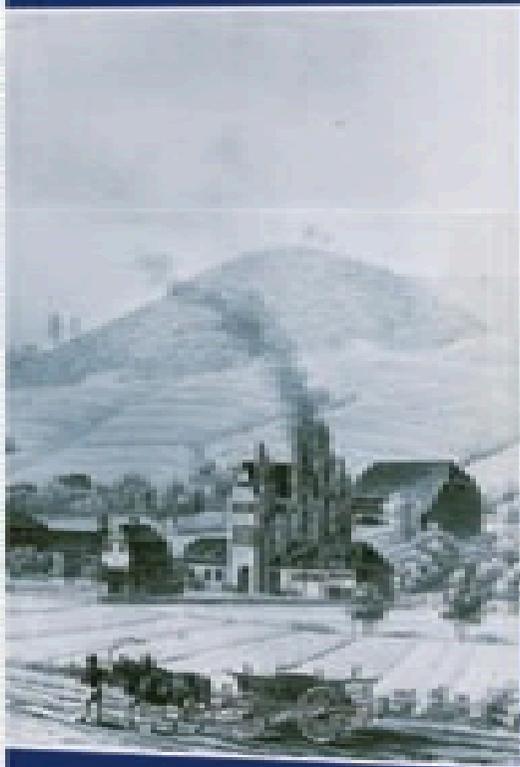
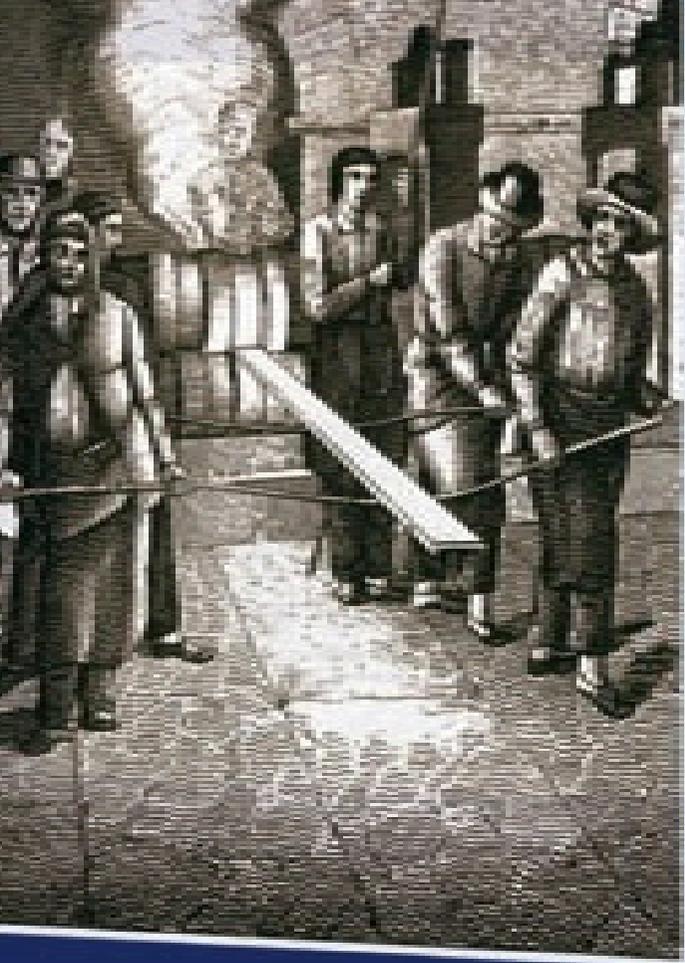


Düker



MERGING THE FUTURE
WITH TRADITION





1960 Highly acid resistant glass lining

1950 REX meat processing machinery

1947 Introduction of socketless drainage pipes

1923 Glass lined bath tubs

1918 Inauguration of Mr. Fried. Wilh. Düker

1913 Karlstadt works founded

1840 Cast iron products for the railway

1469 Iron and steel works at Laufach

INDICATIVE FIGURES 2003

Overall Sales

105.000.000 E

International Sales

25.000.000 E

Investments

3.500.000 E

Staff

700

CORE

BUSINESSES:

