









## Spools and welded components

-  Corrosion resistant pipes
-  Clad pipes
-  Special pipes and components ready for installation
-  Spools and welded components
-  Vessels, tanks and columns
-  Assemblies



**BUTTING**



## Prefabricated piping / spools

The use of sophisticated welding techniques, the processing of austenitic steels and special steel grades and the production of stainless steel pipes have always been our core competences. We also offer customized solutions for piping systems, vessels and special components in nickel alloys, duplex and superduplex materials and clad materials.

The prefabrication of pipes is a form of construction moved forward into the production plant, using isometries, piping plans and models. By directly processing our pipe here at the plant, we optimise the quality of the pipes and supply you with ready to lay or ready for installation products at adequate prices. We produce special components for your system solutions!

BUTTING offers you:

- Pipes ready for installation with
  - Optimized product quality
  - High profitability
  - Increased flexibility
  - Professional project completion
  - Customized project documentation
  - Improved environmental compatibility
- Supervision on your construction site
- Installation of pipes and vessels



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Head of Sales



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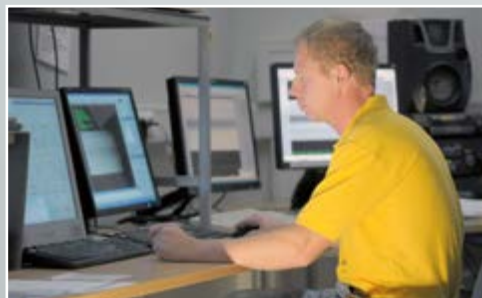
## Bundled responsibility

BUTTING supports its customers throughout all phases of their projects:

- Advice on materials
- Individual product solutions
- Product development
- Pipe planning with CAD systems
- Construction of pipes and vessels
- Economical prefabrication
- Project completion including logistical concepts
- Customized project documentation
- Supervising
- Assembly on-site

The interplay of technical expertise and our wide range of production possibilities bundles responsibility and increases the cost-effectiveness and success of your project.





Our expertise: processing of corrosion resistant steels in accordance with their material qualities

BUTTING produces pipes in sizes ranging from 18 to 3 000 mm in outer diameters

## Quality pipes

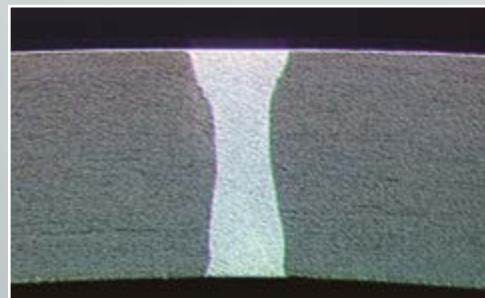
Frequently the longitudinally welded BUTTING pipe is the base product and the main element in prefabricated pipelines. As an approved pipe manufacturer we are able to produce both small and big quantities either from coil and from plate, thereby offering you extensive flexibility. Our skills lie in forming, welding and materials technology and in quality assurance.

Since prefabrication of the pipes and vessels already takes place in the production plant, it is characterised by improved product quality.

The use of high-quality raw materials in line with the requirements of the project and product, the pipes we manufacture ourselves and our carefully chosen fittings, flanges and special components guarantees you first-class workmanship – even with complex piping systems.

We will realise the specific requirements of your project:

- Limited tolerances
- Special sizes
- Processing of special materials
- Individual quality requirements



Our great technical competence and long-standing experience in welding ensure you a high level of quality

## Our welding competence

Processing of corrosion resistant steels in accordance with their material qualities ensures the product can be used without interruption: you can benefit from experience in the welding of more than 85 different stainless steel grades and clad materials and our in-house welding technology.

We use all the current welding processes in production, including plasma, TIG, MSG, SAW, laser beam and electron beam welding processes to orbital welding, TIG hot wire and MAG welding. We use automated welding for circular welds in diameter up to 1 200 mm.

You can rely on our expertise:

- Approx. 1 900 welding procedure qualifications
- More than 300 qualified welders, certified acc. to national and international standards (DIN EN ISO and ASME IX)
- Approx. 1 200 welding certificates are available





## Surface quality essential



A crucial prerequisite for optimum corrosion resistance is a “clean metallic surface”. At BUTTING, pipes, piping components ready for installation and vessels are always subjected to chemical cleaning (pickling). This reliable, environmentally friendly procedure ensures lasting corrosion resistance after forming, welding and annealing.

