

ATG-Sert Rules rev4 – 202501

In litigation, the French version applies

Approval

These ATG-Sert Specific Rules:

- were approved on **December 20th, 2024**, by the General Manager of CERTIGAZ after advice from the ATG-Sert Special Committee;
- are applicable from **December 20th, 2024**, except for modifications subject to a transitional period, see § 0-;
- cancel any previous version;
- may be modified by the General Manager of CERTIGAZ after advice from the ATG-Sert Special Committee.

Summary

No.	paragraph	Page
	Cover page with approval and summary	1
0-	Summary of changes	2
1-	Purpose and scope of application	4
2-	Definitions	4
3-	Marking	4
4-	Certification criteria	4
4.1	Commitments	4
4.2	Requirements for press fittings	4
4.2.1	Requirements for copper press fittings	4
4.2.2	Requirements for stainless steel press fittings	5
4.3	Quality management requirements	5
4.3.1	Quality management system	5
4.3.2	Manufacturing control plan	6
4.3.2.1	Materials	6
4.3.2.2	Dimensional characteristics	6
4.3.2.3	Batch release tests (BRT)	6
5-	ATG Certification Process	7
5.1	Admission	7
5.1.1	Application file	7
5.1.2	Audit(s)	9
5.1.3	Tests	9
5.1.3.1	Specific tests for the part to be crimped	9
5.1.3.2	Specific tests related to crimping tools	10
5.1.3.3	Specific tests of threaded ends of standardized mechanical joints (JMN)	10
5.1.3.4	Specific tests for the durability of the marking	10
5.2	Monitoring	10
5.2.1	Audit(s)	10
5.2.2	Tests	11
5.2.2.1	Specific tests for the part to be crimped	11
5.2.2.2	Specific tests of threaded ends of standardized mechanical joints (JMN)	11
5.2.2.3	Specific tests for the durability of the marking	11
5.3	Information	11
5.4	Complaints/Claims to the holder	11
APPENDIX 1	Preparation of the application file	12
APPENDIX 2	Additional information to CCH2004-02	20
APPENDIX 3	Definition and specifications of qualification tests and monitoring of stainless steel fittings	23

0- Summary of changes

Revision No.	date	Main changes made	Transitional period if necessary
Creation	06/30/2008	Creation of ATG-Sert Specific Rules	N / A
Rev1	03/18/2013	- § 4.3.2.3 possibility of easing batch release tests - § 5.1.3 possibility of a simplified test plan in the event of modification - § 5.1.3 new SLAB100 specification for authorized manufacturer laboratories ATG and intercomparison tests. - § 5.1.4 sampling in the case of different tools for a fitting range - Appendix 1, add the material certificates of the seals to the technical file and modification of the reference table - Appendix 2, clarification on the test tolerances of CCH2004-02 - Appendix 2, details of the impact test and the minimum section - Change of address for CERTIGAZ	None for all changes
Rev2	06/13/2016	- Integration of the 2 versions of the ISO9001 standard, 2008 and 2015 in §4.3.1 - Clarification on the frequency of dimensional monitoring in production - Clarification on the shipping times of test specimens for annual monitoring tests - Carrying out surveillance tests by changing the mark of tools each year when several marks are declared - Appendix 2 adapted to the plan of CCH2004-02 - Details of crimping tools and their identification according to standard NF EN 1775 - Details of possible end connections (JSC connections according to standard NF E 29-536, LPG connections or male conical/female cylindrical connections according to standard EN 10226-1) - Production of test specimens with copper alloy fittings - Integration of SROB100 specifications, annex 2 for ammonia stress corrosion resistance tests - In extension of the ATG-B524 specifications, the DN54, R290, 1.5mm thick copper tube is certifiable for the crimping application. - Clarification on tolerances and implementation of tests - Correction in Appendix 2 of the test plan tables	- Both versions are usable until October 2018, beyond that, only the 2015 version - No - No - No - No - No - No - No - Applicable for new applications but mandatory after December 31st, 2017, for certified accessories - No - No - No
Rev3	04/26/2021	- Updated to mention the new regulatory texts linked to the decree of February 23rd, 2018, and the AMG guide. - Removal of the reference to the ISO9001 version 2008 standard - Replacement of CCH2004-02 ed1 with ed2 from October 2018 - Request for maintenance - Management of multi-site, on-site, remote and subcontractor audits - Monitoring with annealed tubes not certified for compatibility - Rules for updating compatible tools - Revision of Annex 2 for information contained in Edition 2 of CCH2004-02 - Details of the technical file in unlocked PDF format - Various details and country holder or representative in Europe - Appendix 2 §E0.1, clarification on test pieces	No, already applied or without impact for products already certified
		- Testing of threaded fittings	Applicable for 2021 monitoring of certified products
		- Testing of the durability of the markings and its monitoring by the manufacturer	Transitional period of 6 months to check on certified products

