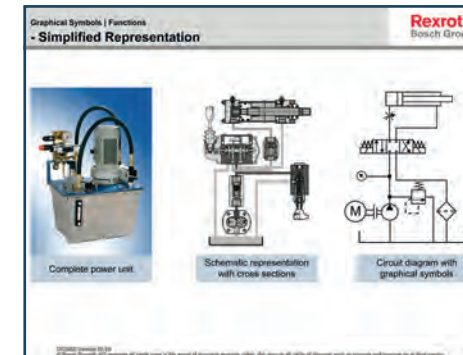
Design of a hydraulic system:
41 study pages
and
final test

Learning contents:

- ▶ Functional groups, mode of operation
- ▶ Important hydraulic components (valves, pumps, cylinders)
- ▶ Open/closed hydraulic circuit
- ▶ Losses, efficiency

eHTG – Basic hydraulic knowledge

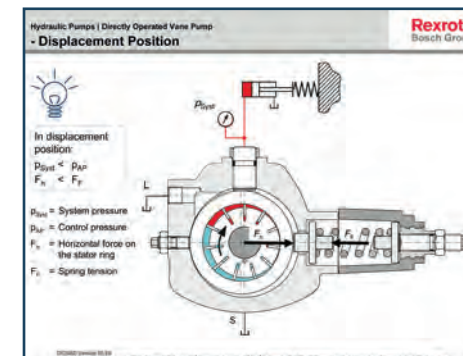
Examples of learning contents



Graphical symbols:
44 study pages
and
final test

Learning contents:

- ▶ Tasks, systems, structure
- ▶ Basic elements, drawing elements
- ▶ Frequently used symbols, circuit diagrams



Hydraulic pumps
46 study pages
and
final test

Learning contents:

- ▶ Task and mode of operation
- ▶ Distinguishing features, typical pump types
- ▶ External gear pumps, direct operated vane pump
- ▶ Pump flow, pump performance, efficiency

Drive & Control Academy
eHTG –
the eLearning training for
basic hydraulic knowledge



Knowledge – the decisive competitive advantage



Bosch Rexroth is one of the globally leading specialists in drive and control technology and has unique technology know-how with regard to products, solutions and their application.

Via the Drive & Control Academy, the company passes this knowledge on and supports the customized training and further development as well as the qualification of technical experts.

"An investment in knowledge always pays the best interest."

Benjamin Franklin

eLearning training

Learning anytime, anywhere

Prerequisites:

- ▶ PC with Internet access and email address for personal log-in on Rexroth study server

Training times:

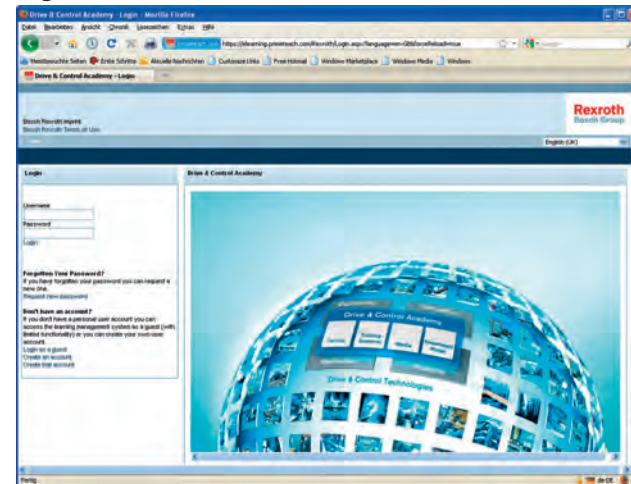
During the license period, the training contents are permanently available.

Advantages:

- ▶ Free division of time
- ▶ Individual speed of learning
- ▶ Unlimited repeatability

You'll receive your personal log-in 3 to 4 days after receipt of your registration (receipt of order). Your eLearning experience can now begin.

Log-in window:



After having completed the final test successfully, you will get a personal Rexroth certificate authorizing you to participate in further trainings.

eHTG - Basic hydraulic knowledge

Learning targets and contents

Today, independent learning at the computer is an integral part of the knowledge transfer. The freedom to choose time and place, unlimited repeatability, individual speed of learning and interactive learning contents make this method an indispensable studying tool.

Learning targets:

- ▶ Getting to know the basic structure of a hydraulic system
- ▶ Understanding the function and structure of selected hydraulic components
- ▶ Preparing hydraulic diagrams
- ▶ Effectively using technical documentation (DIN ISO 1219, catalog sheets, ...)
- ▶ Learning how to handle hydraulic components and systems in operational everyday life

Prerequisite:

Technical understanding

Target group:

People interested in hydraulics, machine operators, maintenance and assembly personnel, people involved in the planning of hydraulic systems, design engineers

From the function and the properties of selected components to the structure of hydraulic diagrams – Many basics that hydraulic engineers need to know are offered in the "eHTG - Basic hydraulic knowledge" online training.

Contents:

- ▶ Hydraulic systems in general
- ▶ Properties of the hydraulic system
- ▶ Structure and function of a hydraulic system
- ▶ Physical basic principles and their meaning in hydraulics
- ▶ Symbols according to DIN ISO 1219
- ▶ Hydraulic fluids
- ▶ Hydraulic pumps, motors and cylinders
- ▶ Control technology (isolation, directional, pressure and flow control valves)
- ▶ Simple circuit diagrams

More in-depth trainings (attendance training):

- ▶ HTP-1 – Practical training "Hydraulic on/off valves"
- ▶ HTPPu – Practical training "Hydraulic pumps and motors"
- ▶ EHG – "Electrical engineering for hydraulic engineers"

eHTG – Basic hydraulic knowledge

Scope and prices

Scope and duration of the studies, languages:

- ▶ 13 study modules
- ▶ 600 study pages
- ▶ Study duration approx. 25 to 32 hours
- ▶ A total of 120 test questions
- ▶ German or English (more languages on request)

The eHTG eLearning training is available as individual license and as multiple license. Thanks to the attractive price/performance ratio, the multiple license is particularly suitable for the further development of employees and students in industrial companies, further education institutions, schools and universities.

The license duration is 12 months after release.

Price list 2011 for Americas (in USD)

Industrial companies:

- ▶ Individual license 900 \$/year
- ▶ 6 licenses 2 551 \$/year
- ▶ 12 licenses 3 818 \$/year
- ▶ 24 licenses 5 713 \$/year
- ▶ 48 licenses 8 548 \$/year
- ▶ 100 licenses 13 099 \$/year
- ▶ 500 licenses 33 396 \$/year

Educational institutions/schools/universities:

- ▶ Individual license 300 \$/year
- ▶ 12 licenses 1 273 \$/year
- ▶ 24 licenses 1 904 \$/year
- ▶ 48 licenses 2 849 \$/year
- ▶ 100 licenses 4 366 \$/year
- ▶ 500 licenses 11 132 \$/year

Free test accounts for getting to know the eHTG eLearning training can be set-up under:

www.boschrexroth.com/eLearning