Besides full body pickling or spray pickling we offer the following surface treatments:

- Grinding
- Roughening
- Glass bead blasting
- Shot peening







At CAD workstations BUTTING employees design the ideas of our customers

Precise CAD planning supports the quality of the prefabrication

## Efficient construction

For the design of complex components and vessels, BUTTING has its own construction departments. This puts us in a position to increase planning quality, shorten project throughput times and reduce costs.

Our services guarantee you:

- Layout of vessels and reactors as preliminary review
- Faster speed of reaction on the construction site by developing installation documents
- Optimised disposition of materials through carefully planned item lists
- Increased flexibility in adapting the isometries and item lists
- Security with regard to installation time and quality by prefabrication in our plant, ensuring on-time delivery and reliable quality





Prefabrication ensures your project is cost-effective



We supply your construction site with pipes and components ready for installation

## Economical on the construction site

The more welding and pickling is already performed on BUTTING's premises instead of on the construction site, the greater the potential savings that can be achieved – while at the same time reducing environmental damage on the installation site.

Welding on BUTTING's premises also improves the quality of the weld seams and the surface quality. The maintenance, repair and downtime costs of your system are reduced.

In short: using prefabricated piping components reduces the amount of welding and also the radiography required on your construction site. We offer you spools ready for installation including final documentation.

This saves your on-site resources:

- Reduces staff
- Cuts installation time
- Requires less space





We offer you a wide range of materials for high corrosion stresses

## Free choice of materials

During the entire project we coordinate our services with your wishes.

Our manufacturing programme covers a broad spectrum of high-quality materials for specific, corrosive applications:

- Austenitic steels
- Clad steels
- Highly corrosion-resistant steels
- Austenitic-ferritic steels (e. g. duplex, superduplex)
- Heat-resistant steels
- Titanium and titanium alloys
- Non-magnetizable steels

The choice of a suitable material is done through an intensive dialogue with you as the user, as early as the

planning and construction stage. At this stage we also support you with the engineering. During this joint development stage, additional potential savings may be developed.

And so we carry out your wishes at any time: flexibly, efficiently and cost-effectively.





## Environmentally friendly

For BUTTING, environmental protection means averting dangers to humans and the environment as well as minimising emissions and waste on a permanent basis. In our headquarter in Knesebeck we have been licensed under DIN EN ISO 14001 for more than ten years.

All our products are given chemical full bath pickling. All the pickling baths and the chance to dispose of the process water are constantly kept under observation. Regular cleanups of the basins ensure that the component is properly cleaned and the environment is protected.

At the same time we reduce the amount of welding and thus of other surface treatment taking place on your construction site. Thus we can reduce on-site damage to the environment.



Prefabrication protects the environment



## Prefabricated piping for every use

A large number of industries are convinced of the high product quality and the considerable potential savings our prefabrication offers:

- Chemical and petrochemical industry
- Water and waste water industry
- Oil and gas industry
- Drilling and well construction technology
- Energy and environmental technology
- Pulp and paper industry
- Nuclear and conventional power station technology
- Shipbuilding technology
- Aerospace technology

We are your producer of system solutions!

Your added value at BUTTING:

- Approved in-house welding technology
- Detailed planning using 3D models, isometric drawings and static load calculations as preliminary service
- Customized project documentation
- Accredited laboratory
- Optimum logistics services for international transport
- Quick availability of raw materials through own pipe production
- Forming capabilities including wall thicknesses of up to 80 mm
- Reduction of field welds up to 80 %
- Optimum pipe fit-up in case of field welds by special calibration of pipe ends

In short: prefabricated piping components guarantee you high quality, speedy installation and cost reductions (in investment and lifecycle costs).



## Responsibility for installation

BUTTING takes on the supervision on your construction site and the installation of high-quality stainless steel, corrosion resistant piping components and vessels. Our installation service guarantees you:

- The comprehensive expertise of our experienced staff
- A high level of quality
- Reliable, customer-oriented and smooth project completion
- Flexibility on the construction site

In countless projects all around the world, we have been responsible for installing piping systems to this

very day, including for the construction of pulp and paper mills, for gas tanker projects in the shipbuilding industry, for bio-diesel plants and for the building of waste water treatment plants.

The combination of pipe and vessel construction, of CAD planning and cost-saving prefabrication up to arranging the installation bundles responsibility and increases the cost-effectiveness of your project.



Ask for our special leaflet „Assemblies“!

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