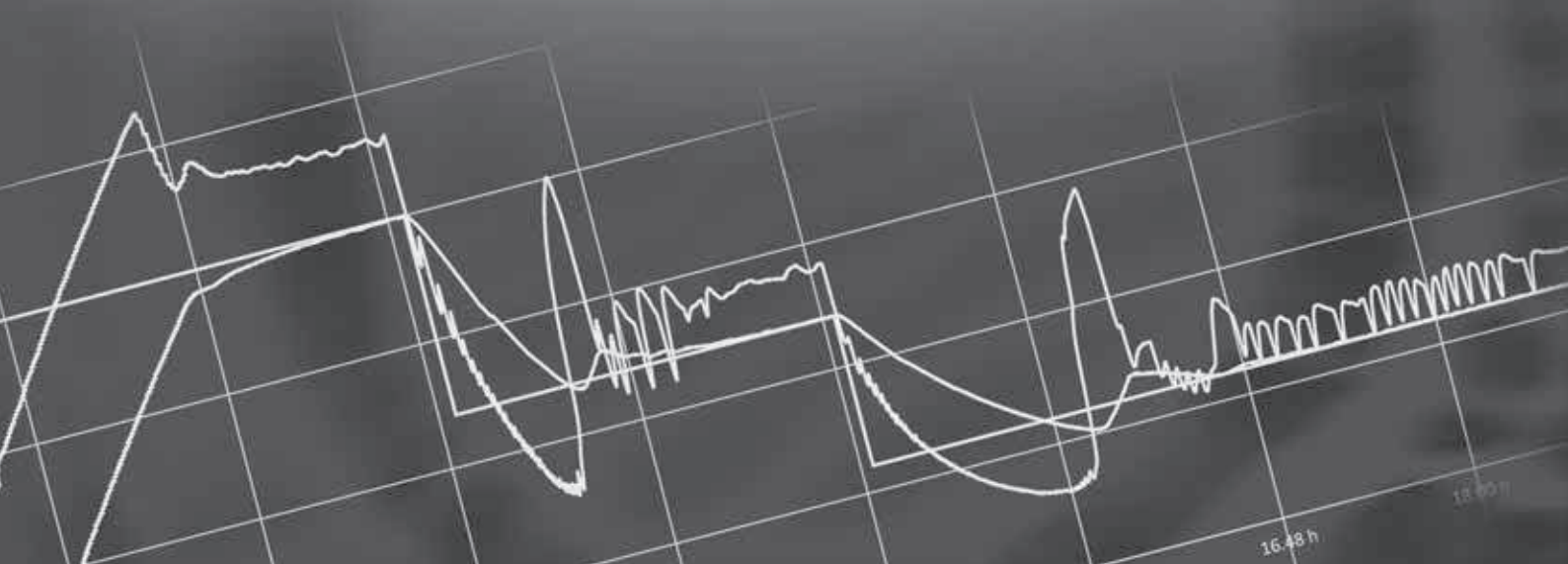


**premix**<sup>®</sup>  
high end reactor solutions



# *Our goal is absolute precision*

## *About premex<sup>®</sup> high end reactor solutions*

*We design, build and develop for the full spectrum of pressure reactor technologies, for example:*

- *Laboratory reactors*
- *Process-controlled reactors*
- *Fixed-bed reactors*
- *Parallel reactor systems*
- *Electronic control units*

*Our high-pressure reactors are characterised by the high machining quality of the components used. Excellent operational qualities are the result of well thought out detail solutions. Our modular reactors are manufactured in stainless steel or high-alloy special steels.*

*Our high-pressure reactors are available in sizes from 0.06 l to around 200 l. Depending on the volume, versions are available for applications up to 350 bar and 350°C. We design application-specific high-pressure reactors for higher temperature/pressure ranges.*

*We develop, design and manufacture magnetic stirrer couplings and magnetic agitator drives for virtually every application for our high-pressure reactors. In addition to our standard range, here magnetic stirrer systems are also already in use up to 600°C.*

*We supply both simple control devices as well as complex industrial process control cabinets to control and regulate our high-pressure reactors.*

# *Our design will meet **your** challenge*

## **Reactor competence**

*Through more than 50 years of reactor construction, Premex® has a huge amount of experience and deep knowledge. After a design consultation meeting and information exchange with our customer, we are therefore able to produce high-performance high-pressure reactors and magnetic agitator drives for almost every application.*

