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## 1. OBJECT AND FIELD OF APPLICATION

The present specification defines **the minimum requirements** relating to the manufacture (new construction, modification and repair) and the **testing** of mechanical welded steel assemblies.

It applies to constructions in the machine engineering industry such as: machine housings, equipment for blast furnace, **casing for mechanical equipment, gear boxes, valve actuating units, receiving hoppers, pressure equalizing valves, etc.**

Equipment covered by specific standards or regulations such as pressure vessels **or pressure piping** (e.g. EN 13480, EN 13445, AD 2000 and CODAP), steel structure (e.g. EN 1090) etc. are excluded.

The standards requested in this instruction are **mainly EN** ISO standards which are applicable to different markets. **In case the supplier wants to use standards which are not specified in this instruction, he has to ask PW for prior approval.**

## 2. SUPPLIER

The supplier (as defined in the International Standard ISO 9000) is reliable for the **welded steel assemblies**, according to the present specification of Paul Wurth, to the prescriptions of the code and the standards listed, as well as for eventual particular requirements stated in the order.

In order to assure an efficient **manufacturing** of the **welded steel assemblies** and to detect potential problem sources, the supplier is required to implement appropriate quality management procedures.

Contractual **minimum** welding requirements:

The **supplier and sub-supplier must have a certification according to EN ISO 3834 - 3. If the supplier is not certified, PW-SQC needs to perform an audit before order placement.**

Paul Wurth reserves the right to assess and approve the welding quality management system of the supplier or to have it assessed by an approved body or by a third party. In any case, Paul Wurth reserves the right to assess and approve the welding quality system presented according to other codes and standards, which are different from those indicated in this specification (e.g.: ASME, AWS, etc...).

## 3. SUBCONTRACTING

The supplier can subcontract part of his supplies with the prior **approval** of Paul Wurth **only**. It is up to the supplier to make sure that the conditions placed in the order documents of Paul Wurth as well as the corresponding documents are supplied to the subcontractor(s).

## 4. WELDING

### 4.1 WELDING DOCUMENTATION

Prior to manufacturing, the supplier draws up documentation, which he will submit to Paul Wurth at first request, with the following content:

- the welding procedure specifications (WPS) applied for each joint type or assembly family (group),
- the welding procedure qualification record (WPQR) for each joint type,
- the list of the qualified welders / welding operators and a copy of the qualification certificates,
- possibly, at the request of Paul Wurth, a description of the sequence of the different manufacturing stages, which can have an incidence on the welding process (heat treatments, non-destructive tests, etc.),
- the welding coordination during the work process.
- the welding map.

### 4.2 WELDING PROCEDURE SPECIFICATIONS (WPS)

The welding shall be realized according to the welding procedure specifications (WPS) as stated in the EN ISO 15609-1.

The supplier shall make sure that applicable welding procedure specifications are correctly used in the production process.

If necessary, the welding procedure specifications shall be completed by work instructions. They shall be available at the welders working place.

### 4.3 QUALIFICATION OF WELDING PROCEDURES (WPQR)

The welding processes (or a combination of them) covered by the EN 1011-1~3 can be used. Other welding processes can be used only after Paul Wurth agreement.

The welding procedure specifications (WPS) must be qualified according to the EN ISO 15614-1 and approved by competent third party (eg. Notified Body in the field of pressure equipment or steel structure) or to applicable QIP, before initiating the welding works (see point 4.1).

A qualified welding procedure specification is applicable to the realization of all the welded joints carried out by the supplier, insofar as the characteristics of such joints and their carrying-out are within the limits of the range of validity.

In any case, Paul Wurth reserves the right to choose between the acceptance of qualification presented according to other codes and standards or the necessity of proceeding to new qualifications.

### 4.4 QUALIFICATION OF WELDERS / WELDING OPERATORS

The qualification of the welders and welding operators allows verifying their ability to carry out welded steel assemblies according to the required quality criteria.

- The welders shall be qualified according to EN ISO 9606-1.
- The operators shall be qualified according to EN ISO 14732.