Drainage Systems / Customised Cast Iron

Socketless cast iron drainage systems, customised cast iron

Gas and Water Supply

Pressure pipe and fittings, valves and thrust resisting joint systems

Technical Enamels

Highly acid resistant glass lined pipes, valves and columns

Plant Engineering

Foundry Technology

DRAINAGE TECHNOLOGY

Drainage systems with both sides enamelled

Drainage systems for buildings and ground

Drainage systems for hospitals, bridges and airports

Compound systems

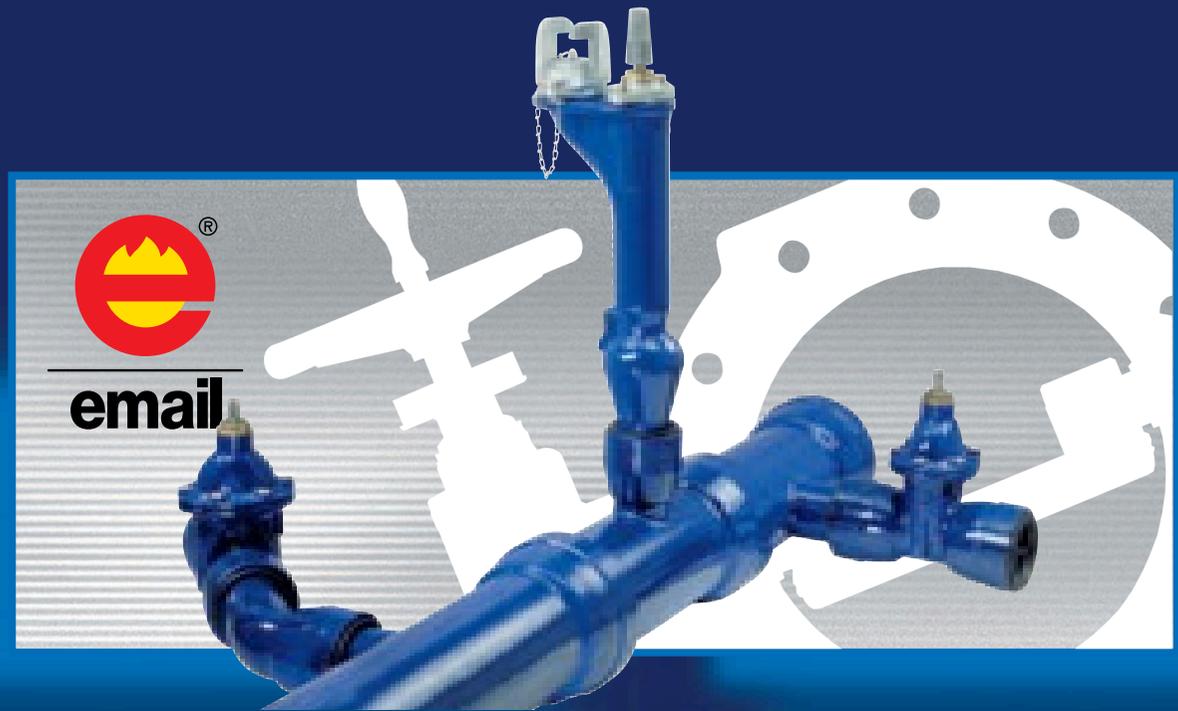


GAS AND WATER SUPPLY

Pressurised pipes and fittings

Valves, hydrants and accessories

**Thrust resisting joint systems for cast iron,
PVC and PE-HD**

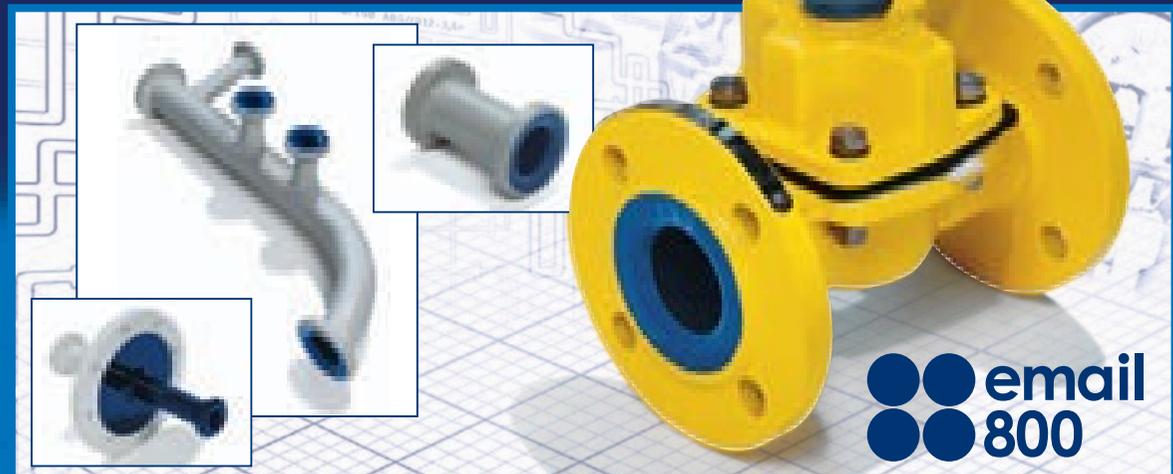


TECHNICAL ENAMELS

**Highly acid resistant glass lined pipework,
valves and special fabrication**

Columns, bellows and production equipment

