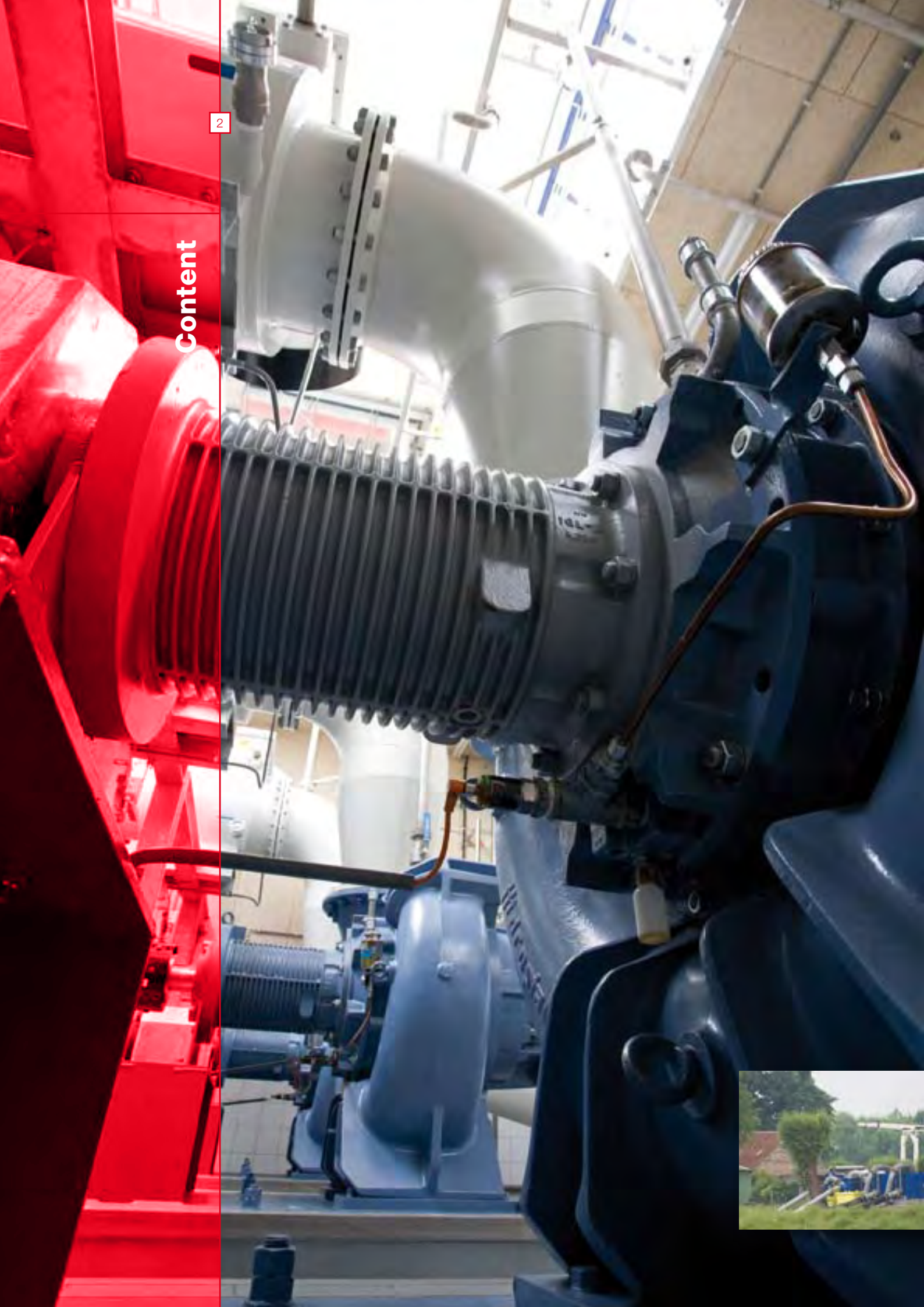




eekeels partner in pumps

Content



Content

Eekels partner in pumps

Introduction 4

Eekels' services

Sales 8

Rental 10

Service & Repair 12

Pump solutions & Projects 14

Handy tips 16

Information

Contact 20



Eekels partner in pumps



Introduction

Eekels partner in pumps

Backed by almost 100 years of experience and enthusiasm, Eekels supplies the right pump solutions to the public sector, contractors and industry - throughout the world and in every conceivable situation and field. We have one single objective: to supply the best pump solution.

