

## THE FUTURE AT YOUR SIDE

# SCHRADER - globally committed

Whether it is Jakarta, Munich or Sao Paulo – thanks to our globally active network of experienced engineers we can blend cutting-edge technologies from our range of core competencies with the specific know-how located in the target region. Our international connections make it possible for us to provide our services worldwide and at the same high level of quality.

We apply our joint capabilities to meet your requirements. Our objective is to supply you with optimum functionality coupled with the highest quality, profitability and environmental compatibility. Wherever you are in the world – we are at your side.



### ENGINEERING, MANUFACTURING, IMPLEMENTATION

SCHRADER will work closely with you to create a system solution that is tailored to your exact requirements. We can offer you comprehensive engineering capability that takes into account all the relevant details, directives and regulations. Our product, manufacturing and installation expertise enables us to combine the components that we develop specifically for your task to make a holistic, customized, practically orientated plant. Together with you, we will get your installation up and running - and boost your success.

### PROCESSES AND PRODUCTION TECHNOLOGIES

Reliability, reproducible processes and security, constant quality are a matter of course for SCHRADER. We specialise in extraction technology, evaporation and vaporisation, mixing, tempering and dosing technologies and thermal separation methods.

### **ENVIRONMENTAL AWARENESS** AND RESPONSIBILITY

A conscientious approach to the use of resources is a fundamental principle at SCHRADER in view of the need to treat our environment responsibly.

In designing industrial plants, we ensure careful use of raw materials and base substances such as vegetable matter, and take recovery of solvents and such issues as wastewater reduction and energy saving fully into consideration.

### KNOW-HOW GATHERED FROM MANY SECTORS

We pool our knowledge for our three main markets, which means we are fully able to fulfil the specific requirements of these quality and production orientated manufacturing industries. Thanks to profitable synergies, we can apply our intersectoral experience to your benefit.





### **CUSTOMER-ORIENTATED AND USER FRIENDLY**

Every plant we install is a customized solution. We will be pleased to tailor your solution to meet the needs of your application. Our experienced experts will incorporate your wishes and local conditions - from operation to the efficient use of resources - in their design work for your equipment. It is your success and the satisfaction of your staff that drives us.

### INTERNATIONAL APPROACH - solutions and opportunities for our worldwide partners and customers

Whether it is producers of natural aromas and active substances, MDF board manufacturers or car manufacturers, whether in Asia, North America, Russia or Europe - SCHRADER is on-site, ready to work and with a view for the "big picture". We cooperate with a worldwide network of partners - to the complete satisfaction of our international customer base.

### SCHRADER - ACHIEVING TARGETS - THROUGH STRATEGY

SCHRADER was founded in 1969 near the town of Münster, north-west Germany. Today, the company covers the fields of process engineering, fluid technology and apparatus construction. Interdisciplinary cooperation among more than 200 employees facilitates an invaluable knowledge transfer between us and our customers worldwide, which boosts our capabilities for every single project.

SME and Made in Germany: As an ambassador of German quality, we consider our work to be a guarantee of quality and innovative commitment. We stand by our word that we will implement your requirements in a way that is fully in line with standards and functional specifications. The key to our quality is the reliability of our plants. This is a constant focal point as we work. We do not rest until you are satisfied.

## Industry-specific solutions

To make a lasting impression in terms of global competition, comprehensive, detailed knowledge coupled with reliable technologies are essential.

Only those companies with technically mature solutions will generate a sustainable competitive advantage in the market. We are your first point of contact when you need development of a high-performance plants.

Our experts work across all industries and at the highest technical standard. Customized SCHRADER concepts are characterised by high levels of efficiency that result in high profitability and productivity with efficient workflows.

## FOOD + PHARMA

SCHRADER - your partner for high-grade production plants in the natural aromas and active substances industry

Thanks to state-of-the-art extraction technology, it is possible to extract aromas and active substances efficiently for the cosmetics, food and beverage industries.

SCHRADER specialises in project engineering and the manufacture of high-grade extraction plants and will support you in creating the technological basis that will lead you to your required targets. Whether it is evaporation or rectification - we can incorporate all the upstream and downstream processes to configure your specific plant concept.



### SCHRADER - pharmaceutical substances safely extracted, manufactured and prepared

The pharmaceuticals industry insists on the highest achievable standards of quality, traceability and care. For several decades, we have been a reliable partner of this industry. Our expertise covers the full range from extraction of vegetable and animal raw materials, quantitative and qualitative formulation of pharmaceutical products using high-precision dosing through to GMP-compliant documentation and process validation.





### WOOD + PULP





### SCHRADER - your partner in environmentally aware wastewater reduction

Our innovative evaporation systems enable excellent energy-efficient wastewater treatment.