Various enamel qualities

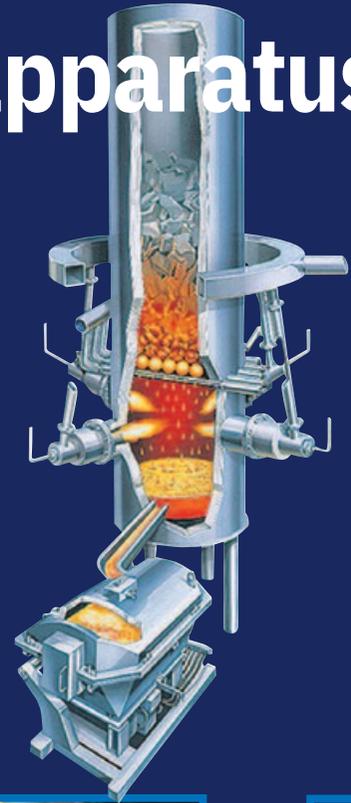


PLANT ENGINEERING

Centrifugal cast iron plants and melting apparatus

Cokeless cupola furnaces

**Design and assembly of
electronic switchboards**



Email800 is the brand for exceptional surface protection for pipework, fittings and columns. Made by DÜKER.



Email800 – The Material

...used for plant engineering in chemical, pharmaceutical and related industries.

email800 is highly resistant to attack, wear and corrosion and to diffusion during long holding times

- Acid:
- according to DIN ISO 2743 (HCL 20%, 108°C); abrasion 0,18mm/year
 - according to DIN ISO 51174 (HCL 20%, 140°C); abrasion 0,18mm/year

- Alkali:
- according to DIN ISO 2745 (NaOH 4%, 80°C); abrasion 0,4mm/year
 - according to DIN ISO 2745 as amended; abrasion 0,3mm/year

Boiling water:

