



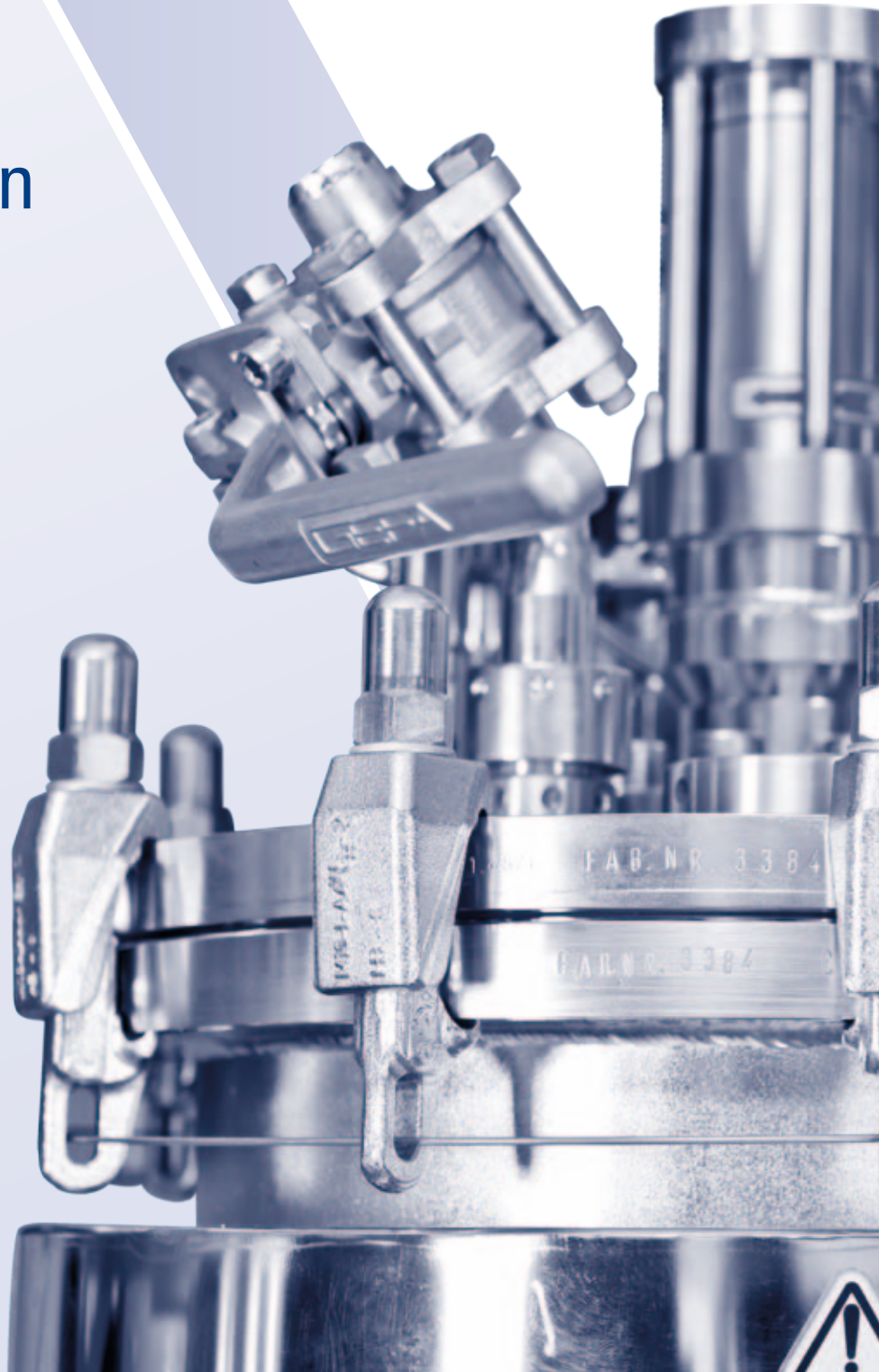
# JUCHHEIM

Laborgeräte GmbH

since 1927

Individual design  
and modular  
reaction vessel  
construction

for pressure  
and vacuum



## Modular vessel construction with tradition

For research, development, and production in the laboratory, reaction vessels with a volume of millilitres to 150 litres within the pressure range from vacuum to 150 bar, at operating temperatures of -80 °C to 400 °C are required.

