

# **General Installation Conditions**

AMB 2012 E / Rev 2



## **Table of Contents**

1 1.1 1.2 1.3	General Information Terms Deviating contractual arrangements No validity of deviating conditions of the Contractor Subcontractors	4.8 4.9 4.10 4.11 4.12	Overtime and surcharges Subsequent rectification work Additional assembly work Joint use of lifting equipment Joint use of scaffolding
1.5	Use of the Client's personnel	5 5.1	Welding and annealing work Welding qualification certificate
2	Client's performances	5.2	Welding personnel
2.1	Storage places and access roads	5.3	Welding Procedure Specification (WPS)
2.2	Pre-assembly place	5.4	Annealing personnel and annealing
2.3	Building site facilities	<i></i>	equipment
2.4	Installation documents and confidentiality	5.5 5.6	Annealing instructions Annealing documentation
2.5	Tools and appliances	5.0	7 mileaning documentation
		6	Quality management and quality
3	Contractor's performances		assurance
3.1	Self-information	7	Cleanliness on the building site
3.2 3.3	Provision of personnel Building site facilities	,	Cleanliness on the building site
3.4	Lifting equipment	8	Environmental protection
3.5	Fixtures and auxiliary structures		•
3.6	Unloading of parts	9	Work safety
3.7	Intermediate transport	9.1	Accident prevention regulations
3.8 3.9	Pre-assembly Lifting assembly and final assembly	9.2	Instructions and proof of instructions given
3.10	Removal of provisional installations	9.3	Occupational safety management for
3.11	Corrosion protection	0.0	subcontractors on the site
3.12	Securing for winter	9.4	Installation instructions and risk
3.13	Protection against soiling		assessment
3.14	Filler metals	9.5	Assembly personnel
3.15	Technical gases	9.6 9.7	First aiders Safety representatives
4	Provision of performances by the	9.8	Work safety officer
•	Contractor	9.9	Electrical hazards
4.1	Quality and safety	9.10	Scaffolding
4.2	Compliance with legal regulations for	9.11	Fire protection
4.0	cross-border services	9.12	Occupational accidents, fire, incidents
4.3	Building site rules	9.13	Investigation of accidents
4.4 4.5	Assembly instructions Relationship to the final customer	10	Clearing up the building site
4.6	Contractor's responsibility on the building	10	Cloaning up the building site
-	site		
4.7	Execution of work on the building site	11.	Code of conduct



#### 1 General Information

#### 1.1 Terms

The deliveries and services, which the Contractor is obliged to provide, are also described as contractual performances.

## 1.2 Deviating contractual arrangements

If the parties deviate from the contractual agreements (e.g. in minutes of negotiation) or the Client deviates in orders from the following General Conditions, the provisions included there shall have precedence over the following conditions, unless the parties have expressly agreed otherwise.

## 1.3 No validity of deviating conditions of the Contractor

Deviating conditions for the supply of goods and services of the Contractor are herewith contradicted. Conditions for the supply of goods and services of the Contractor are only valid, if and as far as they are confirmed in writing by the Client.

#### 1.4 Subcontractors

The subcontracting of deliveries and performances (hiring of subcontractors) by the contractor is only permissible within the terms of the contract concluded between the Client and the contractor.

The start of work by subcontractors on site is to be notified to the site management of the Contractor in advance. The supervisory personnel of subcontractors shall have both writing and speaking knowledge of the contract language agreed in the contract, if such an agreement has not been made, of German.

## 1.5 Use of the Client's personnel

The Contractor agrees to use the Client's personnel under his responsibility. Appropriate agreements must be reached in the event that this should be necessary.

#### 2 Client's performances

#### 2.1 Storage places and access roads

The Client makes storage places and access roads available to the Contractor insofar as they are made available to the Client by the final customer. The Contractor must inform himself of the position and nature of these places and roads, and he may inspect them. Before signing the contract, the Contractor confirms that he has obtained sufficient and precise knowledge of all local conditions and circumstances of the place of assembly and its surroundings. Subsequent claims for additional remuneration by the Contractor on account of the local conditions are excluded.