- acc. to DIN ISO 2744 (demineralised D_1 at 108°C); abrasion 0,02mm/year

Technical Enamels from DÜKER

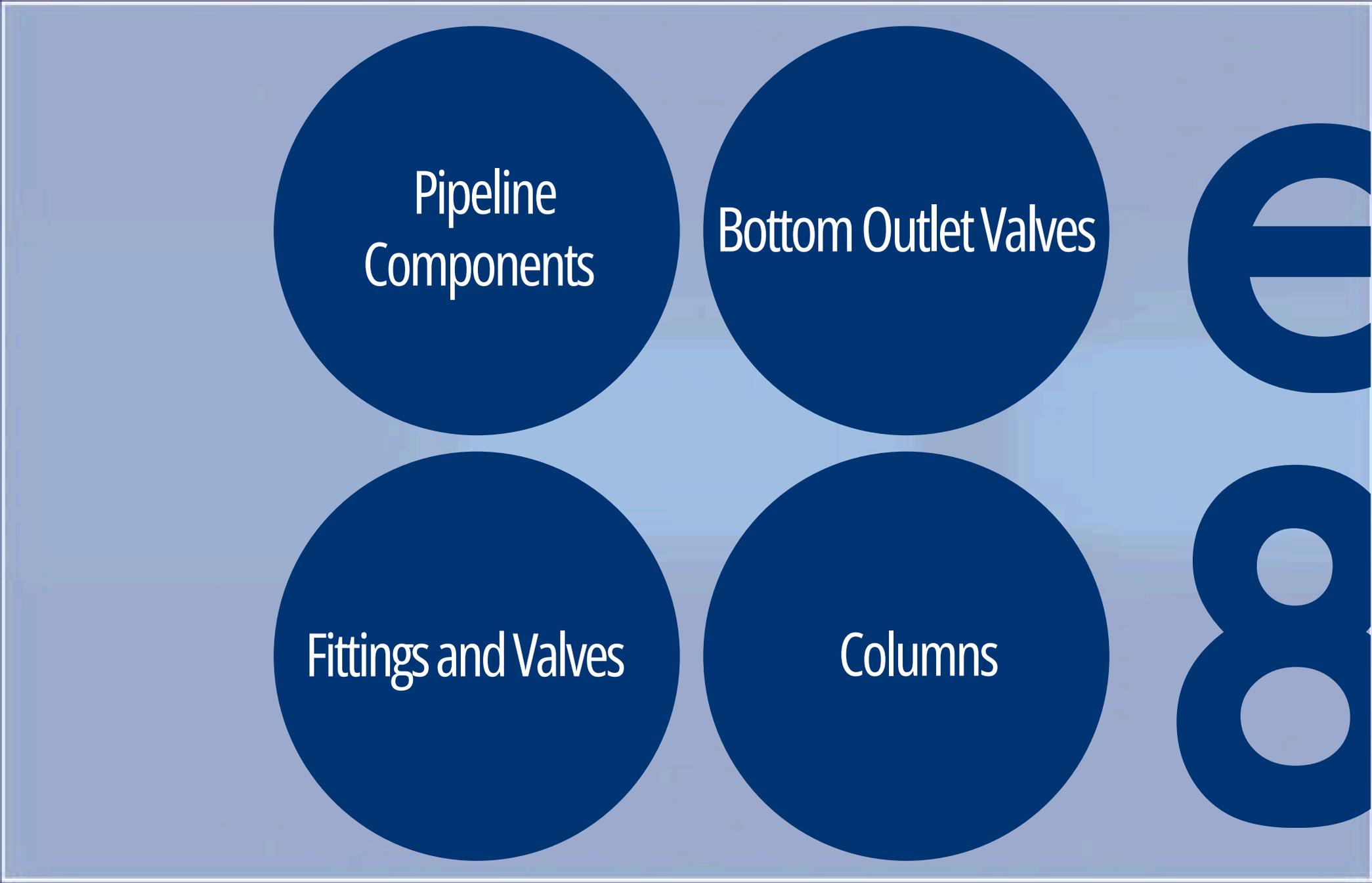
In addition to our *email800* we offer glasslinings which are different with regard to technical specifications, lining thickness or other application criteria:

email250 = pipework for aggressive exhaust air or water

email350 = white glass lining for piping up to 170°C

email850P = light blue glass lining for the pharmaceutical industry





Pipeline
Components

Bottom Outlet Valves

Fittings and Valves

Columns

Pipework, Standard and Special Production

- Pipework from DN15(1/2") to DN 600 (24")
- Lengths up to 3000 mm (10')
- Elbows, Tees, Transition parts...
- Jacketed pipe for heating/cooling
- Special production to customer's requirements



GMP-Bottom Outlet Valve

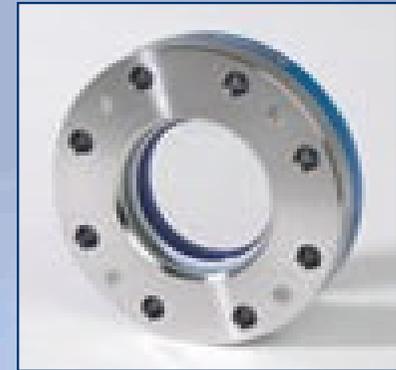
NEW

- Seal with valve seat and sealing cap
(No product entry or crystallisation behind the valve seat)
- Valve seat (PFA) with stainless steel core and integrated gaskets (better stability with high temperature)
- New bellows (6 convolution bellows and seal with PTFE encapsulated O-ring)
- Replaceable PT 100 (without dismantling the valve)
- Pneumatic actuator of stainless steel with emergency opening (polished design)
- Head piece with stainless steel cladding
(No ingress of dirt particles)
- Flushing nozzle (provided as standard)