Revision No.	date	Main changes made	Transitional period if necessary
Rev4	12/20/2024	- Addition of a cover page with ATG logo, approval and summary then summary of modifications in P2 instead of §6 and 7 - Change of CERTIGAZ address - §1 and 4.2.1 Reference to CCH2004-02 ed3 (July 2022) and AMG guide ed6 (January 2023) - §1 Details of the scope of application within the meaning of the decree of February 23, 2018 as amended and for ERP, the agricultural domain and other buildings according to the labor code - §1 and 4.2.2 Details for agricultural buildings for stainless steel pipe and fitting kits and addition of appendix 3 for specifications. - §3 Details for notices and information in accordance with regulations, in particular the environmental code, articles L and R 557 and the decree of February 23rd, 2018, as amended - §4.3.2.1 details for materials - §4.3.2.3 Accuracy for BRT rotating nuts, sampling doubled if failure torque <115% (see example) - §5.1.1 Details for the number of certificates by trademark and materials of fittings and joints and supports - §5.1.2 and 5.2.1 details for an ongoing audit for packaging and instructions and possible video audit for geopolitical reasons in addition to health reasons. - §5.1.3 details for testing and sample storage duration - §5.1.3.3 and 5.2.2.2 details for JMN tests at CETIM/CETIAT/CSTB - §5.2.2 information for samples and cases of non-manufacturing - §5.4 new: to clarify the collection of REX and sales - Appendix 1, DOCUMENT 1 copper and stainless steel, DOCUMENTS 3-C or 3-I, 4 for the list of fittings and 5 for the list of compatible tools - Appendix 2, deletion of information already included in ed3 of CCH2004-02, from § D1, E0 and E3 + correction pressure 7.5 bar and sealing in alternating bending only at 7.5 bar in sequence 3 - APPENDIX 3 new: Definitions and specifications for testing and auditing of qualification and monitoring of stainless-steel fittings, by DN range	no impact on products already certified, therefore applicable upon approval of the Certification Rules except for the details in § 4.3.2.3 which must be applied no later than 31/12/2025, as a transitional period
		-	
		-	

1 Purpose and scope of application

These ATG Mark Certification Rules define the specific conditions for issuing and maintaining the ATG mark for copper press fittings that can be used on combustible gas and liquefied hydrocarbon installations serving residential buildings and their outbuildings.

This also includes intermediate fittings made of copper alloy:

- male tubular fittings with threaded end intended to be crimped with a press fitting. They are considered an additional tube quality (see 5.1.3).
- female crimp fittings with a threaded end.

These Certification Rules apply in addition to the ATG General Certification Rules.

The decree of February 23rd, 2018, amended and supplemented by the CNPG AMG guide, makes the France Gaz specifications designated CCH 2004-02 edition 3 of July 2022 "Copper crimp fittings for use on gas installations" mandatory since January 2023 (edition 6 of the AMG guide) and recognizes the issue of the ATG mark by CERTIGAZ as proof of compliance with the specification of the fittings.

The scope of application of ATG mark copper crimp fittings is extensive:

- To boiler rooms and mini-boiler rooms, within the meaning of the decree of February 23rd, 2018, as amended,
- To agricultural livestock buildings and greenhouses,
- To ERP or buildings with professional activity, on the basis of article GZ12 of the decree of June 25th, 1980 as amended,
- To buildings subject to the labor code, on the basis of articles R4216-1 and following as well as R4227-1 and following.

For agricultural buildings, ATG-Sert certification also concerns stainless steel pipe kits and stainless-steel press fittings from the same holder based on the specifications in Appendix 3.

2 Definitions

The definitions contained in CCH 2004-02 (see part 1, C) apply.

3 Marking

The rules for marking products, their packaging and instructions are defined by CCH 2004-02 (see part 1, F) and by appendix 2 of these rules.

In addition, the press fittings must bear the letters ATG or the ATG logo under the same conditions as the other required markings.

Information required by other markets may be included in the product marking but must not be misleading and may be explained in the instructions.

Marking processes must ensure the durability of information.

The marking on the packaging may include the information from the marking and must also specify the batch number.

The instructions and commercial documents relating to the crimp fittings approved for the ATG mark must refer to the ATG mark and /or bear the ATG logo, without any possible interpretation if the accessories are not certified, in compliance with the regulations, in particular the environmental code articles L and R 557, and the decree of February 23rd, 2018 as amended.

4 Certification criteria

4.1 Commitments

No specific commitments other than those specified in the application form (Annex 1).

These commitments meet the certification requirements of the NF EN ISO CEI 17065 standard.

4.2 Requirements for press fittings

4.2.1 Requirements for copper press fittings

Copper crimp fittings bearing the ATG mark must comply with the following specifications:

- Specifications CCH2004- 02 ed3 (July 2022) : Copper crimp fittings for use on gas installations.
- The ATG-Sert Certification Rules and its Annex 2.

4.2.2 Requirements applicable to stainless steel press fittings

Stainless steel press fittings bearing the ATG mark must be used with tubes of the same DN supplied by the same holder. The requirements are defined in Appendix 3 of these ATG-Sert Certification Rules.

4.3 Quality management requirements

4.3.1 Quality management system

The minimum quality assurance provisions that the applicant/holder must adopt and implement so that products bearing the ATG-Sert mark are manufactured and/or distributed at all times in compliance with this standard are specified below.

By using the ATG mark, the holder makes a commitment to the ongoing quality of the certified products it manufactures and/or delivers to its customers. Under the ATG-Sert mark, the applicant/holder provides proof of the existence and effectiveness of its quality file.

The objective to be achieved by the applicant/holder is the control of processes (within the meaning of standard NF EN ISO 9000) and the maintenance of conformity of its products to the models initially accepted.

Achieving this objective requires that the applicant/holder implements its own means, the performance of which is assessed during the admission visit and verified during follow-up visits. The quality requirements of this ATG-PLT mark are defined below and are based on the requirements of the NF EN ISO 9001 standard, the scope of which is limited to the field of application.

The table below summarizes these requirements.

Quality Requirements	Requirements * § NF EN ISO 9001 (2015)	
General requirements	4.1 - 4.2	Required for processes related to the manufacturing of the product.
Documentation requirements	4.4 – 7.5	Required
Management Responsibility		
Management Commitment	5.1 – 5.2	Required
Responsibility and authority	5.3	Required
Management Representative		Required
Management review	9.3	Required
Resource management	7.1 to 7.4	Required
Product realization		
Product realization planning	8.1	Required
Customer-related processes	8.2	Required for customer complaints management
Purchases	8.4	Required
Mastery of production and service preparation	8.5.1	Required
Identification and traceability	8.5.2	Required
Product preservation	8.5.4 - 8.5.5	Required
Mastery of monitoring and measuring devices	7.1.5	Required
Measurement, analysis and improvement		
Product monitoring and measurement	8.6 - 9.1	Required
Control of non-compliant product	8.7 - 10.2	Required
Corrective action	10.2	Required

(*) These requirements also apply to any subcontractors

4.3.2 Manufacturing control plan

4.3.2.1 Materials

The characteristics of the materials used for the manufacture of press fittings (body and seals) must be guaranteed by the manufacturer (material certificates and/or internal controls).

