

Supplier Information

Welding Technology

I General

Company	
Address	
Telephone	

II Employees

Production Manager(s)	
Quality Assurance	
Welding Supervisor (SFI)	

III Company Qualifications

Is your company certified according to?
(enclose copies of certificates)

DIN EN ISO 3834-2	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
DIN EN ISO 3834-3	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
DIN EN 1090-1	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
DIN EN 1090-2	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
DIN EN 1090-3	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
other (please name)	yes	<input type="checkbox"/>	no	<input type="checkbox"/>

IV Qualification of Employees

Wie ist Ihr Personal qualifiziert?
(enclose copies of certificates)

Number of Welders DIN EN 9606-1 _____

Number of Operators DIN EN 14732 _____

Welding supervisors DIN EN ISO 14731/ DIN EN 719 _____

Inspection Personnel DGZfP or DIN EN 473:

for VT	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
for UT	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
for RT	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
for PT	yes	<input type="checkbox"/>	no	<input type="checkbox"/>
for MT	yes	<input type="checkbox"/>	no	<input type="checkbox"/>

Welding Technology

Agreement and specifications

The following terms and conditions apply for a General Agreement for all prospective orders Broetje-Automation GmbH to the suppliers listed below:

Steel components

Welding work on steel constructions must only be carried out by companies in possession of valid verification of suitability (manufacturer's qualification) in compliance with DIN EN ISO 3834-2/3 resp. DIN EN 1090-1/2 and valid welding certificates in compliance with DIN ISO 9606.

The relevant standards and rules must be adhered to.

Production of welded parts in compliance with the drawing (if available). All dimensions without tolerances in compliance with DIN EN ISO 13920: Linear dimensions B angular dimensions B and straightness, flatness and parallelism tolerances F.

Welded seam priming in compliance with DIN EN ISO 9692-1. If no other requirement is specified, assessment of irregularities in compliance with DIN EN ISO 5817 - B.

If no other requirement is specified, manufactured from S355 J2 +N killed steel in compliance with DIN EN 10025-2:2004.

The material properties must be certified by an acceptance test certificate 3.1 (DIN EN 10204:2004) with details of the chemical composition after the ladle analysis (14er analysis), the CEV value and the mechanical notch impact energy, yield stress and tensile strength values.

The manufacturer is obliged to deliver the acceptance test certificates for materials used to BA (QS).

The manufacturer is obliged to check, that copies of the valid manufacturer's qualification and valid welding certificates are made available to BA. Any changes must be made known to BA (QS) without request.

If weld inspections are requested, the manufacturer's welding inspector must draw up documented tests and delivered these to BA (QS).

Upon completion of the welding process, the component must be low stress annealed, unless agreed otherwise. Annealing must be carried out at approx. 600 °C with subsequent slow cooling. The holding time must be at least 2 hours. The annealing process must be documented in an annealing record. This must include the heating ramp, holding time and cooling ramp.

A record of the annealing process must be delivered to BA (QS).

Aluminium and Aluminium Alloy Parts

Welding work on aluminium or aluminium alloy constructions must only be carried out by companies in possession of valid verification of suitability (manufacturer's qualification) in compliance with DIN EN ISO 1090-1/3 and valid welding certificates in compliance with DIN EN ISO 9606-2. The relevant standards and rules must be adhered to.

Provide a \varnothing 6 mm vent hole in closed sections.

For I seams, make the root side of the webs 0.5 to 1 x 45°

Segregation of aluminium and steel processing. Processing tools and welding machines must be free of other metals. Do not use resin-bonded grinding wheels (increased danger of pores), always use ceramic-bonded grinding wheels.

The surface to be joined must be cleaned and kept clean until welded. Welding surfaces that are moist or have a film of oxidation, must be cleaned or dried respectively again immediately prior to welding.

Tack welds must always be fully molten when welding.

Pre-heat thick materials (= 10 mm) over a large area. The maximum pre-heating temperature for alloys that can be hardened is 180-200°C for a maximum of 10 mins. Cooling periods must be adhered to if the temperature is exceeded.

Production of welded parts in compliance with the drawing (if available). All dimensions without tolerances in compliance with DIN EN ISO 13920: Linear dimensions B, angular dimensions B and straightness, flatness and parallelism tolerances F.

Welded seam priming in compliance with DIN EN ISO 9692-3. If no other requirement is specified, assessment of irregularities in compliance with DIN EN 30042 - B.

If materials in compliance with DIN 4113-T1 in compliance with Table 1, the material properties must be verified by a works certificate 2.2 in compliance with DIN EN 10204:2004. The properties of other materials in compliance with DIN 4113-T1 Chap. 3 must be verified by means of an acceptance test certificate 3.1 in compliance with DIN EN 10204:2004. The content of the works certificates and the acceptance certificates are the chemical composition and the mechanical values for yield stress lateral contraction and tensile strength. The manufacturer is obliged to deliver the acceptance test certificates or works certificates for materials used to BA (QS).

The manufacturer is obliged to check, that copies of the valid manufacturer's qualification and valid welding certificates are made available to BA. Any changes must be made known to BA (QS) without request.

If weld inspections are requested, the manufacturer's welding inspector must draw up documented tests and delivered these to BA (QS).

date, stamp and legally binding signature