Flow Sight Glass / Flat Sight Glass

- Temperature range from -10°C to 200°C at pressures from -1 to 10 (16) bar
- Sight glasses made of borosilicate to DIN 7080
- By the metal to metal contact of housing and cover, an exactly determined and constant prestress is achieved
- Diameters from DN 25 (1") to DN 150 (6") and special sizes upon request



„Snap fit“ loose flange

- Proven millionsoftimesasastandard flange
- Low-weight
- Optimised „one-man fitting“
- Reduced installation costs
- No loose parts
- Homogenous introduction of flange forces
- Minimised leakage rates
- High residual torques after thermal stress



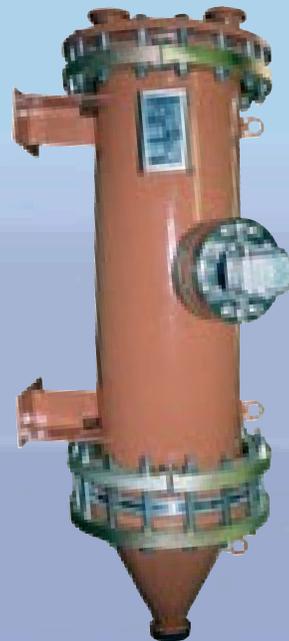
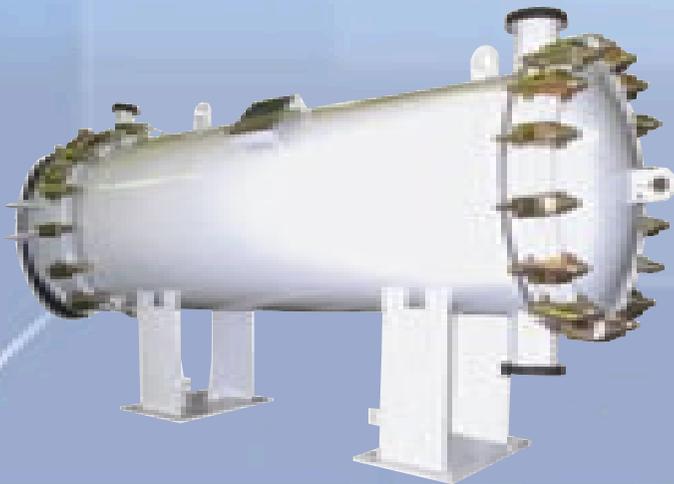
Glass Lined Diaphragm Valve

- Temperature range up to 180°C at operating pressures from -1 to 16 bar.
- Housing forged steel, highly acid resistant glass lined.
- Headpiece available in plastic or stainless steel.
- Sealing by PTFE-protection shield with rubber diaphragm.



Columns

Designed to required applications and specific processes up to DN 600 (24")in diameter and 4 m (13') of length per section. Optimized safety for distillation, absorption, extraction, as gas scrubber or reaction pipe by extensive testing, certification and special inspection procedures.



Re-enamelling of columns and accessories

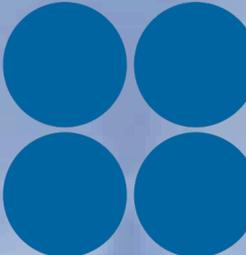
Example: Re-enamelling of
column bottom section DN 650