Traceability of batches of material in relation to batches of finished products must be ensured.

Copper crimp fittings are made of Cu-DHP or CW024A according to standard NF EN 12449.

The end fittings are made of copper alloy, brass or bronze, according to § D.2.1 of CCH2004-02. The use of low-alloy copper alloy is not permitted.

For some standardized mechanical joints, applicable standards may define specific alloys. Other alloys, such as bronze, historically used without problems on the market, may be used. Any change in alloy must be subject to a request and testing.

For stainless steel, see Appendix 3.

4.3.2.2 Dimensional characteristics

The manufacturer must establish procedures to ensure that the manufacturing tolerances allowed for the press fittings are in accordance with the declared values resulting from the initial type tests.

The definition of the necessary metrological checks is left to the discretion of the manufacturer. These checks will be carried out at the start and end of the batch and repeated every 4 hours (2 per work team).

If the process is stable with relevant records to demonstrate this, the frequency can be increased to 8 hours (1 per work shift).

4.3.2.3 Batch release tests (BRT)

A batch of press fittings is a set having the same nominal diameter, shape and marking, manufactured on the same machine without modification of the manufacturing parameters, from the same batch of material. The batch is defined and identified by the manufacturer.

The minimum test characteristics and frequencies must correspond to the data in this table:

Property	Test sample	Article or paragraph specifying the corresponding test	Minimum number of connections/tests	Minimum test frequency if lightening
Axial sliding pressure to failure for a tube quality (DNxthickness and condition) (1)	batch	Basis of § E2.2 of CCH2004-02 The manufacturer must define the operating method (tube quality, thickness, etc.) and record the results and comments to carry out the statistical analyses necessary to conclude on compliance as well as correlation with the history by family (DN, shape, material)	At least 1 but to be defined by the manufacturer	20% of lots and at least 1 lot per year (2)
Dimensions and clamping strength nuts	batch	According to the product family: - JPC/JPG => NF D36-136 dimensions and NF E 29-532 §7 - JSC => NF D 36-136 dimensions and NF E 29-536 §6 - GPL => NF D 36-136 dimensions and CCH2020-04 §4.3	2	All lots (3)

(1) **The pressure to obtain failure**, dislocation or leakage must be greater than or equal to the average observed during the type tests for each diameter and quality of tube weighted by a coefficient of 0.7 without being less than 40 bar. If the pressure reaches 180 bar without failure, the test may be stopped and the batch will be declared compliant.

(2) **BRT relaxation rules**: If the history of the release records for each batch per product demonstrates good control of the process (low dispersion and a satisfactory safety margin compared to the 40 bar limit), the control may be relaxed. That is to say, for the product concerned, the test will not be carried out on each batch. The frequency will be determined by the manufacturer based on history without, however, being less than the values in the table above. These provisions will be verified during surveillance audits.

If a single sample from the tested lot fails to conform, another batch of samples consisting of at least twice the original batch of samples from the same production lot must be retested; and if one of the new samples is found to be non-conforming, the production lot must be rejected. If the product affected by the non-conformity was subject

to reduced control, at least 5 subsequent batches should be tested before returning to reduced control and the corrective actions taken must be documented.

(3) In BRT, for the nut tightening strength test, a minimum sampling of 2 test pieces for 100% of the batches is tested in accordance with the reference normative documents but if deformation or rupture occurs on at least 1 test piece at less than 115% of the minimum breaking torque, a new sampling is carried out to guarantee the conformity of the batch. If a test piece fails before reaching the minimum breaking resistance torque, the batch is rejected.

Example: For a JPG F DN12 G1/2" fitting, the minimum acceptable breaking or deformation torque is 50 Nm and the test must be continued if possible up to 100 Nm. However, if a failure, breakage or deformation occurs between 50 Nm and 57.5 Nm (115%), a new sample is taken from the batch to ensure a better probability of conformity of the batch with a failure greater than 50 Nm.

5 ATG Certification Process

5.1 Admission

5.1.1 Application file

The application file template is given in Appendix 1.

A range is split into several files and certificates by trademark, by material family (copper, copper alloy and stainless steel) and by seal material.

If an application file is not finalized within 12 months of the request due to lack of information from the applicant, the instruction may be subject to a second invoice.

Mixed fittings

In the case of a request for mixed fittings, resulting from an agreement between 2 manufacturers, with a crimped end (ATG-Sert) and an end for connecting a PLT pipe (ATG-PLT), the fittings must comply with each of the certification rules, tests are carried out according to the DN and tests already evaluated on other models with identical characteristics. In addition, the markings and instructions must meet the requirements of each certification rule.

The certification request is made by each of the manufacturers with the 2 commitments signed by the 2 parties.

The fittings are present in each of the certificates and each of the product lists of the ATG-Sert and ATG-PLT marks.

Reconditioning of fittings

If a certified product is repackaged by an entity other than the initial applicant, with or without a change of trademark or references, this is a request for admission by maintenance without modification of the certified characteristics except for the packaging.

In the event of maintenance, the manufacturer and the subcontractor are each responsible for the right to use the ATG mark relating to the product in question and undertake to apply the measures resulting from the sanctions taken in accordance with the Certification Rules.

A manufacturer whose right to use has been suspended cannot therefore subcontract products to another holder within the framework of this maintenance procedure.

Likewise, the subcontractor must inform their client of any sanctions that call into question their right to use.