Eekels always uses the latest developments in its solutions. This enables us to offer our customers additional benefits, such as low energy consumption, environmentally friendly technology, short delivery times and a good price-quality ratio.

Continuity and safety

Eekels knows better than any other company how important continuity and safety are in operational processes. All our activities therefore focus on lasting quality for your operations. Whether it's advice, special products or serious flooding, we are on hand 24 hours a day, 7 days a week!

Specialist in your field

Our many years of experience and our up-to-date expertise mean that we are instantly at home in all possible situations and applications. We provide fast, professional solutions, thus saving you time and money.



Brand-independent and innovative

Eekels is brand-independent and strives to come up with the best solution for every situation. After all, each pump problem requires different techniques or materials. Ongoing innovation and improvement go without saying: Eekels constantly develops new solutions to meet its customers' high requirements and comply with current legislation and regulations.



Products



Always the best pump solution.
Fast, professional and appropriate.

Products

Eekels supplies an extensive selection of pumps, such as:

1 Submersible pumps

- Light-weight submersible drainage pumps for pumping sewage water and rainwater.
- Submersible sewage pumps for sewage water and sludge.
- Axial flow pumps for surface water.

2 Dry self-priming pumps

- For fast suction and pumping of contaminated water with solid particles.
- For versatile applications.
- With diesel or electrical motor.

3 Sewage pumps

- Screw centrifugal pumps for dry or underwater installation.
- Blockage-free pumps with a large discharge head and high efficiency.
- Highly suitable for viscous liquids.

4 Reciprocating pumps

- For quiet, continuous wellpoint dewatering systems.
- Constant high vacuum for efficient processing of air.

5 Food pumps

- Sanitary rotary pumps for viscous and sensitive liquids such as milk products, pastas, sauces or sensitive chemicals.

6 Displacement pumps

- Low-noise diaphragm pumps for general contract work.
- Mono-pumps for uniform pumping of viscous liquids.
- Air-operated diaphragm pumps for almost every viscous, abrasive or corrosive medium with small solid particles.

7 Centrifugal pumps

- A range of simple centrifugal pumps at a favourable price.
- Standard pumps with free shaft end, standard block pumps and multi-stage pumps.

8 High-pressure pumps

- A range of high-pressure centrifugal pumps. Applications: cleaning and flushing pipe systems, filling and pressure testing of pipes and storage tanks, injecting and pulling out piles and sheet-piling, booster pump.

9 Abrasion-resistant pumps

- For liquids with abrasive components (sand, gravel and or mixtures, and bentonite).

10 Chemical pumps

- For corrosive liquids in industry and the (petro)chemical industry.

11 Special pumps

- Eekels is constantly developing new ranges of pumps. You can always rely on specific advice and a made-to-measure solution.

12 Accessories

- A full range: hoses, pipes, fittings, linkages, switch boxes, level controls, power cables, etc.

Tailor-made advice

Eekels will advise you on the right pump solution for your specific situation. This requires know-how and creativity that go beyond standard solutions: **'Eekels Tailor Made'** we call this.

Whether you are located in the Benelux countries, where our own strategically located Eekels branches complete with workshops and personal service can offer you a complete service, or whether you are outside the Benelux countries, you can take advantage of our European-wide network of dealers. Our comprehensive dealer network is fully supported by Eekels and our flexible service team is always on hand to provide additional support if required.



