





## **MEMBERS OF MENK-SCHMEHMANN GROUP**

Annual Turnover: approx. 140 Mio. EUR

Employees : approx. 800



- Undercarriages
- Supports
- Lift masts for mobile cranes



Cooling radiators for transformers





- Flat tube coils
- Cylindrical tube coils
- Tube bends
- Special Assemblies

#### WHO WE ARE AND FOR WHAT WE STAND FOR

Schmehmann – was founded in 1945 and our name is a synonym for quality, performance and service for the customer. Within three-quarters of a century we grew from a small workshop, to an industrial enterprise, which is appreciated by partners all around the world.

But we never forgot where we came from. Even if there are significantly more people around on our premises, as 75 years before, every single employee is part of a large family. Teamwork and solidarity is top priority. Pulling in the same direction and to do everything for the success is our most important maxim.



#### **QUALITY MADE IN WESTERWALD** FACTS AROUND THE BENDED TUBE

At our production site in Bad Marienberg, we form tailor-made functions for your application with around 180 motivated employees. Our manufacturing capabilities go far beyond tube forming.

- Production area 20,000 m<sup>2</sup>
- Crane capacities up to 100 t unit weight
- Tube bends from 5 to 219.1 mm tube diameter
- Mechanical processing / machining
- sheet metal work
- Over 2,000 different bending tools and our own tool shop
- Own sandblasting and painting booths with a size of 6.5 x 6.5 x 17m
- Separate hall for stainless steel production
- Own training center



#### BRANCHES



POWER PLANTS HIGHEST QUALITY FOR RELIABLE ENERGY SUPPLY





CHEMICAL & PETROCHEMICAL WHEN SAFETY IS DECISIVE





FOOD & PHARMA INDUSTRY WHERE HYGIENE COUNTS



EQUIPMENT & PLANT CONSTRUCTION STATE OF THE ART TECHNOLOGY





#### PRODUCTS















SPECIAL ASSEMBLIES



### **POWER PLANTS**

#### HIGHEST QUALITY FOR RELIABLE ENERGY SUPPLY

You are producing the energy, we take care, that everything runs safe.

#### **EXAMPLES:**

- Economisers
- Pre-Heaters
- Heat-Exchangers
- Heating-Systems
- Steam-Generators
- Flat tube coils
- Protective shells and sheets

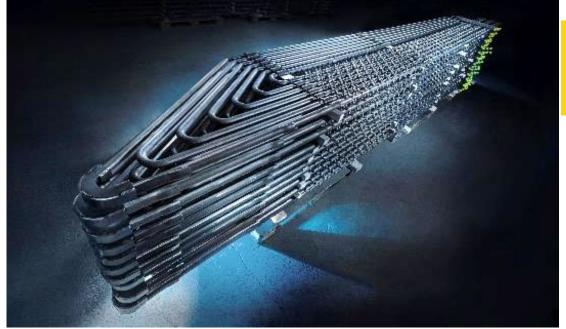
- Supporting tubes
- Headers

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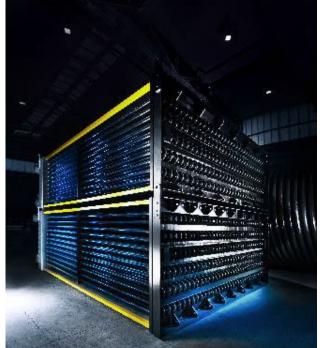
- Bending of cladded tubes
- Harp type superheaters











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### **CHEMICAL & PETRO CHEMICAL**

#### WHEN SAFETY IS DECISIVE

You are working with substances which do not allow mistakes - we take care about safe workflows.

#### We supply plants and components for the following products:

#### - Acids and lye

- Plant based oils & fats -
- Synthetic oils & fats -
- Gases
- Fertilizers
- Cosmetics
- Concrete
- Plastics

- Resins - Glues s - Inks
  - Paints
- Pigments
- Process steam







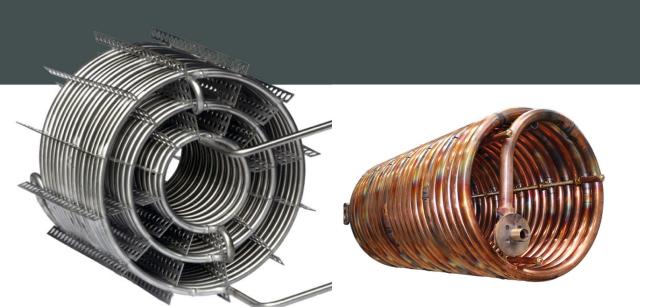
#### **FOOD & PHARMA INDUSTRY**

#### WHERE HYGIENE COUNTS

You are working in an industry, where even the smallest contamination can cause a complete loss of production. That's why you should rely on our expertise.