In any case, Paul Wurth reserves the right to choose between the acceptance of qualifications according to codes and standards, which are different from those indicated above or the necessity to proceed to new qualifications.

In case of non-acceptable performance of a welder, PW reserves the right not to allow this particular welder to continue welding on PW components.

## 4.5 WELDING COORDINATION

The supplier shall have qualified and experienced coordination personnel to make sure that the execution and the control of the welding process is carried out in good conditions.

The welding coordinators shall have adequate technical knowledge according to the International Standard ISO 14731 (see point 4.1).

In any case, Paul Wurth reserves the right to accept persons having sufficient experience to carry out the supervision of the welding operations in order to make sure that such operations are carried out according to the contractual requirements.

The coordinator's qualification certificate shall be presented to Paul Wurth on request.

## 4.6 WELDING CONSUMABLES

Handling/Storing of welding consumables shall be according to the welding consumables supplier recommendations. Requirements of EN ISO 15614-1 and EN ISO 3834-3 shall be followed. Unless otherwise stipulated in the project specifications of Paul Wurth, a «test report» according to EN 10204 - 2.2 is accepted.

# 5. MATERIALS

## 5.1 USE OF MATERIALS

The technical documents of the contract (drawings, bills of materials, technical specification, project specifications) prescribe the grade of the materials to use for the manufacturing of the ordered welded steel assemblies.

The supplier shall make sure that the used materials correspond to those prescribed and is in accordance with the technical delivery conditions of the applicable standard.

Under no circumstances the grade and quality of the prescribed materials shall be modified without the prior consent of Paul Wurth.

Generally the wall thicknesses indicated in Paul Wurth S.A. bills of materials pertain to finished dimensions of walls requiring machining after welding. The supplier is held to determine plates thicknesses according to the related technical drawings and the fabrication facilities used for this purpose.

## 5.2 SUPPLY

The steel products to be used for the realization of the objects of the purchase order shall be supplied following a written order by the supplier.

Any **steel product** order must **at least** stipulate, besides the dimensional characteristics, the **information as per applicable delivery standard (eg. EN 10028) as well as possible additional requirements specified by PW (eg. EN 10160, EN 10164, etc.)**.

Paul Wurth reserves the right to ask the supplier, for any purposes, for a copy of the written order of the components.

### 5.3 INSPECTION DOCUMENTS

The final acceptance of the components shall only take place if the inspection and testing results comply with the requirements of the order / specifications and after the reception of the required acceptance documents.

In any case, the components shall come with perfectly legible, reproducible **inspection** documents in their totality and written in the language stipulated in the contract.

Unless otherwise stated in the specifications or **required** by the construction code, **inspection** documents according to EN 10204:

- **Steel grades  $Re > 235$  MPa = 3.1,**
- **Steel grades  $Re \leq 235$  MPa = 2.2**

However, in agreement with Paul Wurth, **"declaration** of compliance with the order" type 2.1 or "test reports" type 2.2 according to EN 10204 are acceptable for parts like fasteners, stiffeners, supports, etc...

### 5.4 IDENTIFICATION OF MATERIALS

The materials shall be identifiable at each stage of the manufacturing process from the supply to the acceptance of the final product.

The supplier shall be able to prove, during the manufacturing process, the nature and origin of the used materials, by ensuring that their identification is retraceable and preserved. If **required**, he shall carry out the necessary identification reports himself.

## 6. PREPARATION OF THE PARTS BEFORE WELDING

### 6.1 CUTTING AND CHAMFERING

The metal sheet, the pipes and other components can be shaped before or after the forming and welding operations, provided that the following conditions are fulfilled:

- the cutting and chamfering by machining is permitted for all the materials,
- **thermal** cutting can require preheating according to the steel grade and thickness,
- shearing is allowed by taking in account the steel grade and thickness,
- if the zone hard drawn by shearing is not totally melted during the welding process, the manufacturer shall make sure that material characteristics are not affected,
- important irregularities, cracks, **scale** patches and different superficial **imperfections** that might affect the weld quality should be systematically eliminated,
- if the cutting and the chamfering of the components reveal inclusions or **laminations**, the measures for an eventual possible repair are to be taken in agreement with Paul Wurth.