Changes or movements within the building site or on the storage place provided by the Client will not be remunerated.

## 2.2 Pre-assembly place

If the Client has provided a pre-assembly place, number 2.1 applies accordingly.

## 2.3 Place for building site facilities

The Client provides the Contractor with a place to erect day accommodation, construction offices, stores, workshops and sanitary facilities. The Contractor must accept the place in the same condition in which it is made available to the Client by the final customer.

For reasons of space it is usually necessary to stack facility units (containers) up to three storeys high.

# 2.4 Installation documents and confidentiality

The Client will provide the Contractor with the drawings, welding and annealing specifications, parts lists etc. required in order to carry out the assembly work, unless the delivery of the components to be assembled is a contractual performance of the Contractor.



The Contractor agrees to treat the information and documents received from the Client in confidence and disclose them to third parties only to such an extent as is unavoidable for rendering the services to be provided. Corporate agents and employees as well as contracting parties of the Contractor are to be committed to the corresponding confidentiality.

### 2.5 Tools and appliances

- All tools and appliances necessary for carrying out the contractual performance must be provided by the Contractor himself.
- 2.5.2. If it has been agreed that tools and appliances will be provided by the Client, these remain solely the property of the Client even after handing them over to the Contractor. The Contractor bears full and sole responsibility from the time of handover. He must protect the tools and appliances against theft, loss and damage and must insure them adequately.

The Contractor is obliged to take due care of the tools and appliances provided to him, to use them properly and to maintain them in perfect condition. The latter includes the usual maintenance work and any necessary repairs as well as the replacement of worn parts.

Before using the tools and appliances for the first time, the Contractor must examine them with regard to safety and function to an extent which is reasonable and sensible given the circumstances, and must report any defects to the Client. If he fails to do so and the defect was recognisable, the Contractor will be held answerable for the condition of the tools and appliances.

If the tools and appliances provided should prove to be unsafe, unusable or defective, the Client shall only be liable for contractually typical, reasonably foreseeable damages in the case of injury to life, limb and health as well as – except in the case of intent or gross negligence – in the case of the breach of essential contractual obligations.

The Contractor must return the provided tools and appliances to the Client's without issuina office delav completion of the work. The issuing office must be advised of the impending return three days in advance. Upon return, the tools and appliances will be examined iointly by the Client and the Contractor for completeness and intactness and the result will be recorded in writing. If tools or appliances are missing, damaged or in an otherwise unacceptable condition, the Client can invoice the Contractor for the expense necessary to repair the items or purchase new ones and deduct it from the next part payment or final payment.

## 3 Contractor's performances

#### 3.1 Self-information

The Contractor must inform himself about the type and location of the building site. about the ground conditions and about the available water and electricity supplies for the construction machines etc. Furthermore, before submitting a tender, he must check that the work can be performed without any circumstances that could make it more expensive (e.g. difficulty in accessing the building site, existing cables or pipelines etc.) and that all required work is included in the specification sheet. He must clear up any ambiguities in the tender documents with the Client, in particular if these affect the calculation.

Additional claims due to unclear or incomplete tender documents will no longer be accepted after an order has been issued. The same applies to subsequent claims caused by a lack of knowledge of the building site conditions.

#### 3.2 Provision of personnel

The Contractor must provide the qualified expert and assistant personnel, including site management, safety officers, first aiders, welding supervisors and certified welders, which are necessary in order to carry out his contractual performances.

#### 3.3 Building site facilities



In compliance with the respective national and local regulations the Contractor provides day accommodation, site offices, stores, workshops and sanitary facilities, unless these are provided by the final customer or the Client, including the necessary connecting lines to the existing supply and disposal networks. In Germany, day accommodation and sanitary facilities must comply, among other regulations, with the requirements of the German Workplace Ordinance, sections 45, 46, 47, 48 and 49.