*Especially in the field of custom-made products we have verifiable references.*





# *Your partner for R & D **high pressure-** reactors*

## ***Areas of application***

*Users of the Premex® high-pressure reactors include secondary schools, universities, petrochemical, pharma/chemical/coatings/ and paint industries. Applications include hydrothermal synthesis, catalyst development and screening, macromolecular chemistry, hydrations and many more.*

*Contact us, we will find the optimal solution for you.*



# Examples of our *wide* product range

## *High-pressure reactors*

*With varied solutions for research and development we are your competent partner for research departments of companies and universities.*



# Examples of our *wide* product range

## *High-pressure reactors*

*With the "cobalt"-combi-glass reactor we focused on a smooth-running hydraulic lifting device that features crank gearing.*

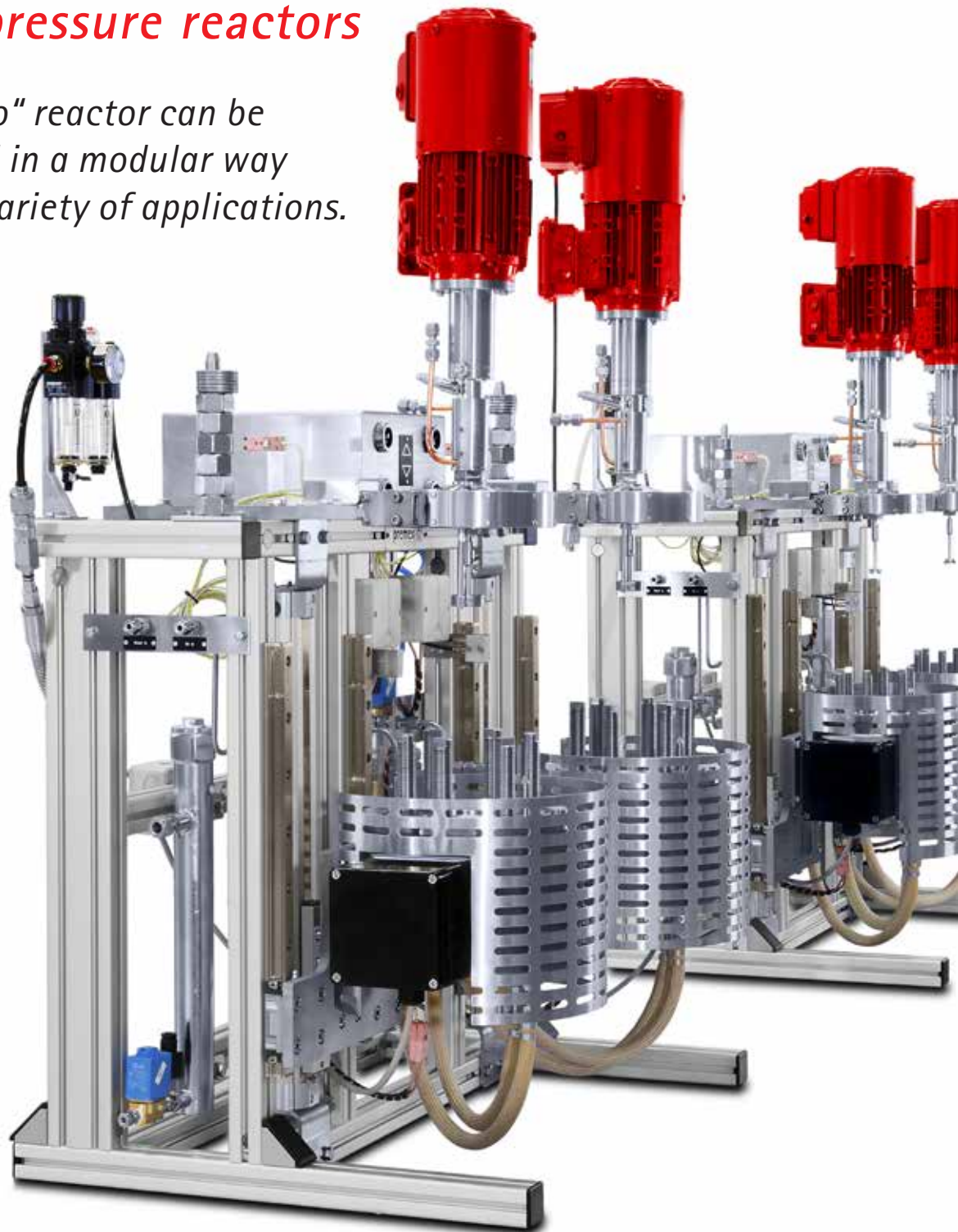




# Examples of our *wide* product range

## *High-pressure reactors*

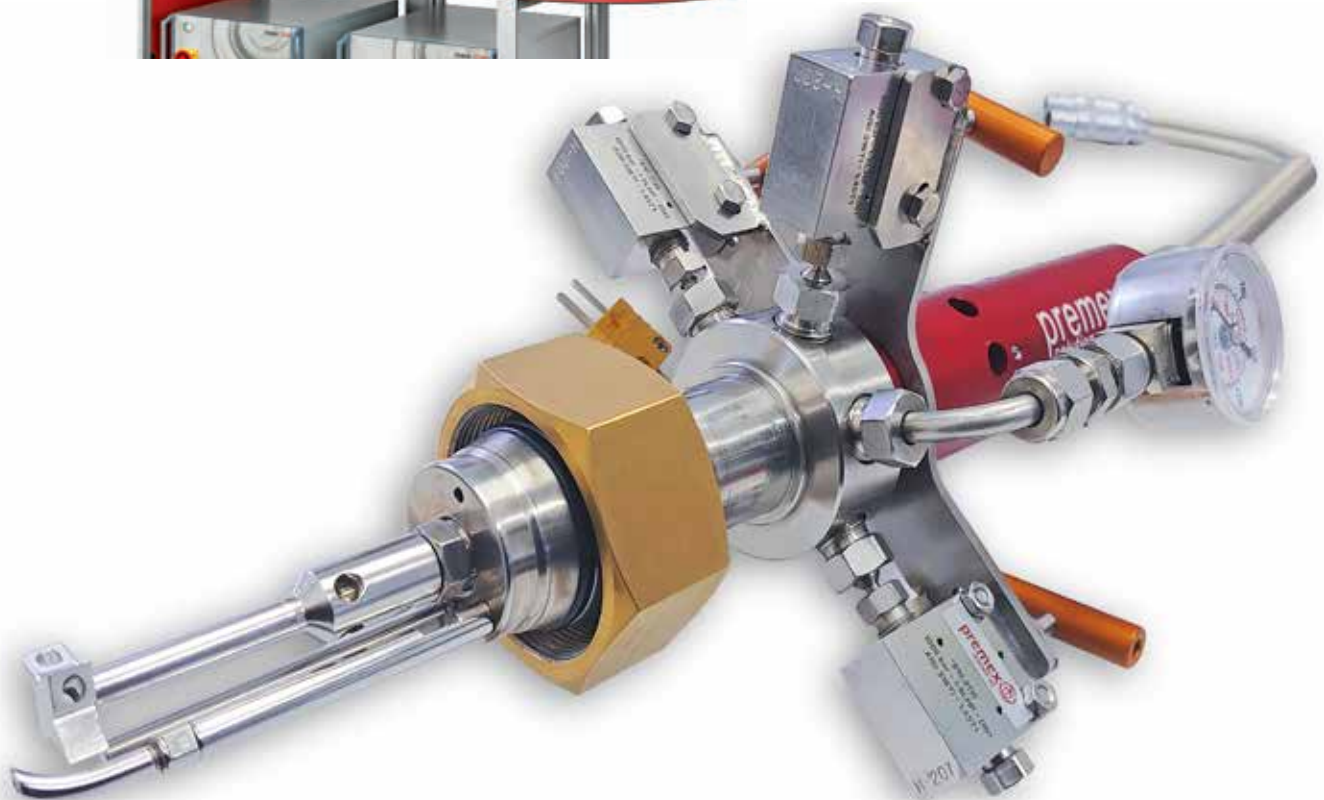
*The "pinto" reactor can be expanded in a modular way to meet variety of applications.*



# Examples of our *wide* product range

## *Magnetic stirrer drives*

*In addition to our standard program we develop, design and produce a wide variety of magnetic stirrer drives or magnetic stirrer couplings.*





# Examples of our **wide** product range

## **Magnetic stirrer drives**

*Our latest development is our compact and powerful magnetic stirrer called "intromic". It can be used for glass apparatuses under vacuum or without pressure and for high-pressure reactors up to 700 bars in laboratory and technological scale. On the right side you see one of our standard magnetic stirrer couplings called "andorra".*