Several cases can be considered depending on the responsibilities/actions/markings of the initial holder and/or the distributor with the following modalities:

CASE	Holder: T		Distributor: D	Certification management procedures			Manufacturer identification on the packaging or instructions (3)
	Marking product (1)	Trademark packaging (1)		Maintaining the ATG mark?	Management methods	Trademark on ATG mark list	
No. 1	T marking	Packaging by T Trademark T	No change in packaging by D	NO	- Management of a basic certification by the T holder: no maintenance	YES	Holder T
No. 2	T marking	Packaging by T Trademark D	No change in packaging by D	NO (2)	- Indication on the packaging of one of the following two pieces of information: - "Product T – Commercial Ref. XXXX or registered trademark" (the ref. or trademark is that of the owner T) - "Product T – CERTIGAZ certificate/file base number" - Management of notices and packaging by the holder T - Review of the management of notices during the admission or monitoring audit of the T holder by CERTIGAZ	NO	Holder T
No. 3				YES (2)	- Request for maintenance by the holder T or the distributor D - Management of notices and packaging by the holder T - Review of the management of notices during the admission audit, then monitoring of the T holder by CERTIGAZ	YES	Distributor D
No. 4	T marking	Packaging by T Trademark T	Modification of packaging by D Trademark D	YES	- Request for maintenance by distributor D - Management of instructions and packaging by distributor D - Review of management of the notices during the admission audit, then monitoring of distributor D by CERTIGAZ	YES	Distributor D
No. 5	T marking	No conditioning by T	Conditioning by D Trademark D	YES		YES	Distributor D
No. 6	D marking	Packaging by T Trademark D	No change in packaging by D	YES		YES	Distributor D
No. 7	D marking	No conditioning by T	Conditioning by D Trademark D	YES		YES	Distributor D

- (1) : for the same owner the marking and the trademark may be different
(2) : to comply with regulatory requirements (marking, manufacturer identification, etc.), the holder and the distributor organize themselves to choose between cases no. 2 and no. 3
(3) : compliance with paragraph R557-2-5 of the environmental code. The concept of manufacturer and distributor is clarified in article L557-3 of the same code.

5.1.2 Audit(s)

The manufacturing site is always audited upon admission to ensure compliance with the points of § 4.3 and the ATG General Rules. When the manufacturing site is ISO9001 certified, § 4, 5 and 9.3 of the ISO 9001 standard, specified in table § 4.3.1, may not be audited after analysis of the ISO9001 audit report.

The duration of the on-site audit will not be less than 1 day and a fixed fee of 0.5 days is added for planning, preparation, drafting of the audit plan, drafting of the report and monitoring of any non-conformities.

If a manufacturer's request concerns multiple sites, the audit duration for each site is one day by default, unless the activity on the site does not justify a day. The audit plan details the duration and activities audited per site. In this case of multi-site audits, the editorial fee is 0.75 days.

As an exception, the SQUAL100 procedure applies if the audit cannot be carried out physically for health or geopolitical reasons. However, this provision does not apply to critical products that undergo 100% release testing.

If subcontracting is carried out with another third-party company and this activity may impact the quality of the products without possible analysis by the applicant, this company is also audited by CERTIGAZ.

In the event of maintenance, an audit reduced to 0.5 days and an editorial package of 0.5 days is carried out by CERTIGAZ to verify the conformity of the markings, packaging and instructions.

5.1.3 Tests

The tests are carried out by CETIM in Nantes, which is the mark's independent laboratory.

However, any test carried out in an accredited laboratory, by a member of the EA (European cooperation for Accreditation), whose scope mentions CCH2004-02, may be retained after analysis of the report by CERTIGAZ to ensure the test conditions. Batch 1 verification tests are carried out on at least 2 DN's by CETIM.

A manufacturer's laboratory may be authorized by CERTIGAZ to carry out mechanical type or surveillance tests in accordance with the CERTIGAZ SLAB100 specifications and after completing an application form. Verification tests are then carried out in the mark's independent laboratory or in the manufacturer's laboratory in the presence of a person authorized by CERTIGAZ.

These verification tests consist of carrying out at least one test of each type within the scope of the authorization for the admission request or monitoring considered.

At the end of the tests, whatever they may be, the storage period of the samples is defined in the contract with the laboratory according to SLAB110 or SLAB100, but this period can be reduced as soon as CERTIGAZ has made its decision and there is no dispute from the manufacturer, otherwise new tests would be necessary.

The manufacturer may request the laboratory to recover the samples, mainly in the event of non-compliance, in order to carry out the necessary analyses to determine corrective actions.

After the first authorization from the manufacturer's laboratory, the following annual monitoring test will be subject to inter-comparison with the mark's laboratory. In this case, the sampling of test specimens will be 2 per laboratory instead of 3. CERTIGAZ may apply this provision after a modification in the manufacturer's authorized laboratory.

The applicant must guarantee the representativeness of the fittings submitted for admission.

5.1.3.1 Tests specific to the part to be crimped

The admission tests are those defined in CCH 2004-02 with the information in Appendix 2 (copper and copper alloy) and Appendix 3 (stainless steel).

When so-called "intermediate" copper alloy fittings consist of one tube end and another threaded end (male copper alloy press fittings with mechanical junction), they are considered as an additional tube quality and must satisfy the mechanical tests of lot 1.

The applicant prepares the samples for the independent laboratory in accordance with the latter and the provisions in appendix 2 or 3 depending on the material of the fittings. This preparation consists of providing the test specimens with crimping of the fitting(s) on the recommended lengths of copper or stainless steel tube. Otherwise, this operation will be carried out in the independent laboratory by the applicant with one of the compatible tool models.

When the request concerns a modification, the test plan may be simplified. It is defined by CERTIGAZ based on the nature of the modification. The CETIM laboratory may be asked to establish this test plan.

In case of doubt, the Mark Committee may be contacted to give an opinion. If doubt persists, as a safety measure, initial tests are carried out.