Building site facilities provided by the final customer or the Client must be used wholly or in part by the Contractor in return for an appropriate payment.

The Contractor is solely responsible for arranging the accommodation of his personnel at the building site location (accommodation outside the building site).

## 3.4 Lifting equipment

The Contractor provides and installs all lifting equipment required to fulfil his contractual performances, including any necessarv ground compaction, foundations. bracing etc. Following completion of the work, the Contractor must remove the lifting equipment, the necessary ground compaction, foundations, bracing etc., without request.

Crane erection plans must be submitted to the Client for approval in good time before the start of the assembly.

The lifting gear and slinging means must comply with the respective national and local regulations. The necessary test certificates must be kept at the building site.

## 3.5 Fixtures and auxiliary structures

The Contractor takes care of the construction and delivery of all fixtures and auxiliary structures necessary for carrying out his contractual performances.

#### 3.6 Unloading of parts

The Contractor is responsible for the unloading and putting into storage of parts at the storage place, interim storage place or building site. The parts become the responsibility of the Contractor upon unloading. The Contractor must provide an appropriate warehouse for parts which are sensitive to weather influences.

The Contractor must check deliveries for completeness according to delivery notes as well as for transport damage. Any complaints must be certified by the haulage driver and reported by the Contractor in writing to the Client's building site management immediately. The contents of closed packages (boxes, crates etc.) must be checked for completeness and defects immediately or at the latest within one calendar week. shall The Contractor bear of consequences checking, not complaining or informing the Client's building site management or of not doing so in good time. In particular, missing parts which are not or not promptly claimed for shall be deemed to have been lost on the building site and must be replaced free of charge by the Contractor.

#### 3.7 Intermediate transport

Intermediate transport from the storage yard to the pre-assembly or assembly place must be carried out by the Contractor.

#### 3.8 Pre-assembly

Unless agreed otherwise, the Contractor must carry out the pre-assembly of individual parts.

## 3.9 Lifting assembly and final assembly

The Contractor carries out lifting and final assembly of the plant components to be assembled as per the contract in accordance with the drawings, taking into account all regulations and technical rules applicable to this order. Unless agreed otherwise, all connections to other assembly sections are contractual performances of the Contractor.



The assembly must be performed in the largest possible steps (e.g. preassembled platform sections incl. railings and gratings).

Plant components must be checked for dimensional accuracy before lifting assembly. If adaptation work is necessary due to incorrect dimensions of the plant components, this will be at the Contractor's expense if he had not checked the dimensional accuracy beforehand and reported deviations to the Client in writing.

Areas for which no railings are intended in finished condition but which nevertheless bear a risk of falling must be temporarily secured by the Contractor by means of a fixed, three-part lateral protection, if necessary. This also applies to the area around openings.

## 3.10 Removal of provisional installations

Following completion of his contractual performance, the Contractor must remove all provisional installations, auxiliary structures, lifting and transport eye bolts etc.

#### 3.11 Corrosion protection

Screwed and welded joints must be provided by the Contractor with suitable protection against corrosion after manufacture. Primer coating damaged during transport or assembly must be touched up by the Contractor professionally in accordance with the paintwork specifications.

### 3.12 Securing for winter

The Contractor's contractual performance includes securing the building site for winter, incl. heating, if necessary, and covering with tarpaulins etc.

#### 3.13 Protection against soiling

During storage and assembly, both the parts and existing plant parts must be protected against interior and exterior soiling. The Contractor must clean the parts if necessary.

#### 3.14 Filler metals

The Contractor will provide all necessary filler metals with the associated quality documentation (suitability certificates/test certificates acc. to EN 10204).

## 3.15 Technical gases

The Contractor provides all necessary technical gases for his contractual performances.