## 6.2 FORMING

*The forming of parts can be carried out by cold or hot processes, either by rolling or by a press or by any other proven process, provided that the properties of the material are not affected beyond tolerated limits.*

*The method used shall allow complying with the required tolerances.*

*Hammering must not be used for cold forming operations.*

*As regards hot-shaping, the recommendations of the steel supplier must be complied with.*

*The supplier shall make sure that the implemented forming process does not affect in an irreversible way the metal properties or its surface quality.*

*If necessary, he shall proceed to the post forming heat treatments required by the codes or standards **or recommendations of the steel supplier.***

After the forming process and possible heat treatments the components shall be inspected as to their dimensions. The shaped faces shall be free from cracks, notches, scratches or other stress-implying **imperfections.**

Paul Wurth reserves the right to ask the manufacturer to provide a description of the forming process as well as a qualification to make sure that the required mechanical characteristics are not affected.

## 6.3 ASSEMBLIES

### 6.3.1 COMMON DISPOSITIONS APPLICABLE TO ALL ASSEMBLIES

- The assemblies shall allow the carrying out of each weld in good conditions of accessibility.
- All the necessary dispositions shall be taken to reduce to the minimum the stress due to **heat input** or shrinkage.
- The accumulation of welds as well as dispositions leading to the concentration of high stress shall be avoided.

EN 1011 "Recommendations for metallic materials welding" do apply, particularly:

- part 1: General guidelines for arc welding,
- part 2: Arc welding of ferritic steel,
- part 3: Arc welding of stainless steel.

## 6.4 JOINT PREPARATION

The surfaces of the joints to be welded and the adjacent surfaces of a weld shall be free from grease, rust, **scale, moisture** and paint.

**The welding on pre-fabrication primer is not accepted.**

For **welded steel assemblies**, the quality of the **thermal** cutting shall be in accordance with ISO 9013 **range 4.4.**

The maintaining of position of the edges to be welded shall allow the compliance with the prescribed alignment tolerances during the whole welding process (e.g. EN 1011 **+ EN ISO 5817**).

The gap allowed for the preparation of the edges to be welded and the adjustments shall comply with the values of the welding procedure specifications.

Paul Wurth reserves the right to verify correct positioning.

Joint preparation shall be in accordance with EN ISO 9692-1/2 + EN 1708-1.

## 6.5 PREHEATING

It may be necessary to preheat the components before any welding and tack welding process in order to avoid the risk of cracking in the heat affected zone.

The preheating temperature depends on the steel grade, the thickness of the element to be welded, the type of joint and the heat input.

The preheating temperature shall be maintained constant during the whole duration of the welding process.

The maintaining of the preheating temperature shall be continuously monitored by means of adequate measuring instruments or temperature indicating pens.

The WPS of the manufacturer shall specify the preheating temperatures and, if necessary, of the temperatures between the extensions of two weld seams.

Note:

The recommendations concerning preheating according to EN 1011 shall be applied.

As for the measurement of the preheating, interpass and preheat maintaining temperature, see the guidelines of EN ISO 13916.

## 6.6 TACK WELDING

The carrying out of tack welding processes is subject to the same welding conditions as those foreseen for the first welding seam of the concerned joint, including if necessary, the preheating.

It is possible to incorporate a tack weld into a definitive weld on condition:

- that its shape is adapted,
- that it is carried out by a qualified welder and according to the welding procedure specifications.

The surfaces of the tack welds shall be cleaned carefully before the final welding.

The tack welds presenting cracks or other non-conformities shall be eliminated.

Note:

The recommendations of the different parts of EN 1011, where applicable, shall be followed.