For an extension of compatibility to R250 copper tubes with a thickness of 0.8 mm, the tests of batch 1 are carried out on all DN's and the Shear, crushing and impact tests are carried out on the 2 extreme DN's.

5.1.3.2 Specific tests related to crimping tools

New tooling with the same crimping principle:

If a crimping tool manufacturer is not referenced for a range of fittings, an extension may be requested by the fittings owner who ensures compatibility with their fittings. They attach a study file to their request as well as a technical and commercial description of the tooling.

The tool manufacturer may also apply for a certificate of use of its equipment with a range of already certified fittings. In this case, only the tests of batch 1 are retained according to CCH 2004-02 (see appendix 2). They must attach to their application a technical and commercial description of the tool.

To update compatible tools, the holder must request a revision of the certificate(s) concerned from CERTIGAZ. The holder must attach a technical and commercial description of the tool to the request. In this case, the update of the certificate(s) by CERTIGAZ **does not incur an extension cost**; it is covered by the annual management **fees**.

Several types or principles of crimping (crimping geometry: single and double for example) for the same range of fittings:

In this case, the sampling for each admission or monitoring test is no longer 3 but 2 per type of crimping except for chemical and temperature cycle tests which are unchanged.

5.1.3.3 Specific tests of threaded ends **standardized mechanical junctions (SMJ)**

Depending on the product family, the following normative documents apply per connection diameter:

- JPC/JPG => NF D36-136 for dimensions and NF E 29-532 for tests
- JSC => NF D 36-136 for dimensions and NF E 29-536 for tests
- LPG => NF D 36-136 for dimensions and CCH2020-04 for tests
- EN10226-1 => CCH2020-05 for testing and EN10226-1 for dimensions

These tests, common to other marks (ATG-PLT or NF540), for JMN, are carried out at CETIM in Nantes but can also be carried out in the laboratories of these marks (CETIAT in Lyon or CSTB in Champ sur Marne). The test pieces for the ammonia stress resistance test are produced by the manufacturer with a crimped cap or a copper tube of minimum length and crimped cap, depending on the male or female end of the JMN fitting.

5.1.3.4 Specific tests for the durability of the marking

To ensure the durability of markings on products, paragraph 9 of standard NF E 29-135 is applicable during admission and during modification of the marking process:

- First category: Name, acronym or registered trademark of the manufacturer, the GAZ application and the ATG conformity mark,
- Second category: All other elements of the marking.

5.2 Monitoring

5.2.1 Audit(s)

Surveillance audits are carried out annually under the same conditions as the admission audits provided for in § 5.1.2.

In the case of maintenance or for outsourced activities with low impact on the product, the surveillance audit is only carried out once during the validity period of the 3-year certificate.

By way of exception, the SQUAL100 procedure applies if the audit cannot be carried out physically for health **or geopolitical reasons**.

5.2.2 Tests

Monitoring tests are carried out each year on fittings taken by CERTIGAZ during the audits provided for in § 5.2.1or, failing that, and at your choice:

- in a stock of the holder on a site other than the production site, a self-sampling by the manufacturer is carried out on the basis of CERTIGAZ directives
- in trade, by CERTIGAZ and at the expense of the holder,
- in the stocks of a reseller, by CERTIGAZ and at the expense of the holder.

Lack of production

In the absence of production since the last sample or since certification, the sample for monitoring may, as a priority, concern another DN, failing which, it may be postponed at the request of the holder if no DN is available.

Any deferral of direct debit must be requested in writing from CERTIGAZ by the holder, by email or on headed letter.

The sampling will take place as soon as possible depending on production. Over a period of 3 years, there must be at least one monitoring test report.

Failure to comply with this obligation, as well as any false declaration noted by CERTIGAZ, may lead to suspension or even withdrawal of the right to use the mark.

After sampling, the preparation of the test pieces is carried out by the holder or in the laboratory with the participation of the holder for the crimping of the different parts , according to the requirements of the ATG-Sert Rules and CETIM. The test pieces are sent to CETIM, at the holder's expense, within a maximum period of one month.

5.2.2.1 Tests specific to the part to be crimped

The monitoring tests are the same as the admission tests of § 5.1.3.1 concerned by lot 1 but they are carried out successively on a single DN for each type of certified crimping as defined in CCH 2004-02 (see appendix 2 for copper and appendix 3 for stainless steel).

Copper tubes are not certified for the relevant DN's, they are nevertheless tested as a precaution to assess the risks if they were used in the field, for example during a gas installation extension.

When the holder has declared the compatibility of several tools for the DN considered, the tools are not the same each year in order to ensure monitoring with the different parameters.

5.2.2.2 Specific tests of threaded ends standardized mechanical junctions (SMJ)

Depending on the product family, the following standards apply in a comparable manner to § 5.1.3.3:

Family	Normative documents	sampling
JPC/JPG LPG JSC EN10226-1	NF D36-136 dimensions and NF E 29-532 NF D 36-136 dimensions and CCH2020-04 NF D 36-136 dimensions and NF E 29-536 CCH2020-05	one connection diameter per year

5.2.2.3 Specific tests for the durability of the marking

Monitoring of the durability of the marking is carried out annually by the manufacturer in accordance with the requirements of paragraph 9 of standard NF E 29-135.

These provisions are verified during audits.

5.3 Information

In addition to §6.1 of the ATG General Rules, the list of certified fittings also specifies the compatibility for each state and thickness of copper tube or stainless-steel tubes and the tools recognized as compatible by each holder. A brief reminder of the regulations is also included in the list.

This list is available on the CERTIGAZ website: www.certigaz.fr

5.4 Complaints/Claims to the holder

In addition to § 4.4 of the ATG General rules, CERTIGAZ collects annually from each holder, as it has undertaken to do, customer complaints (REX) and also sales on the French market by product family (copper, copper alloy and stainless steel). This information makes it possible to assess any potential need for changes to the certification rules.