# Examples of our **wide** product range

## **Electronic control units**

*Our so called "Ordino" family of control units has been expanded to include the new CS320 controller, a stand-alone controller for standard reactors. It allows the control of autoclave without a computer application required.*



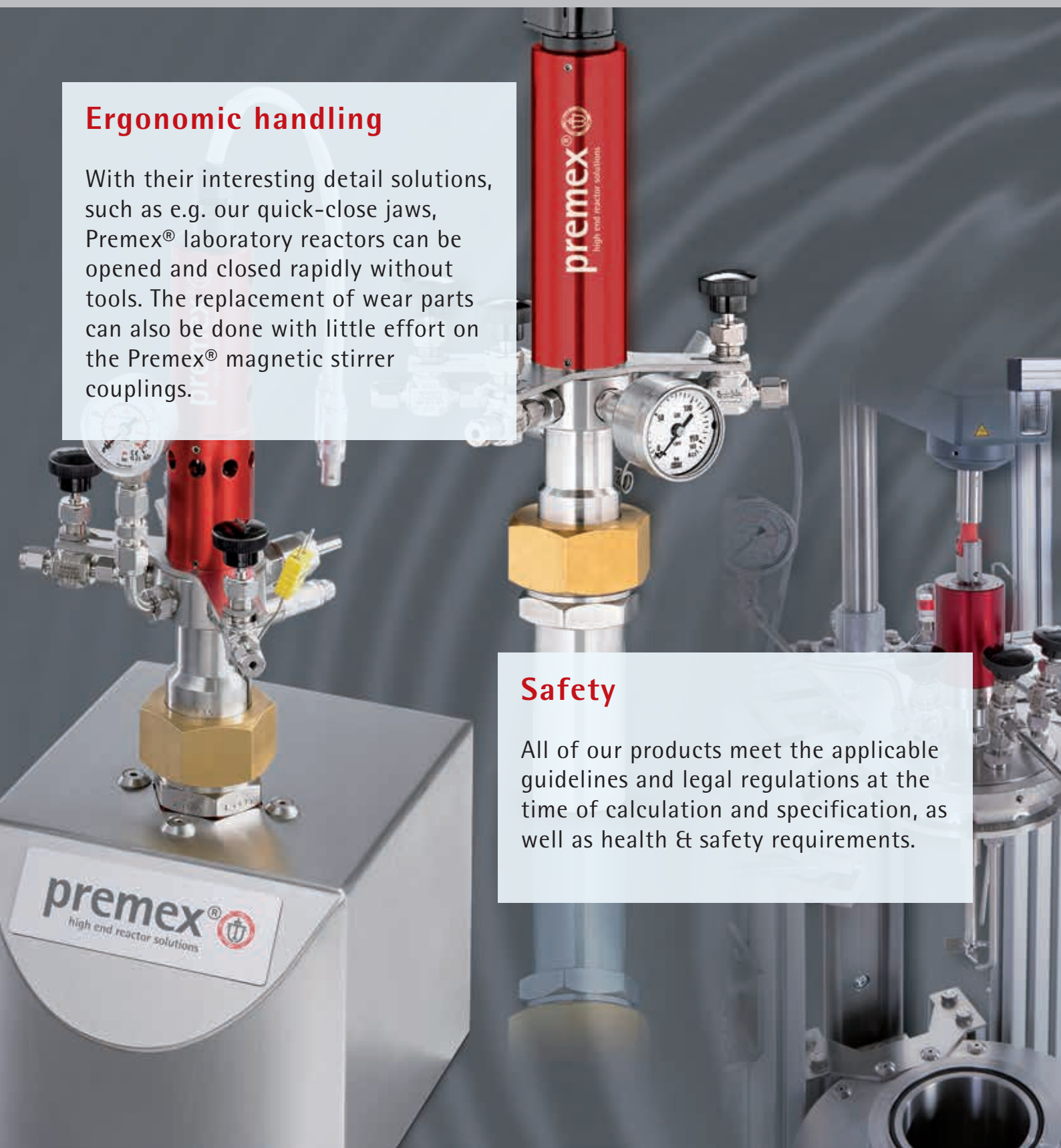
# Advantages of our *customer-specific* solutions

## Ergonomic handling

With their interesting detail solutions, such as e.g. our quick-close jaws, Premex® laboratory reactors can be opened and closed rapidly without tools. The replacement of wear parts can also be done with little effort on the Premex® magnetic stirrer couplings.