## 6.7 TEMPORARY FIXING DEVICES

The attachments of temporary elements for the supporting, sustaining or alignment of the parts by welding shall be carried out while taking the appropriate precautions, corresponding to the grade of the implemented steel.

The removal of temporary fixing devices shall be done by means, which do not affect the characteristics of the material of the concerned element.



After the removal / cutting, the affected zone is submitted to a grinding process followed by an inspection. A magnetic particle **testing** (MT) or a **penetrant testing** (PT) **are required!**

Such cutting or grinding shall not reduce the thickness of the wall of the component below the minimum value indicated on the drawing.

Elimination by hammering is not allowed.

Note:

The recommendations of the different parts of EN **1011-1-2-3**, where applicable, shall be followed.

## 7. EXECUTION OF THE WELDING

Before starting any welding **works** Paul Wurth shall have:

- **reviewed the welding procedure specifications, the welding procedure qualification report**, if required in the contract, (program, instructions and welding procedure specifications) as stipulated in the points [4.1](#) and [4.2](#),
- **reviewed** the welders/ **welding operators certificates** as stipulated in the points [4.4](#).

All the welding operations shall be supervised permanently by the manufacturer, in this particular case by his welding coordinator as defined in point [4.5](#).

The welding operations shall be carried out under protection against rain, snow and wind and shall be interrupted when the temperature of the elements to be welded is below or equal to 0°C. For temperature below 0°C a specific agreement shall be given by Paul Wurth!

The consumables shall be **stored and maintained according to the recommendations of the consumables supplier** (see point [4.6](#)).

**Arc strikes** off the edges to be welded shall be avoided and in case of unintentional striking, the affected surface shall be slightly **ground** and inspected.

Each weld seam shall be free of slag, cleaned and surface irregularities shall be eliminated before the carrying out of the following seam in order to grant the good quality of the metal brought in.

The end craters of the welds shall be eliminated by grinding or by prolonging the seams on suitable **run-on/run-off pieces**. If this is impossible, the end weld point shall be in the least affected zone of the weld.

If the welding process requires full penetration, the back-hand welding of a welded joint shall be preceded by a thermal or mechanical gouging or by a grinding process.

In agreement with Paul Wurth, welds with full penetration carried out on one single side can be realized with **a backing plate**. Requirements concerning this use shall appear in the description of the welding procedure specifications.

Note:

The recommendations for metallic material welding provided by the different parts of the European Standard EN 1011 **shall** be followed as well.

## 8. IDENTIFICATION OF THE WELDS

The supplier has to take all the necessary steps to allow identification of the welder / operator who carried out the welds, either by:

- identifying the weld locally by affixing the symbol corresponding to the welder / operator,
- by replacing the identification of the welds by resuming the corresponding parameters in the manufacturing documents (drawings, weld lists...).

## 9. POST WELD CORRECTION OF DISTORTIONS

If the precautions, taken before the welding process (**welding sequence**, preheating, etc...), did not allow to avoid or to compensate for the effects of shrinkage, such local deviations or distortions can be corrected so as to obtain an end product in conformity with the contractual documents.

The adjustments / the straightening shall be carried out according to a **written** procedure agreed by the contracting parties.

- Adjustment / straightening by local heating is allowed **according to the material supplier recommendation**, if such process does not modify unfavourably the characteristics of the metal and if the final state of delivery of the component is not altered.
- Cold hammering to eliminate overlapping or other distortions is not permitted.
- Accelerated cooling by water or similar is not permitted.

All the deviations, adjustments and straightening shall be documented.

## 10. POST WELD HEAT TREATMENT

If the welded parts shall undergo a post weld heat treatment, the supplier shall define, specify and document:

- the heat treatment method to apply,
- the temperature mounting and descending speed,
- the **holding** temperature and **holding time**.