# 4 Provision of performances by the Contractor

## 4.1 Quality and safety

The Contractor guarantees a proper and workmanlike performance of its contractual services in accordance with national and local law as well as the requirements of the Client and of the final customer with regard to quality, safety, health and environmental protection. If no regulations exist for certain areas or constructions, the work must comply with the state of current technology. The Contractor is fully responsible for the work which he has to perform.

# 4.2 Compliance with legal regulations for cross-border services

The Contractor is obliged to comply with all legal regulations and official directives concerned with cross-border services. He is solely responsible for the procurement and maintenance of work and residence permits etc. He is responsible for remuneration in accordance with legal regulations. The Contractor must compensate the Client for any damages caused by the disruption of the assembly procedure as a consequence of official measures for which the Contractor is responsible.

The Client and the final customer are entitled at any time to check the Contractor's compliance with the German Posting of Workers Act and other legislation concerning cross-border services. The Contractor is obliged to



submit pertinent documents to the Client and the final customer in this respect.

The Contractor is obliged to verifiably instruct his subcontractors with regard to compliance with the German Posting of Workers Act and other legislation concerning cross-border services, to impose on them the above-mentioned obligations and to check their compliance with the obligations.

### 4.3 Building site rules

The final customer's building site rules form part of the contract and are accepted by the Contractor without reservation.

#### 4.4 Assembly instructions

The Contractor prepares a detailed installation plan and submits this to the Client not later than 4 weeks after contract award. Verification of structural stability must be provided for each status of the construction, if required.

## 4.5 Relationship to the final customer

The assembly work proceeds under the supervision of the Client. Direct consultation and agreements between the Contractor and the final customer are not permissible.

# 4.6 Contractor's responsibility on the building site

The presence of the Client's building site management on the building site does not relieve the Contractor of his sole responsibility for the work which he has to carry out.

## 4.7 Execution of work on the building site

The Contractor must arrange the deployment of his personnel and appliances such that the Client's schedule is maintained and the Client does not incur any extra costs.

The Contractor is obliged to cooperate with all of the trades involved in the construction in order to avoid hindrances. This also includes the shifting of working

times in agreement with the Client's building site management should it become necessary to avoid an accumulation of workforces in particular assembly areas. These obligations were taken into account by the Contractor at the time of concluding the contract and no costs are involved for the Client.

In the event that delays in the assembly procedure or other difficulties are recognised, the Contractor and the Client are mutually obliged to inform each other in order to jointly seek solutions for maintaining the schedule and avoiding additional costs.

If delays occur in the assembly procedure due to the Contractor's personnel being absent or unqualified, the Client is entitled, following a prior warning with the setting of a time limit, to deploy his own personnel or third party personnel. The expense of this personnel deployment will be invoiced to the Contractor at the Client's hourly rates applicable at the time of deployment.

The assembly plan must be updated constantly and a new one drawn up if necessary. Progress statistics must be maintained. The number of working hours performed per month is to be reported to the Client for each month at the beginning of the subsequent month. This also includes working hours performed by subcontractors and site management. Any lost time caused by occupational accidents is to be reported to the Client on a monthly basis at the beginning of the subsequent month.

The Contractor shall report the number and qualifications of his on-site personnel in writing to the Client's building site management by 9 am daily.

## 4.8 Overtime and surcharges

The Contractor is obliged, without the remuneration of additional costs, to arrange overtime, working on Sundays and public holidays, night shifts etc., as well as parallel working in offset shifts within normal industrial bounds, if this



should be necessary in order to maintain the schedule that has been stipulated by the Client and confirmed by the Contractor.

## 4.9 Subsequent rectification work

Subsequent rectification work is any work necessary to rectify defects in the design or manufacture for which the Contractor is not responsible.

The assembly price includes 0.25 h/t settlement weight for subsequent rectification work, including all appliance costs in conjunction with this.

Any costs over and above this for subsequent rectification work can only be claimed by the Contractor if, before carrying out the work, the Client's building site management has been informed that the extent of the subsequent rectification work will be greater than originally calculated and the Client has issued his written consent for the work to be performed. Subsequent rectification work carried out without the consent of the Client's building site management will not be recognised.

