

**MegaCPK. A new era starts here.**



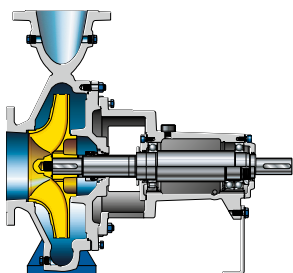
A landscape photograph capturing a sunset or sunrise scene. The sun is a bright, glowing orb on the horizon, casting a long, shimmering reflection across the calm water in the foreground. To the left, a dark silhouette of a factory or industrial building is visible, with a plume of white smoke or steam rising from it into the sky. The sky is a mix of deep blue at the top and lighter, hazy tones near the horizon. The overall mood is serene yet carries a subtle message of industrial impact on nature.

A new era starts here.

## MegaCPK – the best standardised chemical pump in its class.



With continuous research and investments, we have developed a totally new generation of products. A milestone in KSB's history and the dawn of a new era focused on quality, efficiency, safety and reliability – product benefits available in one package, worldwide.



### MegaCPK – a new global product generation.

As a leading global supplier of pumps, valves and systems, KSB not only stands for top quality, reliability and global responsibility, but above all for technological innovations. Our employees and products reflect those values.

The new standardised chemical pump MegaCPK is the natural further development of our internationally successful CPK, CPKN and Megachem type series. It is a truly innovative product offering many different features of first-class quality, which combine to make this pump unique.

#### Your customer benefits

- Maximum operating reliability
- Outstanding efficiency from improved hydraulic systems
- Optimum energy efficiency
- Unrivalled price/performance ratio
- Global availability



## Energy efficiency at its best.

Achieving energy efficiency is a social responsibility worldwide – and one to which KSB rises, setting new standards every time. Our skills in this area make a major contribution to environmental protection. MegaCPK is a particularly powerful standardised pump destined for the chemical and petrochemical industry, and many other fields of application. The optimised design of its hydraulic components sets new standards in energy efficiency.



**Outstanding hydraulic system.**

We have optimised the hydraulic components and characteristics to achieve maximum efficiency and make pump operation more efficient and reliable. This and numerous other features put MegaCPK ahead of its field – not only today, but also for many years to come.

Trimming the impeller of each MegaCPK, for example, to match individual customer or plant requirements is all part of the KSB offer. We reduce the outside diameter of the impeller until pump output exactly matches the required value, cutting energy consumption by up to 10 %.

Highly efficient drives, another standard feature of KSB products, significantly contribute to excellent overall efficiency.

**Benefit from further measures for energy efficiency.**

MegaCPK operators can also use PumpDrive. This variable-speed system cuts energy needs by up to 60 %, and not only ensures energy-efficient but also smooth operation with little wear.

For full transparency of pump operation, the pump is also available with PumpMeter. This system indicates how efficiently MegaCPK is running, and how you can save even more energy.