Enamelled pipeline systems

for aggressive exhaust air and water

- Sealing by means of a PTFE-profile seal using an easy-to-fit clamping ring
- High thermal loading up to 230°C
- No material embrittlement typical of plastics
- High safety factor in case of fire
- Fracture proof
- High voltage test at 5000V

 email
250 *light*

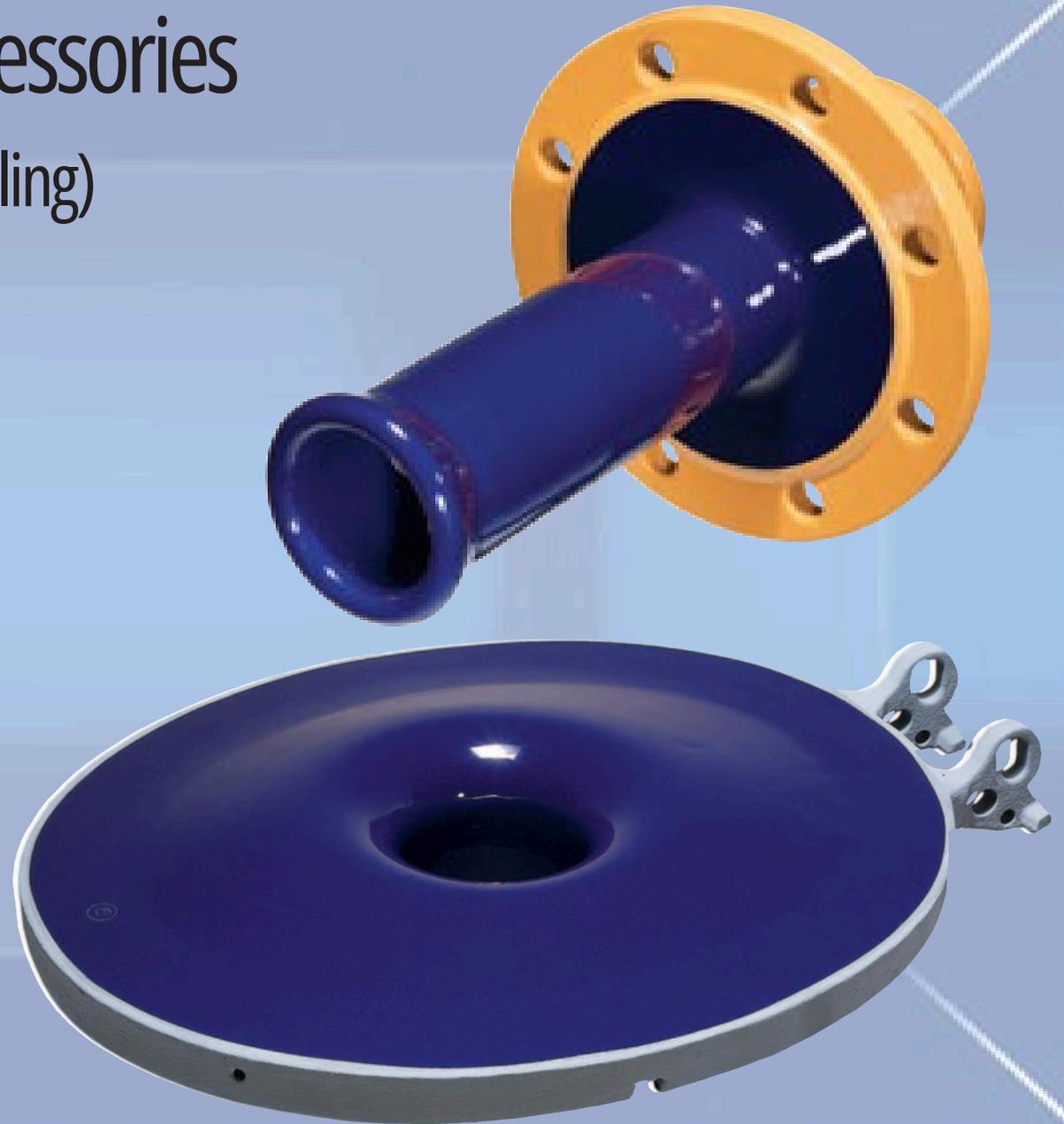


Vessel- and column accessories

(New production and re-enamelling)

Examples:

- Manway covers
- Baffles for reactors
- Inlet pipes
- Sight glasses
- Distributors



D P I –System Solutions

D P I
Complete supplier of
chemical + pharmaceutical
pipeline technology

PLANNING/
DESIGN

GLASS
LINING

GLASS

SPECIAL
MATERIALS

INSTALLATION

Email800—used worldwide

20 existing agencies and new partners
in Switzerland and China

Participations in exhibitions:

ACHEMA
ACHEMASIA
Chemshow

Frankfurt
Peking
New York