APPENDIX 1

PREPARATION OF THE APPLICATION FILE

- Standard letter of application for admission reproduced on manufacturer's letterhead and drawn up according to the attached model (document no. 1)
 - General Information Sheet (Document No. 2)
 - Product identification sheet submitted for admission
 - document no. 3-C for copper
 - Or
 - document no. 3-I for stainless steel
 - List of references and main characteristics (document no. 4)
 - List of compatible tools (document no. 5)
 - Technical file: dimensioned drawings of each connection and joint
- NOTE:** This technical file is sent in a single file in unlocked PDF format so that it can be validated by CERTIGAZ.
- Certificate of conformity to standards EN549 and EN 682 for the material of the joints of the part to be crimped
 - Certificate of conformity to Rules NF078 for JPG/JPC flat joints
 - Certificate of conformity to standard EN549 for LPG seals

DOCUMENT NO. 1**ADMISSION APPLICATION FORM**
(to be established on manufacturer's letterhead)

Letter to be addressed to:

Madam Director General
CERTIGAZ
LINEA building in PUTEAUX (92800)
1, rue du Général Leclerc
CS 60254
92047 PARIS LA DEFENSE CEDEX

Object : Application for initial admission, by maintenance, extension, to the applicable ATG-Sert mark (delete as appropriate)
:

- Copper crimp fittings suitable for use on gas installations.
- Stainless steel crimp fittings suitable for use on gas installations in agricultural buildings.

Madam,

I have the honor to request authorization to affix the ATG-Sert mark to the products of my manufacture, in compliance with **any regulatory document** in force, the characteristics of which appear in the appendix.

I declare that I have read the ATG-Sert Certification Rules **and the normative documents cited therein.**

I commit:

- to comply unreservedly with the requirements of the Certification Rules, as well as with the decisions taken or to be taken, in execution of said requirements;
- to only put on sale products bearing the ATG Sertissage mark after having taken all the precautions necessary to ensure their compliance with the **normative documents** and specifications;
- to reserve the mark and reference of the products presented under the ATG Sertissage mark only for fittings that comply with those permitted;
- to take all measures with regard to the protection of the mark presented to the ATG Sertissage mark in order to have an exclusive right to this mark under industrial property legislation;
- to affix the mark, unequivocally, on the admitted products and them alone;
- to carry out the manufacturing controls incumbent on me under the Certification Rules of the mark;
- to report to CERTIGAZ without delay any incident, any change in manufacturing method or organization, and more generally, any fact likely to lead to a variation in the conditions under which the mark was issued;
- to facilitate the task of auditors mandated by CERTIGAZ in the context of their missions;

DOCUMENT NO. 1

- to provide all supporting documents required in the context of the application of a sanction;
- to provide free of charge the products designated by CERTIGAZ for verification and send them at my expense and under my responsibility to the laboratory designated by CERTIGAZ.
- to pay the amount of the application processing fees provided for by the mark's financial regime, and to make any subsequent payments that may be requested from me in accordance with the mark regulations;
- not to indicate on any advertising material or catalogues any characteristics other than those confirmed by tests and which will be communicated.

(2) I also authorize the company (3) represented by Mr/ Mrs (name and capacity) to represent me on French territory for all questions relating to the use of the ATG Sertissage mark.

(2) I request that the costs I am responsible for be invoiced directly to her. She will ensure payment on my behalf, as agent, upon receipt of the invoices as she undertakes to do by accepting this mandate.

(2) I undertake to immediately notify CERTIGAZ of any new appointment of agent to replace the agent designated above.

Please accept, **Madam** Director General, the expression of my highest consideration.

Date

Stamp and signature of the representative (4)(5)

Stamp and signature of the applicant
(4)(5)

Manufacturer's stamp and signature (6)

Attached General Information Sheet,
Product(s) identification sheet,
Technical file(s).

-
- (2) Optional. This paragraph only concerns applicants located outside European territory (EEA and EFTA)
 - (3) The designation of the agent company includes: company name, form of company, registered office, trade register number, to be entered on document No. 2
 - (4) The signatures of the applicant and his representative in Europe (EEA and EFTA) must be preceded respectively by the handwritten words " *Good for mandate* " and " *Good for acceptance of mandate* "
 - (5) Precede the signature with the handwritten note " *Read and approved* "
 - (6) In the event of maintenance

DOCUMENT NO. 2

GENERAL INFORMATION SHEET

- **Company name and address of the applicant:**

.....
.....
Contact: Telephone: Fax:
Email:
Billing information (VAT No., SIRET):.....

- If applicable, **name and address of the agent in France:**

.....
.....
Contact: Telephone: Fax:
Email:
Billing information (VAT No., SIRET):.....

- **Company name(s) and address(es) of the manufacturing unit(s):**

§ to be duplicated if several sites are concerned

.....
.....
Contact: Telephone: Fax:
Email:

- **Company name and address of the packaging unit (if ≠from the manufacturer) :**

§ to be duplicated if several sites are concerned

.....
.....
Contact: Telephone: Fax:
Email:

- **Company name and address of the supplier of the fittings (in case of resale) :**

§ to be duplicated if several sites are concerned

.....
.....
Contact: Telephone: Fax:
Email:

- **Company name and address of the site carrying out the release tests:**

§ to be duplicated if several sites are concerned

.....
.....
Contact: Telephone: Fax:
Email:

DOCUMENT NO. 3-C

IDENTIFICATION SHEET FOR COPPER OR COPPER ALLOY FITTINGS

(To be attached to the technical file)

▪ **Trademark:**

▪ **Commercial reference:**

▪ **Types and sizes of fittings:**

Insert or attach a table in Excel format according to the model in DOCUMENT N° 4, duly completed

▪ **Specification of copper tubes (quality R220 – R250 – R290, thickness and diameter):**

Mark with a cross, in the non-greyed cells, the copper tubes compatible with the NF EN 1057 standard and the ATG B.524 specifications in accordance with the ATG-Sert Rules. These tubes are NF certified according to the NF090 mark.