The name of the person who commissioned the Contractor to carry out the notifiable subsequent rectification work must be stated on the 'Working time certificate'.

#### 4.10 Additional assembly work

The Contractor is obliged, over and above his contractual performances, to provide any additional deliveries and performances ordered by the Client under the conditions mentioned in the contract and on the basis of the prices mentioned in the contract, even if an interruption in the assembly procedure occurs as a result and resumption of work is then necessary.

The execution of additional performances must be confirmed in writing by the Client.

The counter-signature of performance or weight certificates is also deemed to be written confirmation.

Additional performances will not be remunerated without written confirmation of their execution. Confirmation of execution by the Client's building site manager does not prevent the Client from rejecting additional remuneration with the advice that the work carried out was in fact a regular contractual performance.

## 4.11 Joint use of lifting equipment

The Contractor is obliged the make his lifting equipment on the building site available to the Client and third parties at the request of the Client and in return for appropriate remuneration. The Contractor shall mention his charge rates for this when submitting his tender.

#### 4.12 Joint use of scaffolding

The scaffolding provided by the Contractor can be used if necessary free of charge by the Client and his other Contractors, or by the final customer or his representatives. This regulation also applies in the opposite sense.

#### 5 Welding and annealing work

## 5.1 Welding qualification certificate

The Contractor shall have valid welding procedure qualifications according to DIN EN ISO 15614. For welding work on pressure equipment, the additional requirements according to the Pressure Equipment Directive (PED), TRD, AD 2000, KTA, ASME Section IX are to be met, in each case as far as applicable. In the area of steel structures subject to monitoring the additional requirements according to DIN 18800 or DIN EN 1090-2 (Eurocode 3) are to be adhered to. Copies of the welding procedure test reports shall be handed over to the Client. The Client reserves the right to order sample welds, the testing of which will be carried out by the Client or a testing body. The Contractor bears the costs of the tests.



If necessary, preliminary test certificates for assembly welding work must be presented before commencement of the work.

## 5.2 Welding personnel

All welding work shall only be performed by welders qualified in accordance with EN 287, for automatic welding the requirements according to DIN EN 1418 shall be met. Further, the code requirements mentioned under 5.1 are to be adhered to. The Contractor shall prepare skill test assemblies free of charge on site under site conditions. The welding supervisor of the Contractor shall keep a list of welders on site. The welder's qualification certificates (originals or legalized copies) of the welders employed by the Contractor on site are to be kept ready for submission to the Client or inspection agency. The regulation according to EN 287 applies with regard to the validity of the welding certificates. An authorised and qualified welding supervisor from the Contractor must be present at the building site throughout the duration of the welding work (DIN EN 719).

# 5.3 Welding Procedure Specification (WPS)

Suitable welding procedure specifications (WPS) and, if required, a welding sequence plan shall be prepared and submitted to the Client for approval at least 10 workdays before start of the welding work, considering the codes mentioned under 5.1 and 5.2.

# 5.4 Annealing personnel and annealing systems

The Contractor shall provide the required number of suitable annealing systems and qualified annealing personnel; the requirements according to FDBR 18 "Heat Treatment of Welded Joints" are to be met.

The Client reserves the right to request trial annealing runs at the expense of the Contractor.

#### 5.5 Annealing specifications

Unless the specifications for heat treatment are included the WPS mentioned under 5.3, the Contractor shall prepare separate annealing specifications and submit them to the Client for approval.

## 5.6 Annealing documentation

The requirements according to FDBR 18 shall be adhered to.

## 6 Quality management and quality assurance

The Contractor shall prepare a project-related quality management plan (QPM) on the basis of DIN EN ISO 9001 and ISO 10005. The Client can at any time check implementation of the specific QM requirements by auditing and, if essential defects are detected, stop the installation activities at the expense of the Contractor until implementation of the agreed QM requirements has been achieved, as can be proved.