## Safety

All of our products meet the applicable guidelines and legal regulations at the time of calculation and specification, as well as health & safety requirements.





## Selected materials

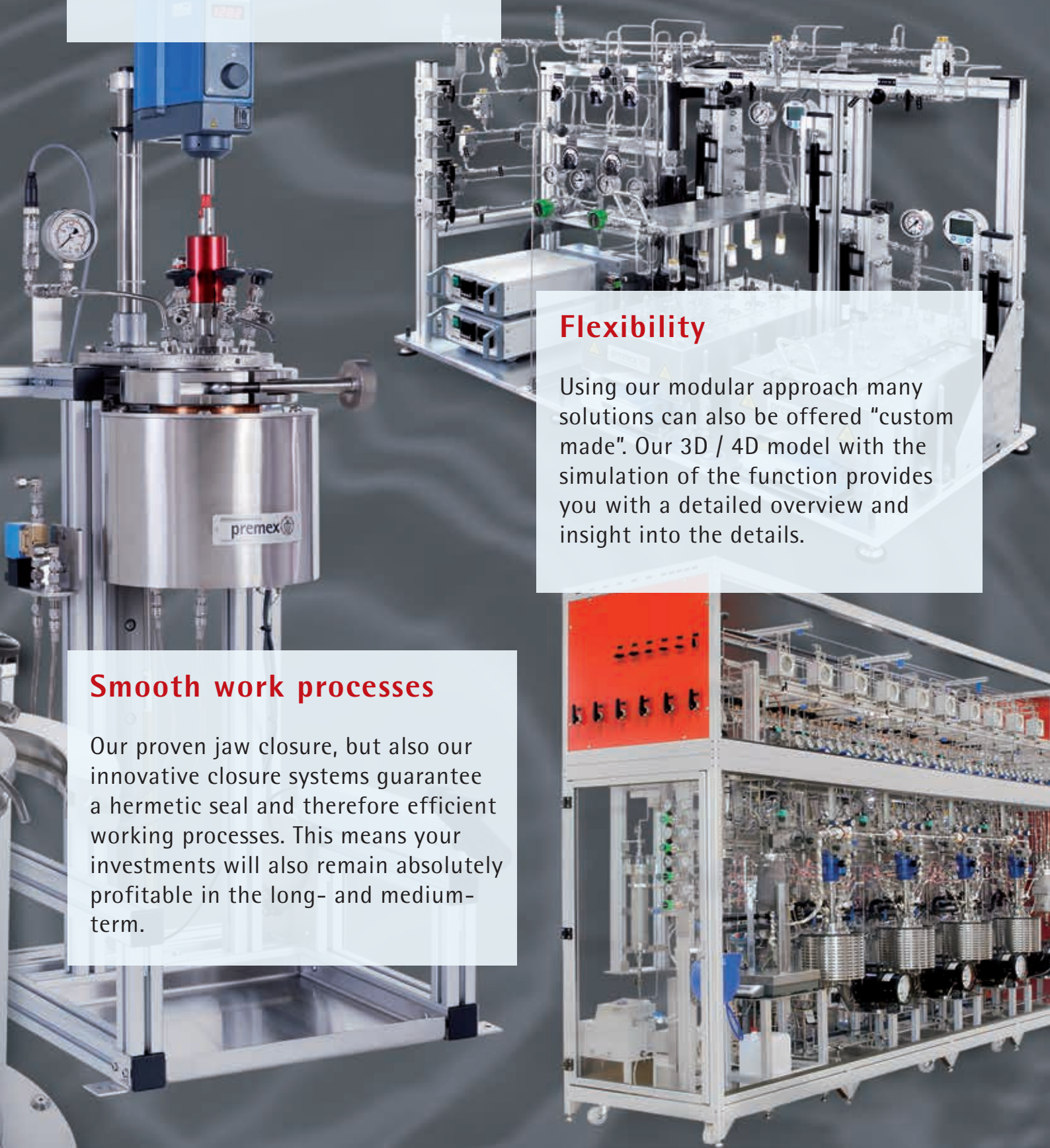
Depending on the desired application area, in addition to stainless steel, we also use high-alloy steels such as Hastelloy® C22, C276, as well as high-temperature steels and titanium, zirconium etc.

## Flexibility

Using our modular approach many solutions can also be offered "custom made". Our 3D / 4D model with the simulation of the function provides you with a detailed overview and insight into the details.

