Welding and testing technology
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Welding and testing at the highest stage

We train welding procedures and welders, consult on the choice of materials and conduct material tests and damage inspections. Our consulting services ensure that Kraftanlagen Group products meet the highest quality standards.
Our solutions

Your partner for all questions about welding and materials testing

By using optimal welding techniques and processes, we make no compromises in meeting the highest standards with regard to the quality of weld seams in piping systems for power plants and the industrial sector. Many of our customers have trusted the top-notch work of our welders for decades. We are proud of the trust they have invested in us and are consistently working on improving. In doing so, we are placing a great emphasis on regularly providing further training to our employees. As our customer, take advantage of our many years of experience and benefit from the expertise of our highly qualified employees!

The Kraftanlagen Group is a versatile partner for industry and the energy sector. We are covering the entire life cycle of plant technology. Our welding and testing technology spectrum includes:

- Consulting
- Selection of materials and production processes
- Design reviews
- Preparation of procurement documentation
- Process qualifications
- Non-destructive tests
- Consultation and expediting
- Preparation of procurement documentation for
  - Welding
  - Heat treatment
  - Forming
  - Non-destructive materials examination
- Fabrication monitoring
- Processing of non-conformers
- Training and testing of personnel (certified teaching service provider according to ISO 29990)
- Selection and qualification of dismantling processes

We train your personnel in the welding procedures TIG, SAW, MIG, MAG and gas welding at our own welding school. The welding training and examination is conducted in accordance with DIN EN 287-1/EN ISO 9606-1 and ASME Section IX.
Our services

Top-notch welding and testing

Here is an overview of our services. Please contact us for additional information and a consultation. You can find our contact information on the rear cover of this brochure.

Consultation and expediting
- Consultation regarding the selection of materials under thermal and corrosive loads
- Consultation on and execution of damage inspections
- Consultation regarding the selection of suppliers (welding-related supplier evaluation)
- Monitoring of suppliers (quality and progress)
- Parts approvals

Preparation of specifications
- Preparation of welding and heat treatment instructions for all materials suited for welding in the following processes: TIG, SAW, MAG, MIG and gas welding (manual/mechanized)
- Preparation of work and testing instructions according to customer specifications (and taking into account general requirements of European regulations and the ASME code)
- Preparation of inspection and test schedules

Process qualifications
- Procedure and production tests
- Introduction of a qualification for new pipeline construction welding and testing procedures
- Optimisation of welding and testing procedures

Non-destructive examination
- Visual inspection (VT) including endoscopy
- Penetrant test (PT)
- Magnetic particle test (MT)
- Radiographic test (RT)
- Ultrasound test (UT) including manual dexterity tests for UT testers
- Materials analysis (PMI/OES/RFA)
- Hardness test (Vickers, UIC, EQUOTIP, Brinell)

Training and testing of personnel (certified teaching service provider according to ISO 29990)
- In the welding procedures TIG, SAW, MAG, MIG, UP, gas and bolt welding for metallic materials at our own welding school and on site (including conducting manual skill examinations)
- In welding procedures for plastics
- In the production processes of soldering, bonding, laminating, screwing, annealing and bending
- From personnel to the installation of screw connections according to DIN EN 1591-4

We work in accordance with the following product rules and standards
- EN 13480-ff „Industrial piping“
- 12952-ff „Water pipe boilers and plant components“
- DIN EN 13445-ff „Unfired Pressure Vessels“
- AD 2000 „Manufacture and testing of pressure vessels“
- AGFW „District heating working group“
- DVGW „German association for gas and water applications“
- VdS „Association of property insurers“
- EN 1090 „Eurocode“ (steel construction)
- ASME Sec I „Rules for Construction of Power Boilers“
- ASME Sec VIII Div. 1 „Rules for Construction of Pressure Vessels“
- ASME B31 ff. „Piping“

Visual inspection (VT) of a UP weld seam
Product ranges of the Kraftanlagen Group

Energy and power plant technology
Decentralised power generation
Underground piping systems
Nuclear technology
Industrial plants
Utility services
Fire protection
Engineering
Fabrication
Welding and testing technology

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