Quality inspections are carried out on the basis of released inspection plans, test specifications, material specifications and other specifications included in the inspection plans or technical drawings. Deviations are to be documented in writing and are subject to the scenario described in the above mentioned QMP.

Necessary weld repairs of connecting welds or components are to be presented to the Client without delay. Only after submission and release of the repair specifications (WPS and inspection plan) the weld repair work will be carried out.

Welding work and weld repairs are each day recorded statistically by the Contractor and handed over to the BBS site management in writing. Repair rates are determined in each case on the basis of inspected welds and weekly reported to the Client.

Unless otherwise agreed, quality control will be carried out by the Client or third-party inspectors and/or notified bodies.



If repetition of a quality inspection is necessary and the Contractor is responsible for this, he will bear the total costs caused by the repetition.

If systematic defects are found, the Client is entitled to increase the scope of inspection agreed upon in the contract, if necessary up to 100 % of the contractual work. If the Client is responsible for the cause of the increase in the scope of inspection, he will bear the total costs caused by this.

The Contractor shall prepare a quality documentation concurrent with the installation progress under the direction of the Client which conforms to the quality required by the Client and/or end user.

Acceptance of the assembly work is based on the contractual agreements, the latest edition of the VGB Guidelines for Ordering High Duty Steam Boilers (VGB = Association of Large Power Station Operators), the TRDs (German Technical Rules for Boilers), the AD specification sheets and the agreed construction and assembly supervision plan.

The Contractor must allow the Client or final customer's quality assurance officer, construction supervisor and acceptance officer access to the parts of the plant at all times.

#### 7 Cleanliness on the building site

The Contractor must perform coarse cleaning of his work area on a daily basis. The Contractor must perform fine cleaning of his work area at the request of the Client if the building site procedure makes this necessary (e.g. adjoining assembly sections, acceptance, handover, impediment of third parties etc.). Furthermore, the Contractor shall employ, at his own expense and in accordance with the size of his staff, one person from every 20 persons for 10 hours per week for the general cleaning of the building site. The use of these employees is arranged via the Client's building site management.

In areas where other Contractors of the Client are also working besides the Contractor, the Contractor is jointly responsible for cleaning along with the other Contractors. In the event of a dispute between the Contractor and the Client's other Contractors regarding the respective share of the cleaning work, the Client can demand that the Contractor carry out the cleaning of the entire area. The Contractor's verified costs will be reimbursed proportionately according to his staff level, his trade and the associated level of dirt at the time of the cleaning work.

If the cleaning is not carried out even after a written warning and the setting of an appropriate time limit, the Client is entitled to carry out the cleaning himself or to have it performed by a third party. The third party in this case is another of the Client's Contractors, who has taken over the cleaning completely. The Client will allocate the costs proportionately to the Contractor according to his staff level, his trade and the associated level of dirt at the time of the cleaning work.

#### 8 Environmental protection

All applicable legislation and official directives concerning the disposal and handling of waste and residual materials on building sites must be complied with.

If the final customer and the Client have come to an agreement regarding the handling and disposal of waste and residual materials on building sites, this applies accordingly to the Contractor.

The costs for disposal will be allocated proportionately to the Contractor according to the share of his contractual performance in relation to the entire project.

## Hazardous substances

The following provisions are to be observed in connection with the storage, handling and processing of dangerous substances on the site:



For all dangerous substances the corresponding safety data sheet in German, English and in the respective national language must be available on the site. All dangerous substances must be listed in a list of dangerous substances with indication of the quantity of the dangerous substances and the dangers arising from them. If the use of the dangerous substance is subject to the approval of the final customer (see also building site regulations of the final customer, for instance), the Contractor itself is to obtain this approval. Any resulting delays or re-scheduling will be at the expense of the Contractor.

Apart from the approval of the final customer for the use of dangerous substances the use and/or storage of water-polluting substances is to be reported to the Client's site management. Only after release by the Client's site management these substances may be stored in accordance with the national rules and regulations applicable at the respective time.