Sales

discharge

suction



“ We understand your pump problem and we take suitable steps to solve it. You know where you are with us. ”

Sales

Most customers want a lasting solution, so the purchase of a pump and accessories is often the most advantageous option. Our sales department will be happy to advise you on the advantages of buying and all aspects involved.

Only the best pump solutions

Eekels obviously wants to be your first choice in pump solutions, so we sell only high-quality products. Leading products in our range include Hidrostral screw-centrifugal pumps manufactured in Switzerland and robust Grindex submersible pumps. For more complex problems Eekels comes up with solutions itself. This has resulted, among other things, in the Betsy diesel motor pump and the extra-low-noise wellpoint dewatering pump.

Betsy

The Betsy is an extremely quiet and dry self-priming screw-centrifugal pump. The low-noise Betsy has extremely low fuel consumption thanks to the use of a high efficiency pump and an advanced electronic vacuum system.

Versatile application

The pumps that Eekels supplies have a wide range of applications. For example, our pumps are used by the public sector in sewage pumping stations, in civil engineering and at sewage treatment works. A lot of projects are carried out by Eekels on a turnkey basis for both contractors and industry, such as food production, the chemical industry, waste processing and the energy sector.

Internationally deployable

Eekels has locations in the Netherlands and Belgium, but we also supply our products to other countries. We have experience in exporting to countries in Asia, North America, Commonwealth and Europe. So wherever you are in the world, you are guaranteed of Eekels pump solutions.

The advantages of buying from us:

- Almost 100 years of experience in pump solutions.
- Our own development department and production facility.
- A wealth of experience with problems involving the public sector, contractors and industry.
- Turnkey projects.
- Internationally deployable via a global network.
- Reputable brands in our range.
- A lot of pumps can be supplied ex stock.



Rental



We always give you the best possible service and we continually check that this is the case.

Rental

A lot of projects require temporary pump solutions, which is where Eekels' extensive rental service comes in. Thanks to our wealth of experience, we know exactly which pump is suitable for your situation. And if you rent from us, you get a lot more than just a pump.

Eekels provides thorough know-how, service and a wide range of accessories which are accessible through our extensive European dealers network. Thus, we are able to meet all your needs wherever you might be.

Large rental fleet and comprehensive services

Eekels has a modern rental fleet of over 800 pumps. Our consultants will help you to choose the best pump for your project. We also rent out all the necessary accessories such as generators, pipes and fully automatic controls. And if you want to contract out the entire pump problem, you've come to the right place. We will discuss your wishes and expectations with you and ensure that the whole project is taken care of from start to finish, including assembly, crane work, transport, and so on.

Innovation

Ongoing investment in research and development means that we can respond to our customers' specific demands in every field. We also constantly update our rental fleet with pumps that have been built and constructed in accordance with the latest technology.

The advantages of hiring from us:

- Almost 100 years of experience in pump solutions.
- Modern rental fleet of 800 pumps.
- Wealth of experience with applications for the public sector, contractors and industry.
- Turnkey projects including all the pipework, power supplies and assembly /dismantling.
- Internationally deployable, both onshore and offshore.
- Our own locations in The Netherlands and Belgium.



Service & Repair



“We prove that we are worthy of your trust throughout our contact with you.”

Service & Repair

Even the best systems need repairs and maintenance. Our wealth of experience enables us to unfailingly track down the causes of and solve your problems.

Maintenance contracts

Careful, regular maintenance of your pumps and pump systems saves money in the long term. An Eekels maintenance contract therefore always pays for itself and contributes to the security and reliability of your operating process. It ensures the periodic maintenance and the functioning of your pumps. Our exclusive representation guarantees the use of original parts. Accurate status reports ensure that you are kept up to date.

24-hour service

If a problem should occur unexpectedly, feel free to contact us immediately. We are on hand 24 hours a day, 7 days a week.