#### **EXAMPLES:**

- Tube bends for dairies, breweries, coffee industry etc.
- Tube coils for the pharmaceutical industry
- Cooking tube coils for chocolate products
- Steam generators for process steam
- Tube bends, cooling coils
- Key components for flow measurement devices







### **EQUIPMENT & PLANT CONSTRUCTION**

STATE OF THE ART TECHNOLOGY You drive the economy, we are your reliable partner.

#### **EXAMPLES:**

- Waste heat vessels
- Heaters
- Heat carrier plants
- Heat exchangers
- Turn-Key Plants
- Components for bio gas- and solar plants Components for heat treatment plants

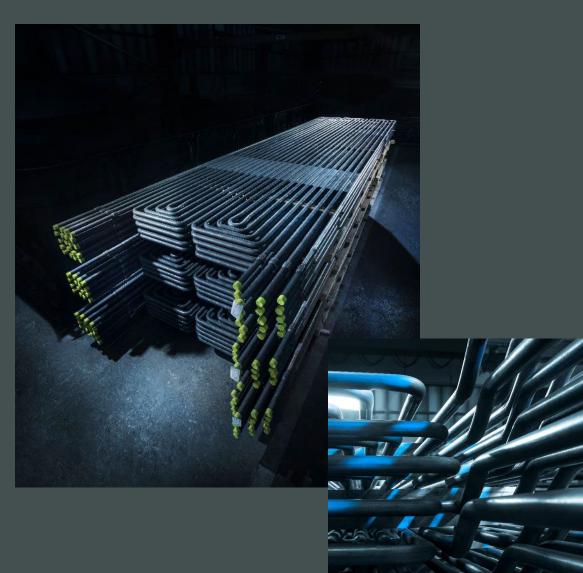






#### **FLAT TUBE COILS**

#### FROM SMALL SERIES TO MILES LONG MASS PRODUCTION



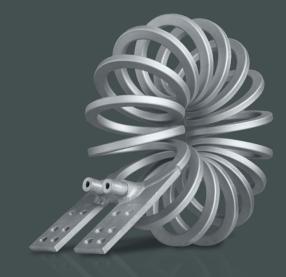




#### CYLINDRICAL TUBE COILS

#### COMPLEX SYSTEMS IN THREE DIMENSIONS

Cylindrical tube coil systems. Available with multible coils and sets.











#### **TUBE BENDS**

#### ONE PRODUCT, VARIOUS APPLICATIONS

Tube bends for piping and tube bends with tight radii, tolerances and high repeatability

- From 5 to 219,1 mm tube diameter
- Tight radii and tolerances
- High repeatability
- Heavy duty tubes with up to 35 mm wall thickness Including welding ends
- Single- and multiple bends All materials which are cold formable

A REAL PROPERTY AND A REAL







#### **SPECIAL COMPONENTS AND TURN KEY SOLUTIONS**

#### HIGH VERTICAL INTEGRATION AROUND TUBES AND SHEETS

We not only manufacture flat coils and pipe coils as individual components. Thanks to our extensive expertise in plant construction and metal working, we are of course also able to deliver special assemblies or complete systems to you.