State	thickness	diameter - DN									
		12	14	15	16	18	22	28	35	42	54
R220	1										
R250	0.8										
R250	1										
R290	1										
R290	1.2										
R290	1.5										

Dimensions in mm

▪ **Characteristics of the seals (attach certificates):**

- Nature (elastomer family):
- Supplier :
- Reference :
- Hardness:
- Temperature range:
- Color :

Note: The TGA test for characterizing the seal according to ISO 9924-2 can be provided.

▪ **Fitting materials (standard designation and reference standard):**

▪ **Crimp Type:** ☐ Single ☐ Double

▪ **Recommended tools for making crimping operations:**

Attach any additional documents designating the tools and their use.

Complete DOCUMENT N° 5 for the different tools.

DOCUMENT N° 3-1

IDENTIFICATION SHEET FOR STAINLESS STEEL FITTINGS

(To be attached to the technical file)

▪ **Trademark:**

▪ **Commercial reference:**

▪ **Types and sizes of fittings:**

Insert or attach a table in Excel format according to the model in DOCUMENT N° 4, duly completed

▪ **Specification of INOX tubes of the same commercial brand:**

Stainless steel grades 1.4401 or 1.4404 of standard EN 10028-7 are admissible (see appendix 3).

Mark the desired compatible stainless steel tubes with a cross in the non-greyed cells

Stainless Steel Shade	Thickness +/- 0.1	diameter - DN									
		12	14	15	16	18	22	28	35	42	54
	1.0										
	1.2										
	1.5										

Dimensions in mm

▪ **Characteristics of the seals (attach certificates):**

- Nature (elastomer family):

- Supplier:

- Reference:

- Hardness:

- Temperature range:

- Color:

Note: The TGA test for characterizing the seal according to ISO 9924-2 can be provided.

▪ **Fitting materials (standard designation and reference standard):**

Stainless steel grades 1.4401 or 1.4404 of standard EN 10028-7 are admissible (see appendix 3).

▪ **Crimp Type:** ☐ Single ☐ Double

▪ **Recommended tools for making crimping operations:**

Attach any additional documents designating the tools and their use.

Complete DOCUMENT N° 5 for the different tools.

DOCUMENT NO. 4

LIST OF FITTINGS AND DESIGNATIONS

(To be attached to the technical file)

Table templates to be completed for identifying fittings (This table is provided with examples)

The family code, **for copper fittings**, is optional and identical to that of the NF088 mark when it exists for solder fittings.

Crimp fitting (Shape and designation to be specified: sleeve, elbow, reduction, tee, etc.)	Product family code	Commercial reference	Outer diameter of the copper tube in mm or type of junction to be specified			Fitting material		Manufactu ring site
			Extr . 1 F or M	End 2 F or M	Extr . 3 F or M	family	Normative nuance	
Straight connection	JPG	xxxxxxxxxx	F22	JPG DN32 swivel nut NF E 29-532	-	Bronze, brass or stainless steel	xxxx	B
Straight connection	JPC	xxxxxxxxxx	M16	JPC DN20 swivel nut NF E 29-532	-	Bronze, brass or stainless steel	xxxx	B
Straight connection	LPG	xxxxxxxxxx	F14	LPG rotating nut M20x150	-	Bronze, brass or stainless steel	xxxx	B
Straight connection	JSC	xxxxxxxxxx	F14	JSC DN15 swivel nut NF E 29-536	-	Bronze, brass or stainless steel	xxxx	B
Straight connection	EN10226-1	xxxxxxxxxx	F14	Rp 1/2"	-	Bronze, brass or stainless steel	xxxx	B
F or M plugs	5031	xxxxxxxxxx	F12	-	-	Cu or stainless steel	xxxx	A & B
FF sleeves	5270	xxxxxxxxxx	F28	F28	-	Cu or stainless steel	xxxx	A & B
FF sliding sleeves	5270	xxxxxxxxxx	F18	F18	-	Cu or stainless steel	xxxx	A & B
90° MF elbows	5001	xxxxxxxxxx	M14	F14	-	Cu or stainless steel	xxxx	A & B
90° FF elbows	5002	xxxxxxxxxx	F16	F16	-	Cu or stainless steel	xxxx	A & B
45° MF elbows	5040	xxxxxxxxxx	M15	F15	-	Cu or stainless steel	xxxx	A & B
45° FF elbows	5042	xxxxxxxxxx	F22	F22	-	Cu or stainless steel	xxxx	A & B
FFF equal tees	5130	xxxxxxxxxx	F16	F16	F16	Cu or stainless steel	xxxx	A & B
FFF reducing tees	5130	xxxxxxxxxx	F16	F14	F14	Cu or stainless steel	xxxx	A & B

FF reduction	5243	xxxxxxxxxx	F22	F18	-	Cu or stainless steel	xxxx	A & B
MF reduction	5240	xxxxxxxxxx	M35	F22	-	Cu or stainless steel	xxxx	A & B

F or M: female or male connection

DOCUMENT NO. 5

LIST OF COMPATIBLE TOOLS

(To be attached to the technical file)

Table templates to be completed for tool identification (This information is included in the ATG-Sert list)

Holder of the fittings	Material of fittings	File or certificate number	year of declaration of addition to the certificate	brand	model	model year	strength	energy	one-piece jaws	"mother" jaws + chain	"mother" jaws + concentric inserts	"mother" jaws + non-concentric inserts	"mother" jaws + inserts offset in the axis or inclined	profile	jaw brand	identification mark on the fitting after crimping	link to photo or photo of identification mark

It is recommended to attach these tables, which can be supplemented with other information in the form of additional columns, in paper format but also in the form of an Excel file.