## **MegaCPK – versatile and flexible.**

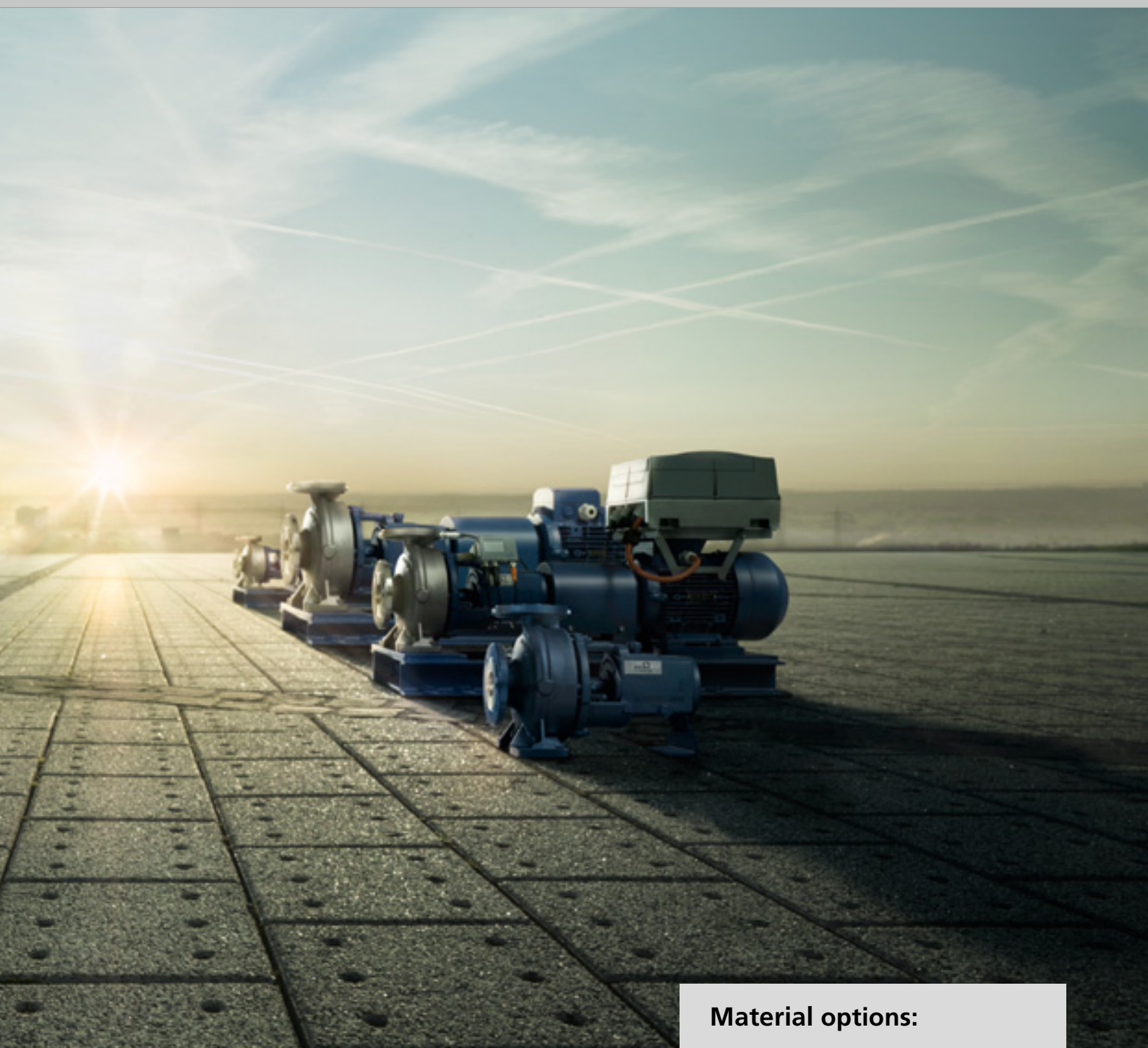
Our new MegaCPK is a standardised chemical pump based on a comprehensive modular design system. It can be supplied in different materials, and offers optimum efficiencies as well as excellent NPSH values.

MegaCPK is available with various shaft seals, impeller and casing types, as well as in a large number of different materials. This array of options, optimised features and the adjustability to local conditions allow us to truly meet your plant's individual needs precisely.



## **A huge range of applications.**

Many years of experience in developing and designing pumps have enabled KSB's international team of experts to optimise MegaCPK in many ways. This standardised pump offers particular flexibility and suitability for numerous applications, and can be easily adapted to local conditions. This makes the pump safer, more reliable and efficient which, in turn, saves energy costs and helps to conserve resources.



## Satisfies individual requirements.

As well as a large number of sizes, the pump is also available in many materials. This extensive range makes MegaCPK a particularly versatile pump for numerous applications. KSB additionally offers a great choice of seals, further promoting flexibility and suitability for various processes.

### Material options:

Grey cast iron: JL1040/A48CL35

Cast steel: GP240GH+N/A216GrWCB

Stainless steel: 1.4408/A743GrCD4MCuN

Duplex steel: 1.4593/1.4517/A995GrCD4MCuN

Special materials





## Maximum operating reliability – day after day.

For 140 years, we've put safety and reliability first when developing and operating our pumps, valves and systems. Our goal is trouble-free running of our products for a particularly long time. This skill and experience are embodied in our MegaCPK.

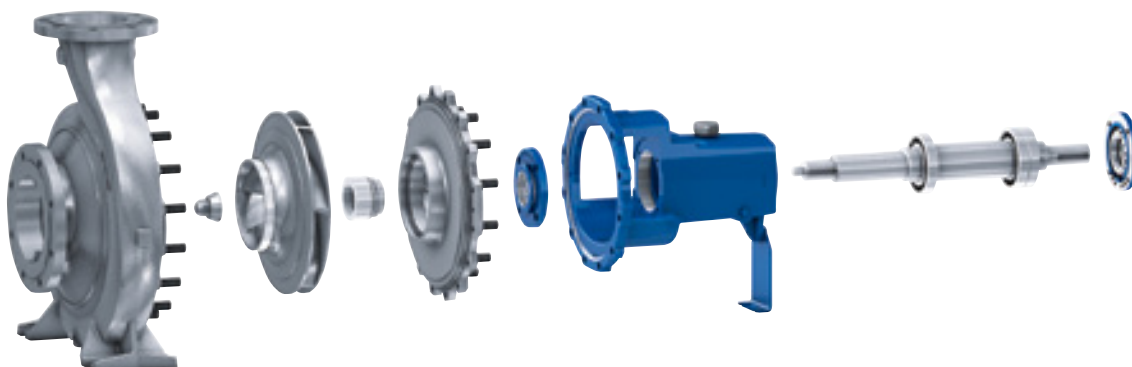
We used finite element analysis (FEM), one of the most modern calculation methods for structural simulation, to optimise the pump still further: MegaCPK is more rigid, offers exemplary hydraulic characteristics and generates only minimal axial thrust.