- Tube systems
- Metal sheet production
- Surface treatment
- Insulation
- Refractoring
- Electric wiring
- Turn-Key Plants



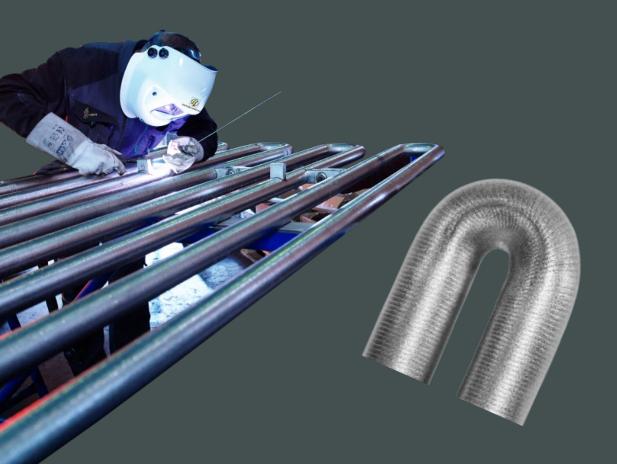


#### **CLADDED TUBES**

#### CLADDED TUBE BENDS ARE ONE OF OUR MAIN COMPETENCES.

We can bend cladded tubes with very tight radii and different cladding thicknesses. Cladded tubes are used in waste incinerating plants and protect the tube material against high temperature corrosion and abrasion.

Bending ratio of up to  $Rm/Da \ge 0.6$  is possible.



#### **FINNED TUBES**

#### EVEN FINNED TUBES CAN BE BENT.

With our long expertise in tube bending and modern machinery, we are able to make finned tube bends, even in the finned area of the tube.

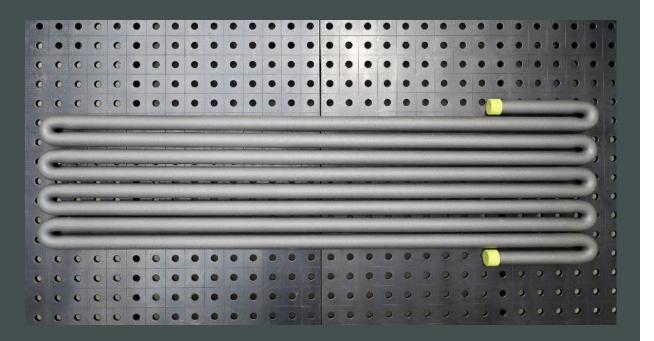


#### **PRESSED TUBE BENDS**

#### Flat tube coils as pressed tube bends, safes you a lot of welds.

We can bend flat tube coils and press them directly on the coil. Therefore, a lot of welds can be avoided.

The below example shows a tube of Ø38 mm with a bending radius of R22 mm with a bending ratio of 0,58. This allows for maximum surface on minimum space.



#### **CLADDINED PRESS TUBE BENDS**

#### Pressed tube bends with cladding is also possible.

This example shows a cladded tube bend with Ø 33,7 + 2 mm cladding layer

= ø 37,7 (38) mm, a bending radius of R20 mm and a bending ratio of 0,53



#### **BENDING MACHINES**

### MODERN CNC-BENDING MACHINES PRECISION & REPEATABILITY

From simple tube bends to multiple bends to complex isometrics, we offer a wide variety of tube bending technology.





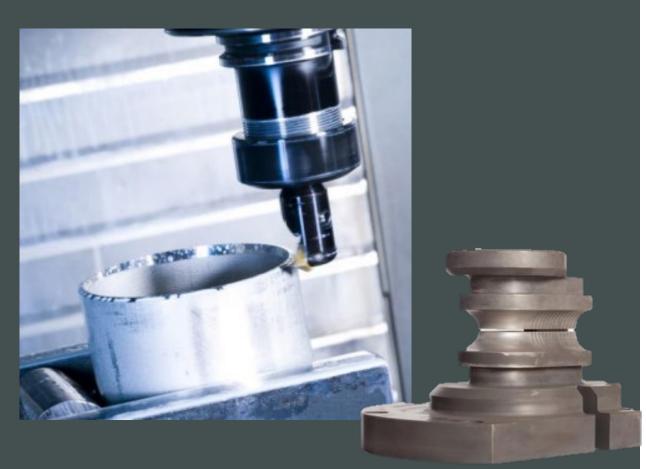


#### **BENDING TOOLS**

#### BENDING TOOLS FROM OUR OWN WORK SHOP

#### BENDING TOOLS AND WELD END MACHINING

In our own tool shop, we manufacture all our bending tools ourselves and we are able to provide the tube ends with welding edges.



#### **MECHANICAL MACHINING**

Our range of services for everything to do with mechanical metal working is unparalleled.

CNC-controlled component processing Five-axis machining center for large components weighing up to 2.5 tons.