The supplier has to take into account the recommendations of the manufacturer of the material concerning the grade(s) of the steel used in the process. **If not otherwise specified by the material manufacturer, the FOR 558 shall be followed.**

The duration and temperatures of the complete cycle of the post welding heat treatment shall be **recorded** during the whole process

The heat treatment diagram shall **be included in the final documentation of the supplier.**

## 11. MACHINING

Any eventual final machining of the concerned parts shall only be carried out after the welding and the heat treatment, **if not otherwise required**. The machining of flanges should always be carried out after the welding on the connection tube, unless welding neck flanges are being used.

The dimensions and tolerances are specified on the drawings or specification of Paul Wurth. The surface roughness shall be according to the drawings (see also EN ISO 1302).

## 12. INSPECTIONS AND TESTING

### 12.1 ORGANIZATION OF INSPECTIONS

- During the fabrication of the parts, the inspections and examinations shall be carried out at duly defined manufacturing stages by the supplier in order to ensure the conformity of the manufactured parts with the contract documents.
- For that purpose, the supplier shall send Paul Wurth the manufacturing schedules, which take in account the different inspection and testing operations, **latest 2 weeks after receiving the order**.

### 12.2 CONDITIONS OF CARRYING OUT INSPECTIONS

- In order to avoid systematic non-conformities, inspections shall be undertaken as from the beginning of the manufacturing process.
- Any weld that becomes inaccessible due to ulterior operations shall be inspected prior to the execution of such operations. Paul Wurth shall be informed before the consecutive operations to these inspections can be continued.
- No weld seam may be painted before having been inspected and approved.
- The works or parts of works submitted to inspection shall allow an examination under good conditions and cannot be dispatched without the prior consent of the responsible person at Paul Wurth.
- **Welds not indicated in the drawings (Shop splices)** shall be 100% checked: VT, UT/RT. The Shop splices shall be shown on the fabrication drawings.

### 12.3 QUALIFICATION OF **NON-DESTRUCTIVE TESTING (NDT)** **PERSONNEL**

The NDT personal shall be qualified and certified according to EN ISO 9712, level 2 for VT, MT, PT, UT and RT.

### 12.4 TESTING REQUIREMENTS

If not otherwise indicated in the drawings, the technical specification, QIP, etc., the non-destructive testing (NDT) has to be performed according to "Mechanics Medium Requirements" (see below).

Non-destructive testing of welding	Standards	Acceptance standards	Scope of testing	
	EN	EN		
<b>Visual Examination (VT)</b>	EN ISO 17637	ISO 5817 Quality level C	100 %	
<b>Magnetic Particle inspection (MT)</b>	EN ISO 17638	EN ISO 23278 Acceptance level 2x	B, A, C, D, F, G	100 % * 20 % *
<b>Penetrant Testing (PT)</b>	EN ISO 3452-1	EN ISO 23277 Acceptance level 2x	B, A, C, D, F, G	100 % * 20 % *
<b>Radiographic Testing (RT)</b>	EN ISO 17636-1 class B	EN ISO 10675 - 1 Acceptance level 2	F G	20 % 100 %
<b>Ultrasonic Testing (UT)</b>	EN ISO 17640 testing level B	EN ISO 11666 Acceptance level 3	C D	20 % 100 %

A : Standard fillet welds; k-welds; butt welds  
 B : Lifting eyes  
 C : Full penetration welds and butt welds (K welds) (thickness  $t \geq 10\text{mm}$ )  
 D : Full penetration welds not mentioned or indicated in the drawing (thickness  $t \geq 10\text{mm}$ )  
 F : Full penetration welds (thickness  $t < 10\text{mm}$ )  
 G : Full penetration welds not mentioned or indicated in the drawing (thickness  $t < 10\text{mm}$ )

\* Magnetic particle inspection can be replaced by Penetrant Testing and inversely.

- 1) Welds marked with (#) must be included in the test scope
- 2) In case of defect detection at partial extent of testing (e.g. 20%), the extent has to be increased in gradual manner, if necessary up to 100%.
- 3) In case of doubt, radiographic examination must be supplemented by ultra-sonic examination and inversely.
- 4) At the beginning of fabrication, the extent of testing must be increased in order to verify, if the welding parameters / process etc. are correct.
- 5) In case of partial surface crack examinations (e.g. 20%) the zones to be checked must also be chosen, where visual examinations give some doubt, furthermore weld crossings and end of welds must be checked.
- 6) All NDT must only be performed at least 24 hours after welding completion.