The company Juchheim has nearly 90 years of experience in planning, designing and manufacturing this equipment. Because of our expertise and many years of experience in the field of producing reaction vessels and their accessories, we can respond to and meet your individual needs. Our modular design and construction is the ideal foundation for high-quality, personalised solutions that bring solid pricing and reliability to a common denominator.



TÜV approval for the manufacture of pressure vessels from various materials is issued. In accordance with the GMP standard for the pharmaceutical and food industries, we have experience in the production of containers.

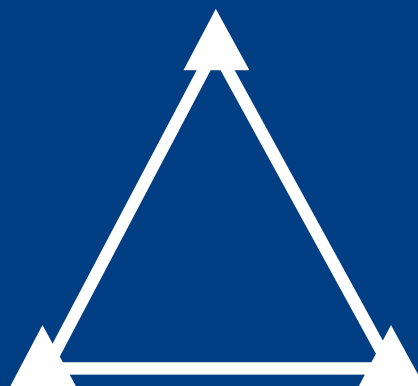
We are specialised in manufacturing vessels with a total capacity ranging from 0.5 litres to 128 litres in the following areas of application:

- Vacuum up to 10<sup>-4</sup> bar
- Pressure up to 150 bar
- Temperature from -80 °C to 400 °C

The main components of a completed plant are:

- **Reaction vessel with accessories**  
stirrer heads and stirrers, connections, drains
- **Additional devices**  
drive systems, lifting platforms, gas collecting mains, coolers, condensers
- **Temperature controllers**  
heating circulators, coolers, valves and controllers

Competence and years of experience  
in manufacturing lab resources and equipment  
and designing and constructing individual  
reaction vessels to whole plants



Designing and manufacturing  
according to individual needs

Consistent quality assurance  
and professional advice



# Committed to quality

The quality of our products is our top priority. In order to ensure constantly high-quality production of our standard laboratory equipment and our reaction kettle-special, we let TÜV Rheinland continuously certify our production plants.

By working closely with independent businesses which have years of experience in quality control, we can guarantee you consistent quality.



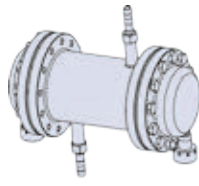
# Individual reaction vessel construction for pres

## Progress through modular design

The requirements of our customers for the reaction vessels are as varied as the respective processes which are carried out in them. In recent decades, we have developed a modular system with standardised connection components, in order to economically implement individual solutions. This greatly simplifies the design and construction of our custom-made products.

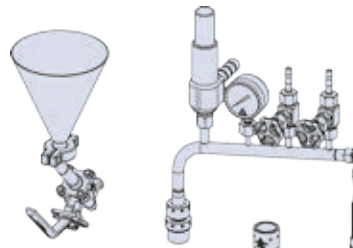
With the various interchangeable connecting components (such as Liebig condensers, tube condensers and various pipe systems), it is economically feasible not only to create the initial reaction vessel, but also to extend, modify or upgrade it. In most cases, quick and inexpensive delivery of the required parts is possible due to our wide range of standard components. Of course, any special requests are realised on arrangement.

Contact us!



