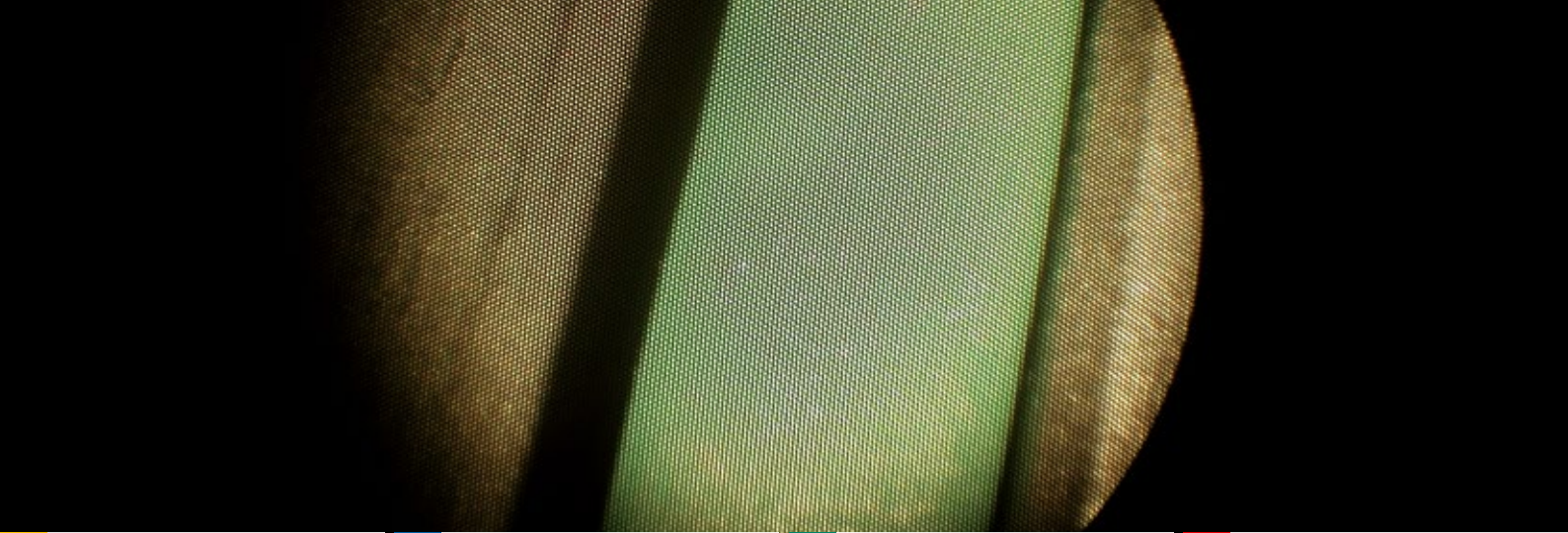




QUALITY DOESN'T COME BY CHANCE



KNAACK & JAHN
Pipeline and plant
construction

Knaack & Jahn
Piping systems and fire
fighting

KNAACK & JAHN
Pipeline and apparatus
construction

K+J
Building technology



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WELDING PROCESSES AND MATERIALS

STEELS AND SPECIAL MATERIALS

Services

We are experts in the following processes for joining metals:

- Manual metal arc welding (E), TIG, TIG orbital, MIG/MAG, oxyacetylene welding, flame brazing

We use this process either individually or in combination, depending on economic and quality requirements.

We also carry out assembly and welding work in high-pressure power stations.

We adhere to high standards when selecting and training our staff, enabling them to produce high quality seams even under unfavourable conditions (e.g. constrained positions due to construction site conditions). This simplifies complicated repair and assembly work.

The requirements for quality and productivity are constantly increasing. We therefore consider it very important to regularly train our welders and modernise our welding equipment. All welds are carried out according to fixed welding instructions (WPS) with authorised filler materials (TÜV, DNV GL).

We weld the following materials, whether sheet, profile, pipe or fitting:

- Unalloyed, low-alloy and creep-resistant steels, e.g. P235 G1 TH (St. 35, 8), P265 GH (HII), P295 GH (17Mn4), 16Mo3 (15Mo3), 13CrMo4-5 (13CrMo44), 10CrMo 9-10
- High-alloy, austenitic steels, e.g. X5CrNi18-10 (1.4301), X2CrNiMo17-13-2 (1.4404), X2CrNiMo18-14-3 (1.4435), X6CrNiTi18-10 (1.4541), X6CrNiMoTi17-12-2 (1.4571), X1NiCrMoCuN25-20-7 (1.4529)
- Duplex steels, e.g. X2CrNiMoN17-13-5 (1.4439), X2CrNiMoN22-5-3 (1.4462)
- Special materials, e.g. titanium, copper, high-strength brass, CuNiFe

Process testing

Our process tests are in accordance with all the usual certification: DIN EN ISO 15614-1, AD Instruction Leaflet HP 2/1, HP 0, HP 100 R as well as VdTÜV Instruction Leaflet 1160 (soldering) and have been inspected and approved by experts from the TÜV Nord as well as DNV GL. Work tests are carried out regularly.

Welder testing

Our welders are tested according to DIN EN ISO 9606-1 to 4.

PLASTICS

Services

We carry out the following processes in plastics processing:

- Butt mirror welding, WNF, hot gas welding and infrared plastic welding

We weld and process the following plastics:

- PE, PP, PVDF, PVC, ATS

WELDING SUPERVISION

Our welding supervision is carried out by welding engineers and welding specialists and corresponds to the requirements of DIN EN ISO 14731 "Welding Supervision". Each welding supervisor has national, European or international qualifications (DVS, EWS, IWS). We are in regular contact with specialist associations, welding institutes and experts, which means that we can rely on competent support even for complicated welding assignments.

QUALITY ASSURANCE

Quality assurance systems according to DIN EN 9001 and DIN EN ISO 3834-2. In conjunction with certified test laboratories we carry out tests on welding seams and materials: materials analysis, weldability tests, liquid penetrant inspections, magnetic particle inspections, X-ray tests, ultrasonic tests, mechanical tests (tensile strength, notched-bar impact tests), damage investigations. The results of the quality tests are documented, enabling identification and traceability.

QUALIFICATIONS

We are a qualified manufacturer of pressure vessels and pipelines by:

- Pressure equipment directive
- AD 2000 Instruction Leaflet HP 0
- WGH
- DIN EN 1090-2
- Pipeline and shipbuilding constructions according to the regulations DNV GL-Rules

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