**TECHNICAL REQUIREMENTS**

Please consult the technical specifications and quality inspection plan (QIP) of the project.  
 In case of different requirements the stricter ones have to be applied.

## 12.5 EXTENT OF TESTING

If the testing leads to the detection of non-acceptable imperfection/indication with regard to the acceptance criteria, the testing is extended (in the case of a partial inspection by sampling (5, 10, and 20%)).

As regards inspection extensions, refer to annexure C of EN ISO 17635.

## 12.6 TEST REPORTS

Each non-destructive testing carried out forms the subject of an inspection report established by the supplier.

This document shall at least contain the following information:

- the references to contract documents (order, drawings/**item N°**),
- the location/**identification** of the welds,
- the date of inspection,
- the name/**qualification** of the inspector,
- the operating conditions of the inspections (procedures, inspection instructions),
- **applicable standards/testing class/acceptance criteria**
- the inspection results,
- the interpretations and conclusions of the inspector.

## 13. REPAIRS

### 13.1 REPAIRS **OF NON-ACCEPTABLE IMPERFECTIONS/INDICATIONS**

- **Any non-acceptable imperfection/indication shall be repaired in a workmanlike manner.**
- After the repair, the weld seams shall undergo a new inspection. **Repairs shall be recorded in the NDT-report.**

### 13.2 OBLIGATIONS OF THE SUPPLIER

Paul Wurth shall be informed about the corrections carried out.

In case of **major** corrections, which might alter the final behaviour of the assembly, the supplier shall obtain the consent of Paul Wurth before proceeding to such corrections. In case of repair, the supplier shall make sure that the regular execution of the corrections are carried out carefully and shall mention them in his dimensional inspection report.

## 14. DIMENSIONAL CONTROL

### 14.1 FINAL DIMENSIONAL INSPECTION

A final dimensional inspection shall be carried out by the **quality** department of the supplier.

If the contract / order requires the presence of Paul Wurth and of the final customer during such inspections, the supplier has to address, with advance notice as stipulated in the contract, a written notification to Paul Wurth.

### 14.2 MANUFACTURING TOLERANCES

The manufacturing tolerances apply to the dimensions defined in the drawings / specifications approved by Paul Wurth.

The admissible deviations are defined:

- by Paul Wurth (in Paul Wurth drawings or Paul Wurth specifications) for the values, whose precision is imposed by the fitting or connection requirements,
- or by the specified construction code.

**If not otherwise specified in the drawings, technical specifications, quality inspection plan (QIP), EN ISO13920, class BF applies.**

### 14.3 CONTROL DOCUMENTS

The real measured dimensions shall be reported:

- on an overall drawing or detail drawing,
- in a dimensional inspection report,
- respectively on the inspection sheet of Paul Wurth attached to the contract.

### 14.4 OUT OF TOLERANCE VALUES

If, after the completion of the welding works, the welding dimensional inspection reveals out of tolerance values, the concerned parts shall be treated as non-conformities of the supplier and shall either:

- undergo repair work in the workshop,
- possibly be scrapped,
- be submitted to a derogation request for a possible acceptance without any repairing.

A derogation to the contractual requirements may in certain cases be accepted, provided that the usability is not being affected.

However, a derogation presumes the prior consent of Paul Wurth and the final customer.

The dimensional inspection report and the drawing(s) shall be included in the supplier's **final documentation**.

### 14.5 CALIBRATION

The measuring devices used to check the conformity of an element according to final documentation with the stipulated requirements shall be periodically calibrated **according to the QM-system of the supplier** and can only be used during the validity period of their calibration.

## 15. **TRIAL** ASSEMBLY IN THE WORKSHOP

Except otherwise stated in writing by Paul Wurth, the supplier has to proceed to a **trial** assembly in the workshop of the different parts of an equipment.