The advantages of our service:

- We provide a maintenance and repair service, either on site or in one of our workshops.
- Eekels handles health, safety and the environment in a responsible manner. This is evidenced by our Health, Safety and Environment-certification (HSE/VCA).
- A maintenance contract provides security and additional benefits.
- We use original pump parts.
- Our expert service engineers are on the scene quickly, as they are deployable from various locations.
- We are contactable and will respond 24 hours a day 7 days a week.
- Eekels uses the most advanced equipment, such as laser alignment equipment and digital pressure differential meters.



Deliveries and contact

We supply and install pumps and accessories to suit your individual requirements, wherever and whenever it suits you. If you want to carry out the installation yourself, feel free. Would you like further details? Then contact our consultants at the location of your choice.





14

Pump solutions & Projects



Pump solutions & Projects

Turnkey solutions

Eekels loves a challenge. The public sector, contractors and industry all have wide-ranging requirements and complex problems. We use our flexibility and our years of experience to turn your challenges into successes.

Regardless of what the problem is, Eekels comes up with a total solution - from the inventory of the project requirements and the technical engineering to the implementation. We are familiar with and understand every possible situation, ranging from pump controls and environmental problems to 24-hour service. We pay attention to quality, efficiency and durability.

Pioneering

Eekels provides expert support in complicated projects across national borders. We use the specific know-how and experience of our international network of partner companies. So, wherever you are in the world, you are guaranteed a high-quality solution to your problem.

Tailor-made

Eekels analyses your situation and comes up with a fitting solution. We do our best for you and guarantee a fast, professional and tailor-made solution - for every situation.

Total solution

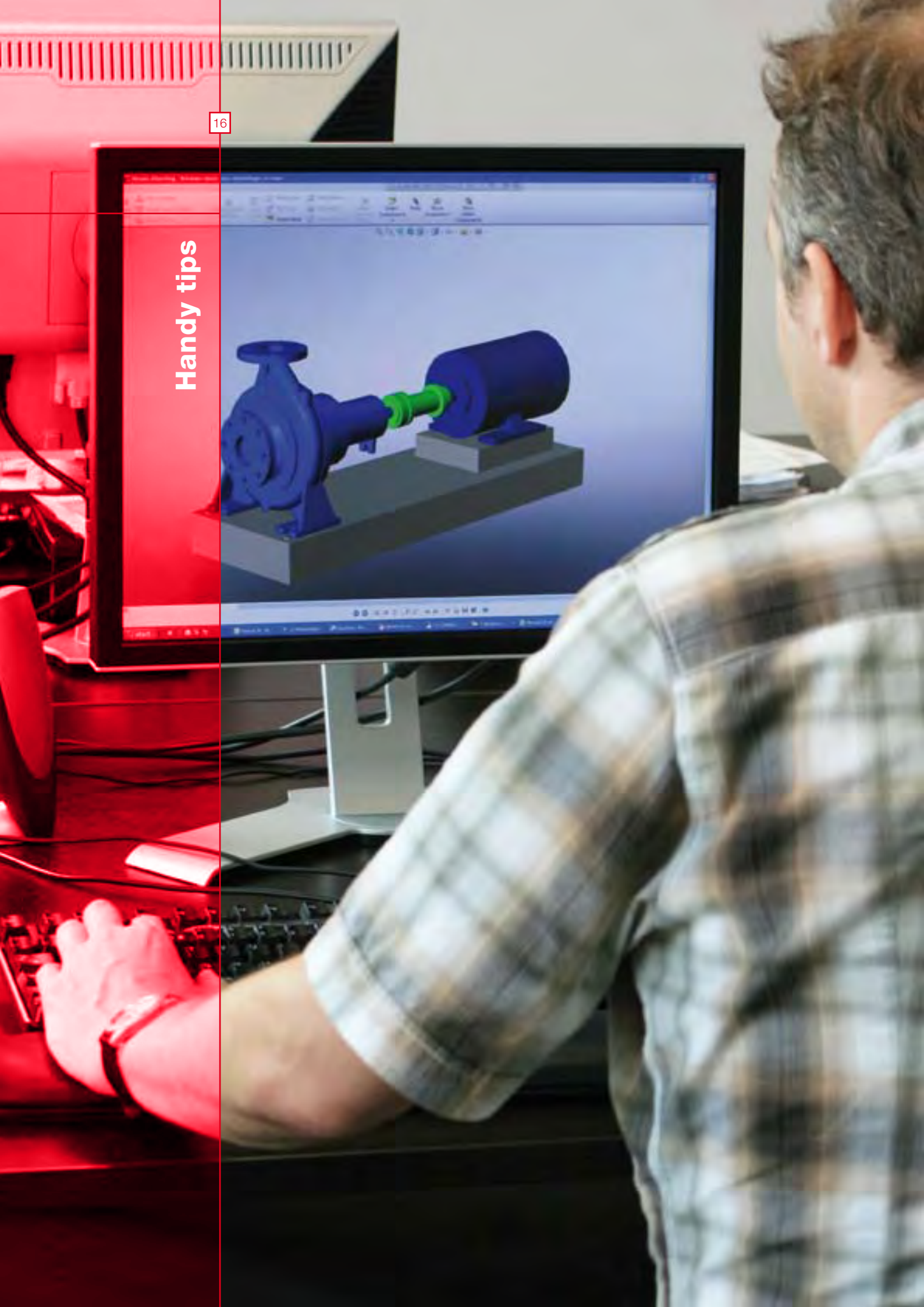
Our expertise and innovative skills help you with complex projects, throughout the world and in every possible conceivable situation and field. Our experts install and test on site and when your own installation is up and running we can also handle your periodic maintenance. You are guaranteed a total solution for your entire project, which enables you to concentrate on your core business. We do the rest.