SCHRADER is your preferred contact when it comes to project engineering and manufacture of single-stage and multi-stage evaporation plants. In the case of process water evaporation in connection with MDF board manufacture, we guarantee you optimum process flows to ensure wastewater-free and residue-free water treatment.

In addition, SCHRADER has many years' experience in the evaporation of bleaching liquor in pulp production. Thanks to a highly sophisticated combination of plate falling film evaporators and flat tube heat exchangers, SCHRADER supports companies in creating modern, energy-efficient processes. Worldwide.

### AUTOMOTIVE + OEM SUPPLIERS

SCHRADER - your independent specialist for customized supply and application systems for paints, sealants and adhesives

From planning, design and construction, from installation and commissioning of our supply system - we provide the full range of services from a single source. Thanks to many years of experience in conveying viscous fluids, backed up by continuous further development and the exchange of ideas with our customers, we are always able to apply the current state of the art.

In particular in the case of automotive industry and OEM suppliers, we offer technologies to meet a wide range of customer needs. Throughout Europe, many renowned car manufacturers and their suppliers use reliable SCHRADER plant technology. As an authorised distributor and design centre, we work in close cooperation with Graco to provide innovative technologies successfully in that market.





# **Quality counts**

### Pacesetter in future-orientated developments

To be able to master global challenges, not only today, but also in the future, it is essential to keep abreast of technological developments or, even better, keep one step ahead. The SCHRADER team will put your project centre-stage from day one. We start with an accurate analysis of the status quo, and this is followed by a clear definition of the features specified for the ideal engineering solution. Close cooperation between the SCHRADER divisions and their over 200 employees and the international network of partners guarantee you will benefit from a reliable, outcome-orientated partnership.

#### **CERTIFICATES AND PERMITS**

The Companies in the SCHRADER Group have the following certificates and permits:

- DIN EN ISO 9001:2015
- Pressure Equipment Directive 2014/68/EU Modul, G,A2
- ► AD 2000/HP0
- ▶ DIN EN ISO 3834-2
- ► Federal Water Resources Act (WHG) Sec.19.1
- WASME Section VIII Div.1 & Div.2
- SCC for contractors and manufacturing enterprises

The following standards and EU Directives may be applied:

- ► ATEX 2014/34/EU
- Ghost R Certificat ho
- Chinese Manufacture License D1, D2
- GMP
- ► FDA
- CFR title 21
- EU 10/2011
- EHEDG
- GAMP 5.0

Further details on request.

#### ► OPTIMISATION + SERVICE

After handing over your plant, we continue to accompany you and act as your one-stop contact for optimisation processes and conduct any necessary service and maintenance work for you.

SCHRADER - the reliable partner at your side.

### **▶** COMMISSIONING

After installing the plant, we commission it together with you - from a signal check and trial runs with just water and then actual product, through to instruction sessions with your staff.

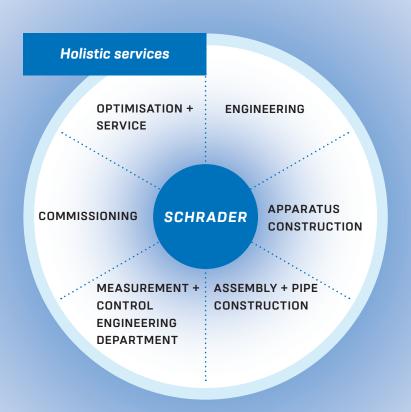
We hand over the installation in operable condition turn-key.



#### **► ENGINEERING**

We develop customized plant solutions with apparatuses and equipment designed specifically for your application. Our engineers and employees with experience in the field of process engineering will design and implement your individual plant, fine-tuned to your requirements.

From concept design through to detailed engineering.



### > APPARATUS CONSTRUCTION

Our state-of-the-art facilities combined with the wellfounded know-how of our construction teams in the design and production departments guarantee that all welding work is carried out to the highest possible standards.

Tailor-made, workmanlike and standards-compliant.

### ASSEMBLY AND PIPING CONSTRUCTION

Our highly qualified staff guarantee first rate plant assembly. At the centre of our work is our dedicated aim to meet your requirements. SCHRADER will provide you with a personal supervisor or a complete team on-site.

Organised, safe procedures during the assembly of your plant.

### ► MEASUREMENT AND CONTROL ENGINEERING

To facilitate operation, monitoring and control of the plant, we offer options from simple manual control through to fully automated process control. Safety and process reliability are at the forefront - especially when it comes to the complex interaction of components, control systems and measuring instruments.

Safe, convenient and needs-compliant.







### **VERFAHRENSTECHNIK • APPARATEBAU • FLUID TECHNOLOGY**

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