In addition, our engineers paid particular attention to a low NPSH value (Net Positive Suction Head). The risk of cavitation is reduced while the pump runs more smoothly and stably so that availability increases. This ensures not only the pumps' reliability, but also the value of your investment.



#### Take advantage of state-of-the-art technology

- Optimised single-piece bearing bracket
- Excellent thrust balancing
- Heating/cooling jacket for the most demanding fluids
- Fully confined casing gasket and metal-to-metal contact
- Easy-to-service mechanical seals
- Improved pressure/temperature range of our stainless steel models



#### Total convenience throughout the life cycle.

When designing the MegaCPK, we applied a simple principle: the fewer components are used and the more robust they are, the easier the pump can be serviced.

So the back pull-out unit is always a one-piece component, and the cover on all sizes is equipped with forcing screws for dismantling – two features that make the MegaCPK particularly easy to service.

We also enlarged the conical seal chamber, which reduces wear when handling aggressive fluids and improves the venting of fluids that contain gas.

## Teaming up for tomorrow.

KSB has always seen itself as a partner to its customers. This means understanding their requirements and needs, and reflecting those in our products and services. As well as top quality, we also provide real value for money.

### Here are some examples of what that means in practice:

- The optimum operating point can sometimes simply be achieved with a smaller pump size
- We reduced the number of parts, so MegaCPK is particularly reliable and easy to service
- MegaCPK offers a higher maximum flow rate
- We optimised many features of the pump for energy efficiency
- The pump can be excellently matched to local conditions
- Modular design equips the pump for an extraordinary range of applications

The larger variety of sizes means that MegaCPK meets your individual operating conditions even better. Overall, investment costs are considerably lower. Efficient and cost-effective operation over the entire life cycle enables further significant savings.



## Global standards and commitment.

The new and globally uniform MegaCPK standards are an advantage bringing you major benefits. Our tight-knit worldwide sales and service network ensures short delivery times, and all our production sites work to the same excellent technical and quality level – a symbol of KSB's commitment to its worldwide customers.

Local adaptability is just as important. As a globally operating company, KSB has sites on most continents and detailed knowledge of each region's requirements. Your KSB consultant can adjust your pumps and accessories quickly, easily and safely. So your MegaCPK pump exactly matches your individual requirements – in an optimum overall package.



### Standardised Chemical Pump:

#### Standardised Chemical Pump

to EN 22858/ISO 2858/ISO 5199 and  
Directive 94/9/EC (ATEX)

#### Material options

Grey cast iron: JL 1040/A48CL35

Cast steel: GP240GH+N/A216GrWCB

Stainless steel: 1.4408/A743CF8M

Duplex steel: 1.4593/1.4517 / A995 CD4MCuN

Special materials

#### Technical data

Flow rate                      Up to 1160 m³/h (50 Hz)  
                                      Up to 1400 m³/h (60 Hz)

Head                            Up to 162 m (50 Hz)  
                                      Up to 233 m (60 Hz)

Operating temperature    -40 °C to +400 °C

Operating pressure        Up to 25 bar

### Applications:

For handling aggressive organic and inorganic fluids in the following industries and processes:

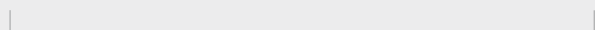
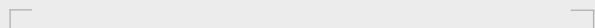
- Chemical industry
- Petrochemical industry
- Process engineering
- Sugar industry
- Biodiesel, bioethanol
- Fire-fighting systems/water
- Seawater desalination/reverse osmosis
- Condensate
- Hot water
- Brine
- Steel industry
- Heat transfer media
- Cleaning agents

### Your benefits at a glance:

- Top worldwide quality standard
- Flexibly adaptable to local conditions
- Short distances and delivery times



Your local KSB representative:



More space for solutions.



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