The advantages of buying from us:

- Complete pump installations (straightforward or complex).
- Including pipes and accessories.
- Complete engineering, support and implementation.
- Including temporary power supply (generators) if required.
- Including access to our 24-hour service department.
- Periodic inspection and maintenance.
- Periodic refuelling on site.
- Secondment of personnel to your site.



Handy tips



Handy tips

The right pump

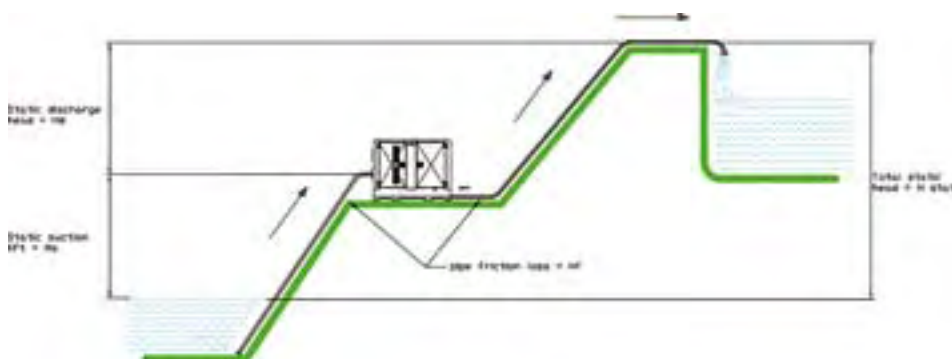
The pump is the heart of every installation, so it is important that you use the right pump for the right application. A properly selected pump that is the right size for the job saves problems and money, for example in product continuity, effectiveness and efficiency. This prevents breakdowns, production losses, unnecessary wear or too small yield. Therefore it is necessary to find out what criteria a pump has to meet, which is why our experts are here for you: Eekels helps and advises you, and provides a huge amount of technical expertise.

How to choose the right pump

In order to select the right pump for a certain job we have to know not only the capacity but also the required head (pressure) that a pump should produce. As the use of a pump often involves a certain suction lift and delivery pressure, we use the following terms:

Hs =	vertical static suction lift in m
Hd =	vertical static discharge head in m
Hf =	pipe friction loss in m
Hman =	manometric head that can be read from the manometers at the pump suction and pressure connection.