The Contractor declares that the materials to be supplied by it are free from asbestos and substances according to Annex XIV of the REACH Regulation and/or the corresponding "Candidate List of Substances of Very High Concern".

#### 9 Work safety

## 9.1 Accident prevention regulations

The Contractor must issue directives and take measures to prevent accidents in compliance with the national and local accident prevention regulations and the legal regulations with respect to the Health and Safety at Work.

# 9.2 Instructions and proof of instructions given

The Contractor shall regularly give instructions in occupational safety and health to his employees in accordance with the legal regulations and furnish proof of giving the instructions, the

contents and the group of participants. The instruction records are to be kept ready on site for inspection at any time.

# 9.3 Occupational and safety management system for subcontractors

Together with the submission of its offer the Contractor is to prove to the Client that the company has an occupational safety and health system in place. This includes BS OHSAS 18001, OHSAS 18001, BS 8800, SCC\*, SCC\*\*, SCC\*\*, SCSaM. If the company has implemented a different management system, this must have been checked by the Client before it can be accepted as equivalent.

Irrespective of the introduction of a management system the Contractor grants the Client the right to check the actual conditions with regard to the introduction and implementation of the system at the building site and at the permanent establishments of the Contractor by means of an audit.

Companies which do not have a corresponding management system in place, must be qualified by a corresponding pre-audit of the company. The items to be observed in connection with the audit are geared to the current version of the SCC Document 010.

# 9.4 Installation instructions and risk assessment

At least 10 working days before the commencement of work the Contractor's installation instructions including all relevant safety details must be available at the site.

Technical safety specifications could be, <u>for example</u>:

- Scope, sequence and description of the assembly, lifting weights, rigging points, hoists
- 2) Regulation of responsibility
- Measures to prevent employees from falling or slipping during assembly work

BILFINGER

- 4) Measures to prevent objects from falling
- General drawings or sketches of the intended workplaces and access to same
- 6) Instructions on first aid and fire prevention

At least 10 working days before the commencement of work the Contractor is to present to the Client (site management) a risk assessment for the work to be performed by it. This risk assessment must be available not only in the national official language of the Contractor but also in the German language and the language spoken at the site. The risk assessment must be geared to the Directive 89/391/EEC on the performance of measures for the improvement of safety and health of the employees at work.

### 9.5 Assembly personnel

The Contractor must instruct his assembly personnel and his subcontractors on the specific conditions of the building site before work commences. Each of the Contractor's employees and subcontractors must confirm this instruction in writing.

The assembly personnel employed by the Contractor and his subcontractors must have been subjected to occupational medical check-ups in accordance with the following regulations:

Fitters: BGI 504-1.4, BGI 504-20. BGI 504-26.2

Welders: BGI 504-20, BGI 504-26.2, BGI 504-39

Stainless steel welders: BGI 504-15, BGI 504-20, BGI 504-26.2, BGI 504-38, BGI 504-39

Crane drivers: BGI 504-25

Fork lift truck drivers: BGI 504-25

The carrying out of the medical examinations must be proven and the written confirmations of instruction submitted to the Client upon request. The Client is entitled to expel the employees concerned from the building site until such time as the written confirmations and the proof of medical examinations have been submitted.

#### 9.6 First aiders

The Contractor is to engage a sufficient number of first-aiders at the site which is geared to the risk potential.

#### 9.7 Safety representatives

For every 50 employees assigned to the work the Contractor is to appoint one employee who has completed a corresponding safety training for the building site and fulfils the duties of a safety officer. If it is required due to legal regulations, a safety officer is to be appointed for the building site.

## 9.8 Work safety officer

As a function of the number of employees assigned to the work the Contractor is to employ the necessary number of workers who have completed the corresponding safety training for the building site and fulfil the duties of an occupational safety and health specialist. If it is required due to legal regulations, a corresponding number of occupational safety and health specialists is to be assigned.