## Smooth work processes

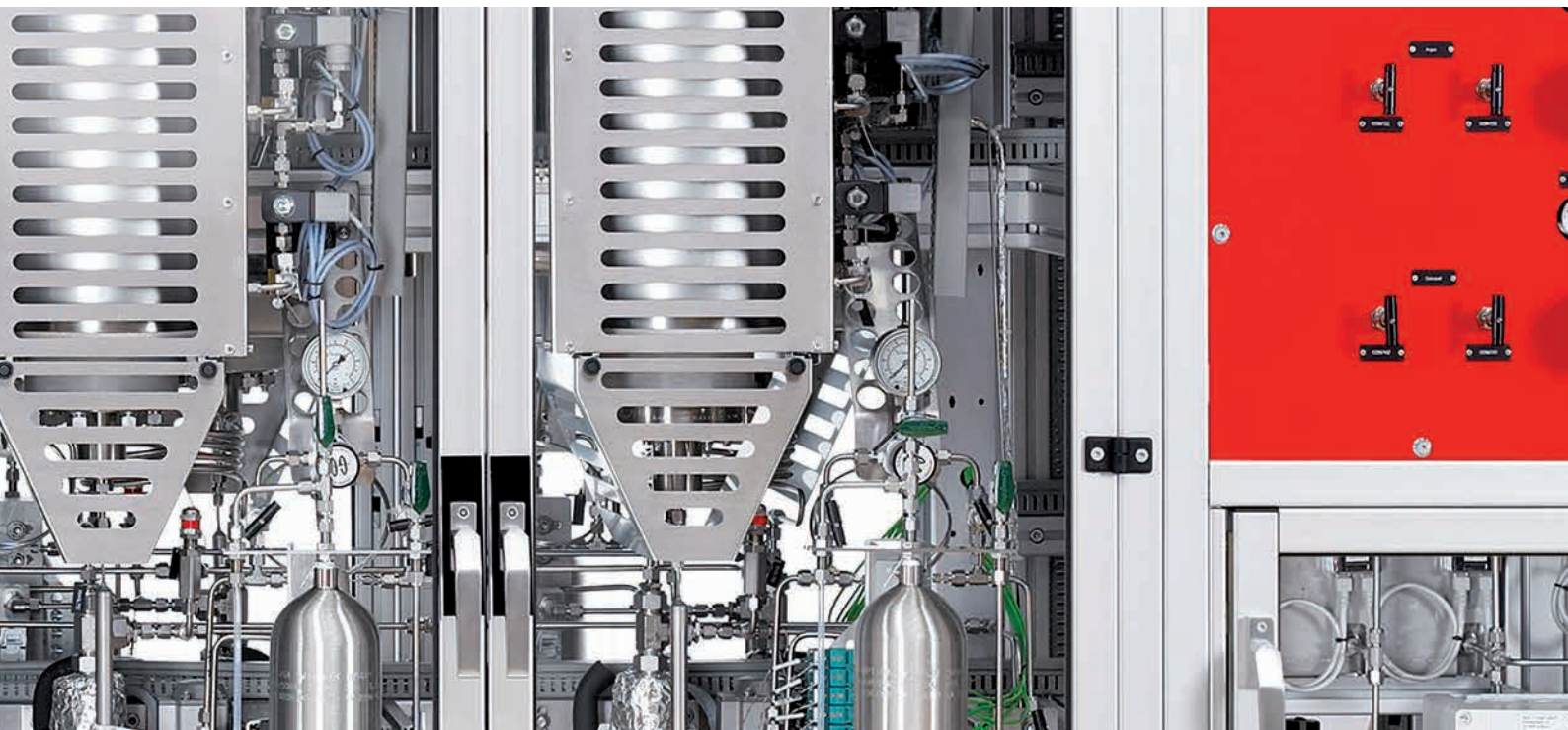
Our proven jaw closure, but also our innovative closure systems guarantee a hermetic seal and therefore efficient working processes. This means your investments will also remain absolutely profitable in the long- and medium-term.



# Your success is *our* success too

## *Performance ist our passion*

*Many references show: From development through the final solution, Premex® has been and remains a reliable and proven partner for research and industry. Many of our products are still running without any problems many years later, thereby guaranteeing profitable investments for you.*





# We are ready for *your* success

Contact us, we will answer your questions promptly and answer competently.



*Bernd Hartmann*  
Technical Service & Sales

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