CNC component processing, also in large dimensions. Machine travel:  $10.5 \times 1.5 \times 2 \text{ m}$ 



#### **METAL SHEET MANUFACTURING**

- **Laser technology:** CO<sup>2</sup> laser for mild steel up to 15 mm thickness, stainless steel up to 12 mm thickness and sheet metal dimensions up to 2.000 x 4.000 mm
- **Fine plasma cutting:** Plasma cutting system for sheet metal up to 50 mm thickness and 3D tube processing with diameters from 60 to 350 mm and a maximum length of 5.000 mm
- **Press brakes:** CNC-controlled with a press force of 3.200 kN for edge lengths of up to 4.000 mm



#### SURFACE TREATMENT

Whether sand blasting, a single-layer primer or a multi-layer complete paint job in numerous shades, everything is possible with us.

Paint booths with dimensions of 6.5 x 6.5 x 17 meters, weights up to 100 t

Fast completion thanks to the cabin that can be heated up to 80°C



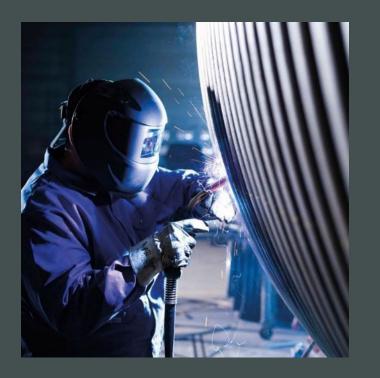


#### WELDING TECHNOLOGY

Every single weld seam is an extremly important component of the complete plant and contributes to the safety of your production.

#### All relevant applications available

- WIG manual (welding method 141)
- WIG hot wire manual (welding method 141)
- MAG welding (welding method 135)
- MAG welding with filling wire (welding method 136/138)
- Submerged arc welding (welding method121)
- Fist class product results due to high qualified workers and welders (ISO 9606, ASME Sec. IX)



#### **OPTICAL MEASURING DEVICE**

#### DIMENSION CONTROL VIA OPTICAL MEASURING DEVICE



The measuring device guarantees:

- Optical measuring without contact
- precise and fast measuring
- Feedback to bending machine
- Reverse Engineering, generates a bending program on basis of a 3D drawing
- Recording and documentation of the bending



## **EVERYTHING FROM ONE SOURCE** OUR SERVICES

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## **ENGINEERING**

You have an idea what you need for your project, but you do not know, if the plans can be realised?

No problem, our experts can help you with their know-how. We bring your requirements into a drawing and check the feasibility as well as the economic aspects. We support you in your planning of your plant. You already have a sketch of your plant and would like to have support on the technical concept? We would be glad to help you. We can make a complete design plan, as well as a 3D-CAD drawing according your requirements. Your plant will get alive on the screen. So we can support you in your project from the beginning till the end. We take care about the complete planning process.

## **PROJECT MANAGEMENT**

**As experts we know:** Only by building of a plant, the work is not done. Before the first activity, many things have to be considered. Remember to check the draft of your project including strength and static calculations

And even when the last welding seam has been done, many organisatory things has to be clarified. For example the transport of your plant to its destination, or who is responsible for the installation.

We can take care about all of this and handle the complete project management. To place an order at Menk-Schmehmann means less efforts for you. At the end, you just have to turn the key and put the plant into operation.





## CERTIFICATES

### OUR COMPREHENSIVE QUALITY MANAGEMENT

Our complete production and order processing is constantly monitored and certified.

- ISO 9001:2015
- TÜV-ZERTIFIKAT MODUL H1
- TÜV-ZERTIFIKAT DGR-WERKSTOFFE-AD2000-W0
- NATIONAL BOARD CERTIFICATE OF AUTHORIZATION
- ASME U-STAMP
- ASME S-STAMP
- KGS CERTIFICATE OF MANUFACTURE (REGISTRATION OF CYLINDER)
- BUREAU VERITAS
- CERTIFICATE FOR WELDED PRESSURE EQUIPMENT, CLASS I & II (DNV)
- VR CHINA 2 (Boiler)
- VR CHINA 1 (VESSELS)
- DIN EN 1090





## CONTACT

You would like to place an order? You have questions or suggestions? We are looking foward to hear from you.

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