APPENDIX 2**Additional information to CCH2004-02, by paragraph****PART 1: Characterization of copper crimp fittings and their assembly method****D) Characterization of the connections**

A dimensional survey is carried out on 3 samples of each commercial reference for the main characteristics (standardized mechanical junction, crimping part and size).

E0.1) Description of the test pieces

When an application concerns the 3 DN 14, 15 and 16, admission tests can be carried out only on one of the DN to qualify all three. However, dimensional checks and axial slip tests will be carried out on each DN.

For diameters 28 and 35, the tests of batch 1 are carried out for the only tube provided for in the ATG B.524 specifications.

For diameters 42 and 54, the tests of batch 1 are carried out for the 2 thicknesses except the bending test which is carried out with the maximum thickness.

For the performance of the various tests with copper alloy fittings, the test pieces may differ from those described in CCH2004-02 depending on the type of fittings available from the applicant. Based on these fittings, CERTIGAZ defines the production of the test pieces required for each test.

Generally, various possibilities for capping and connecting specimens can be considered. In the case where caps or fittings include a crimp, this is therefore subject to the requirements of the test (e.g. for tensile or axial sliding tests).

E2.2) Resistance to axial sliding

During monitoring tests, this time **can be reduced** to a minimum of 24 hours, **instead of 48 hours.**

The leak test after the 35 bar test is not necessary and the test is continued to determine the pressure at which dislocation, leakage or rupture occurs. This test makes it possible to obtain averages per DN and per quality of tube which serve as a reference for batch release tests.

E2.7) Crushing resistance

If the ball diameter is not respected, the test is non-compliant but as long as the connection is watertight, the test is not blocking for certification since safety is assured. The report indicates the maximum ball diameter that can pass through the test piece.

E2.8) Impact resistance

For information, the section is checked with the balls after the impact test. The report indicates the maximum ball diameter for each case.

ADMISSION			Test plan (see paragraphs of CCH 2004-02 and appendix 2 of the ATG-Sert Rules)													Family of tests	
			E 1.1	E 2.1	E 2.2	E 2.3	E 2.4	E 2.5	E 2.6	E 2.7	E 2.8	E 3.1	E 3.2	E 4	E 1.2	Lot 1	Lot 2
Number of samples	Essay	time of solicitation (h)	Waterproofing 1 hour 30 mbar And 1 hour 7.5 bar	traction	Axial sliding	flexion	Alternating flexion	twist	shear	crushing	shock	ammonia	Bleach – Pentane – Acid Salt Spray - Detergent	Mini section	Waterproofing 10 min under 7.5 bar		
3	Traction	0.5	①	②											③	X	
3	Axial sliding	48	①		②											X	
3	Flexion	0.5	①			②									③	X	
3	Alternating flexion	14	①				②								③	X	
3	Twist	1	①					②							③	X	
3	Shear	1	①						②						③		X
3	Crushing	1	①							②				④	③		X
3	Shock		①								②				③		X
3	Stress corrosion cracking	24	① a nd ③									②					X
15	Chemical attacks 5 baths	72 to 96	① a nd ④			③							②				X
3	Minimum section		-	-	-	-	-	-	-	-	-	-	-	①	-	-	X
3	Accelerated Aging / GS	840															X
GS : crimping geometry (M: single or V: double) Lot 1: All fitting diameters must be tested Lot 2: All extreme diameters (minimum and maximum) of each crimp form must be tested																	

Lot 2: all extreme diameters (minimum and maximum) of each crimp form must be tested

APPENDIX 3

Definition and specifications of qualification tests and monitoring of stainless steel fittings

This appendix concerns the range of stainless-steel press fittings dedicated solely to gas installations in agricultural buildings.

The gas installation is entirely made of stainless steel inside the livestock buildings to limit the risks associated with corrosion by ammonia attack. Bronze/stainless steel screwed mechanical connections, which have a low galvanic torque, are however possible for connecting appliances.

For other agricultural installations, copper, stainless steel or a combination of both technologies are possible.

The specifications for stainless steel are similar to those for copper based on CCH2004-02 ed3 with the following clarifications.

PART 1: Nature of the products

For both fittings and tubes, stainless steel grades 1.4401 or 1.4404 of standard EN 10028-7 are acceptable.

The permissible diameters and thicknesses of tubes are specified in document 3-I of appendix 2.

PART 2: Admission

Tests:

The manufacturer holding ATG-Sert certification for copper will be able to provide, with its application for certification of a stainless-steel range, the qualification tests for the German market as well as the associated certification for this type of stainless steel fittings in connection with stainless steel tubes of the same commercial brand.

Based on this information, if the joints in the area to be crimped are made of the same material, the qualification test plan will be reduced. 2 DN's from the range are tested at CETIM according to the LOT 1 tests defined in §5.1.3.1 and in Appendix 2:

- the first in the DN15 to 28 range
- the 2nd from 35 to 54.

If the request concerns only 1 range, only 1 DN is tested in type tests (TT).

Sections 5.1.3.2 and 5.1.3.3 apply except for the ammonia stress resistance test dedicated to copper alloy fittings.

If the material of the seals is different, the chemical tests are carried out on 1 DN and one crimping method if there are several.

Audits:

The audit of the stainless steel fittings manufacturing site is audited under the same conditions as in § 5.1.2.

If the workshop for stainless steel fittings is located on the same site as the copper fittings workshop, the audit can be joint but its duration is increased to 1.5 days and the editorial package to 0.75 days.

PART 3: Surveillance

Tests:

The monitoring plan is annual for 1 DN and LOT 1 tests, in accordance with § 5.2.2.

Audits:

The audit of the stainless steel fittings manufacturing site is audited annually under the same conditions as in § 5.2.1. and 5.1.2.

If the workshop for stainless steel fittings is located on the same site as the copper fittings workshop, the audit can be joint but its duration is increased to 1.5 days and the editorial package to 0.75 days.