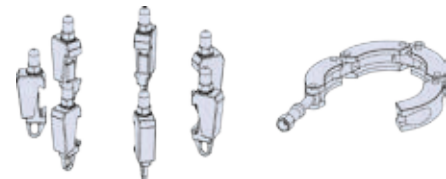
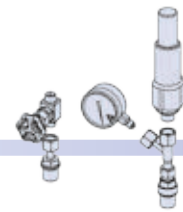
### Distillation units

- Tube condenser
- Liebig condenser



### Cover port

- Funnel
- Distributors
- NS sockets
- Thermometer sockets



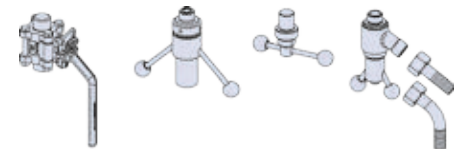
### Locking systems

- Hexagonal bolts
- Pressure clamps
- Quick release chain



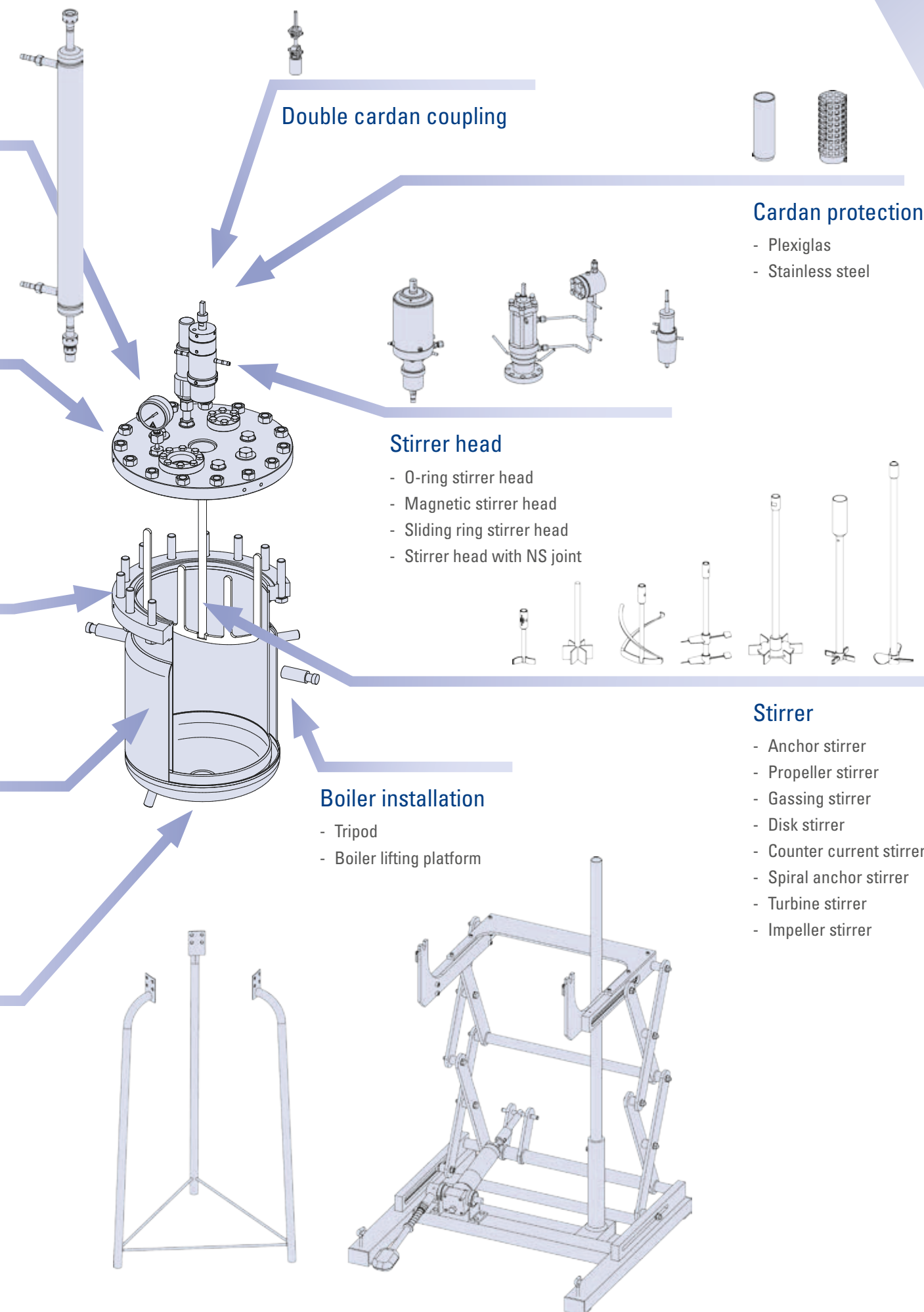
### Lateral sight glasses

- Round
- Elongated



### Drain:

- Ball valve
- Straight drain valve
- Tommy screw
- Oblique drain valve
- Straight olive connection
- Curved olive connection



# From the flow chart to the finished plant

## Tell us your requirements

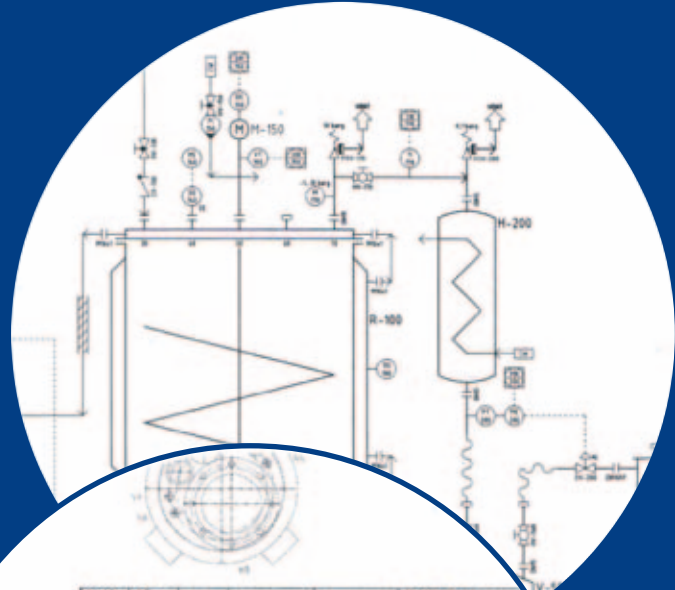
In the laboratory or in a technical centre, and according to customer requirements, we manufacture chemical-technical test facilities (pilot plants) with reaction volumes from millilitres to 150 litres, and which are made of stainless steel and special alloys, e.g. for polymerisation, melting, stirring, etc.

A pilot plant is used for data acquisition, and the optimisation and acquisition of technical experience in chemical processing, in order to subsequently produce the perfect product (scale up) in the industrial plants in series.

**Send us your technical specification or your R&I flow chart.**

Owing to our experience for many years, we have a large database including a wide variety of pressure and vacuum vessels with standard components in order to plan your individual plant optimally.

We will then prepare a detailed offer.