This operation consists in assembling the parts as foreseen in the workshop drawings, in fitting them with the adequate bolts and in adjusting them in such a manner that the joint edges to be welded on the assembly site do present the prescribed shapes and dimensions.

The **trial** assembly and the disassembly shall be possible without causing deformations of the parts or holes.

The identification of the parts before their disassembly is compulsory.

On request, the supplier works out a test assembly program and submits it for approval to Paul Wurth.

**The** supplier has to take photographs of the test assembly of the parts and hand them to Paul Wurth.

## 16. CORROSION PROTECTION WORK

Corrosion protection work carried out in the workshop can only be executed after the inspection and the final acceptance of the components.

Such work shall be carried out according to the specification of Paul Wurth ([FOR 518](#), [FOR 519](#)).

Before applying any coating, the supplier shall ensure that the surface quality of the parts allows the coating in conformity with the specification.

The supplier shall make sure that the prescriptions of the manufacturer of the coating product are respected, namely:

- the surface preparation of the product,
- the application method,
- the drying time between the layers,
- the climatic conditions.

The verification of the coating thickness shall be carried out with a calibrated measuring device.

The measured values shall be registered in a report ([FOR 520](#)) to be handed to Paul Wurth.

In general the requirements of the EN ISO 12944 shall be followed.

## 17. OTHER TESTS

Tests such as:

- pressure tests (hydraulic pressure tests or pneumatic pressure tests),
- tracer gas leakage test,
- functional testing of the parts,

may be required by Paul Wurth according to the modalities defined in the contractual documents such as: drawings, technical specifications, QIP, etc...

## 18. REQUIREMENT OF DOCUMENTATION

The documents, which constitute the complete final documentation, shall be established in the language mentioned in the order or particular specification of Paul Wurth.

Unless otherwise required in the order document of Paul Wurth, the final documentation shall comprise all the documents that illustrate the different stages of supply, realization and inspection of the parts, as indicated in the form [FOR 566](#): "Documentation requested to the supplier".

**ANNEX A: Form [FOR 566](#): "Documentation requested to the supplier"**

(also available in German language)

The form [FOR 566](#) has to be used, as a coversheet, for the requested documentation.  
The minimum to be provided is as follows (see checked items):

Section	Available	Description of contents
1	<input checked="" type="checkbox"/>	Declaration of Conformity / Declaration of Performance / CE-Marking / Manufacturer Declaration
2	<input checked="" type="checkbox"/>	Manufacturer Qualification
3	<input checked="" type="checkbox"/>	List of Drawings
4	<input checked="" type="checkbox"/>	Quality Inspection Plan (QIP)
5	<input checked="" type="checkbox"/>	Welding Documentation (WPS / WPQR)
6	<input checked="" type="checkbox"/>	List of Welders / Welders Certificates
7	<input checked="" type="checkbox"/>	Qualification of non-destructive testing (NDT) personnel
8	<input checked="" type="checkbox"/>	Material Certificates / Traceability
9	<input checked="" type="checkbox"/>	NDT (Non Destructive Testing) Records (VT/ MT/ PT/ UT/ RT) / Traceability
10	<input checked="" type="checkbox"/>	Destructive Testing, Records of Production Tests
11	<input checked="" type="checkbox"/>	Heat Treatment Records / Diagrams
12	<input checked="" type="checkbox"/>	Pressure and / or Leakage Test Records
13	<input checked="" type="checkbox"/>	Dimensional Inspection Records
14	<input checked="" type="checkbox"/>	Corrosion Protection Records
15	<input type="checkbox"/>	Notified Body Inspection Documentation / Certificate Of Conformity (if applicable)
16	<input type="checkbox"/>	Material Safety Data Sheets (where applicable)
17	<input checked="" type="checkbox"/>	Bolt Tightening Reports (where applicable)
18	<input checked="" type="checkbox"/>	Non-Conformity Reports
19	<input checked="" type="checkbox"/>	Release Notes