The period of service is established according to the factor of 0.5 hours per employee and month. The required periods of service represent the lower limits to be observed. All periods of service of the occupational safety and health specialist at the site are to be proved by the Contractor upon request.

## 9.9 Electrical hazards

As a rule, power station building sites fulfil the criteria for working in confined spaces or for working under increased electrical hazards. For this reason, all electrical tools and machines used must possess a



valid test certificate for mobile electrical equipment. The protective measures necessary for the Contractor's work (e.g. isolating transformer, protective extra-low voltage) must be provided by the Contractor.

## 9.10 Scaffolding

Working and protective scaffolding must be erected in accordance with DIN EN 12811, DIN 4420 and DIN EN 1004. Working scaffolding must be designed with at least load class III. The scaffolding may only be erected or altered by a specialist company.

All scaffolding must be marked in a permanent and clearly recognisable manner. The marking must include the following details:

Which scaffolding is it?

Which width class is used?

Which load class is used?

What load can the scaffolding bear?

Who erected the scaffolding?

Who checked the scaffolding?

In areas where there is an increased risk of fire, the scaffolding must be erected with flame resistant boards.

If there are differences to the standard design as per the manufacturer's erection and usage instructions, verification of stability in an individual case must be supplied by the Contractor.

The manufacturer's erection and usage instructions and the verification of stability in an individual case, if applicable, must be kept at the building site at all times.

### 9.11 Fire protection

Unless otherwise required, the Contractor must maintain a sufficient number of tested and functional 12 kg dry powder fire extinguishers (ABC extinguishing powder) as follows:

per accommodation container

1 x 12 kg dry powder extinguisher (ABC)

per storage container

1 x 12 kg dry powder extinguisher (ABC)

per 100 m<sup>2</sup> warehouse area

1 x 12 kg dry powder extinguisher (ABC)

per gas bottle store

1 x 12 kg dry powder extinguisher (ABC)

at cutting and welding workplaces

1 x 12 kg dry powder extinguisher (ABC)

Fuel loads must be removed by the Contractor from the assembly area on a daily basis.

Only flame-resistant tarpaulins and sheets may be used.

## 9.12 Occupational accidents, fire, incidents

Not later than 24 hours after an incident (e.g. occupational accident, environmental pollution, fall of objects) the Contractor is present a written report about this to the Client. In the event of serious occupational accidents (fatal accident, accident with several injured persons, serious injuries) the site management of the Client is to be immediately informed.

## 9.13 Investigation of the accident

The Contractor shall actively contribute to the investigation of incidents. Any meetings or the preparation of documents required for this purpose will not be paid. In the event of such incidents the Contractor grants the Client the right to participate in the investigation and, if necessary, also to conduct this investigation. Official investigations and/or local legal conditions remain unaffected by this.



## 10 Clearing up the building site

Following completion of the assembly work, all provisional items must be including provisional removed, all foundations etc. The building site must be handed over in a clean-swept condition. Storage places, pre-assembly places and places for building site facilities, if these were provided by the Contractor, as well as building site facilities provided by the Client must be handed over by the Contractor in a comparable condition to that at the time when they were handed over to him. The handover to the Client of the building site and the facilities mentioned in section 3 must be recorded in writing.

If the Contractor does not comply or does not fully comply with his obligation to clear up the site, the Client is entitled, following a written request and the setting of an appropriate time limit, to carry out the cleaning himself or to have it performed by a third party at the Contractor's expense.

### 11 Code of conduct

The Contactor is committed to the principles of ethics, integrity and law-abidingness.

The Contractor also commits himself to integrity and a law-abiding ethical conduct conforming to the principles of the Global Compact Initiative of the United Nations. The Contractor commits himself to adhere to the Code of Conduct<sup>1</sup> of Bilfinger SE for subcontractors and suppliers and confirms this by his signature.

<sup>1</sup> Annex Code of Conduct for Subcontractors and Suppliers

AMB 2012 E / Rev. 2