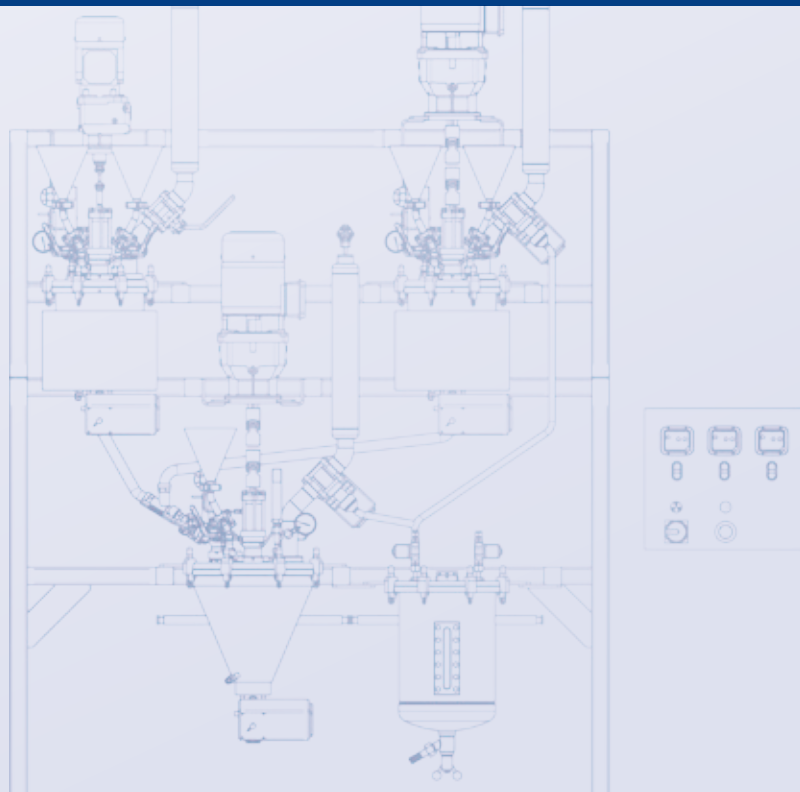
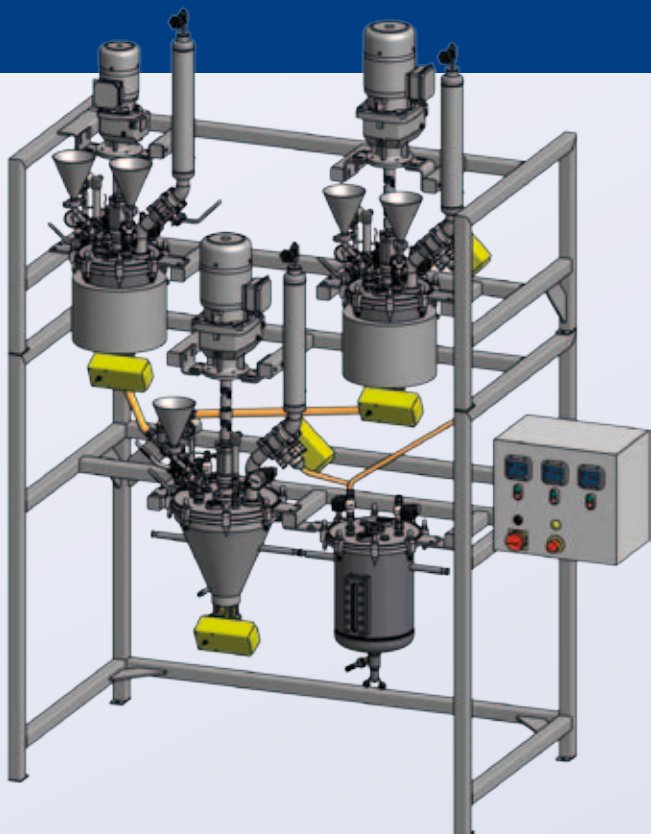
Bez.	DN	PN	DIN	Dichtfläche	Verwendung, Bemerkung
N 10	15				Bodenablass
N 9	G1/2"	228		O-Ring	Thermometerschutzrohr
N 8	40				Schauglas
N 7	15				Manometer
N 6	15				Inertgasanschluß
N 5	200	10	1092	Flachdicht.	Feststoffeintrag / Schauglas
N 4	15				Lösungsmittel
N 3	25				Abfluß
N 2	25				Sicherheitsventil
N 1					Rührwerk

**Stutzen**

Bezeichnung	Medium im Behälter	div. Pharma-Produkte	Dichte	kg
1	Medium im Heiz-/Kühlraum			
1	Ausführung des Behälters	stehend		
1	Wärmeübertragungsfläche			
1	Ausführung Mantelbeheizung			
1	Art der Aufstellung	fest installiert im Wagen		
1	Transporthilfen	Wagen		
1	Leertastanzeiger	nein		

**Werkstoff**

Werkstoff	ohne	Schiff + F. P.





Our standard laboratory equipment such as lifting platforms, laboratory burners or tripod systems can be found in our laboratory equipment catalogue.



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