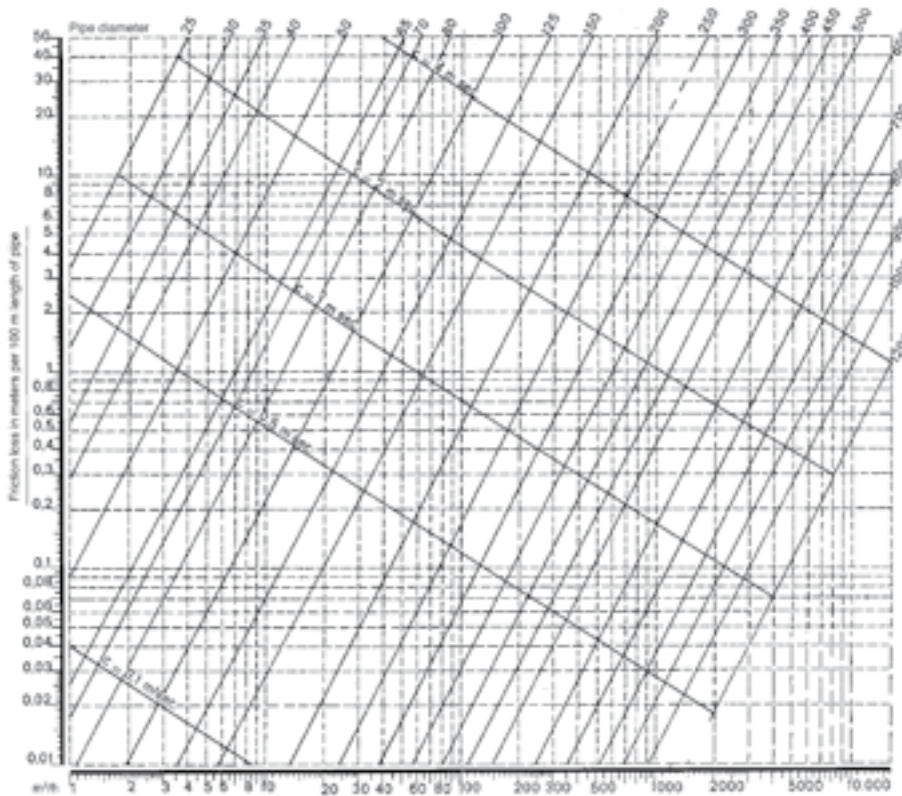
In practice, we measure the vertical height difference between the liquid level at the suction side and the end of the pressure connection, expressed in m (= Hstat). This height difference, added to the pipe resistance (= Hf expressed in m, produces Hman in m (see figure below).



Handy tips



The pipe resistance (H_f) can be read from the below pipe resistance table. This gives the relationship between the amount of liquid that flows through a pipe, the diameter of this pipe and the resistance that the liquid meets in this pipe, expressed in m.



Handy pump formulas

Power consumption at the pump shaft with non-viscous liquids

$$P = \frac{Q \text{ (m}^3/\text{hour)} \times H_{man} \text{ (m)} \times sg}{3.67 \times \text{efficiency (\%)}} \text{ kW}$$

Fuel consumption of a diesel engine = approx. 0.27 liter / kW per hour
= approx. 0.2 liter / pk per hour

Contents of a pipe $\frac{(\varnothing \text{ in cm})^2 \times \pi}{40} = \text{ltr / mtr pipe}$

Surface area of a pipe $\frac{(\varnothing \text{ in cm})^2 \times \pi}{4} = \text{cm}^2$

Speed (V) in a pipe $\frac{Q}{\text{surface area of pipe (m}^2) \times 3600} = \text{m/sec}$

Change of capacity (Q), head (H) and power (P) at a different speed (n)

$$Q_2 = Q_1 \times \left(\frac{n_2}{n_1}\right) \quad H_2 = H_1 \times \left(\frac{n_2}{n_1}\right)^2 \quad P_2 = P_1 \times \left(\frac{n_2}{n_1}\right)^3$$

$$\pi = 3,14$$



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