BRL-K777
Date: 2022-01-04
draft

Evaluation Guideline

for the Kiwa product certificate for repair clamps and repair couplings

Preface

This evaluation guideline has been drawn by the Technical Advisory Committee Pipes and Accessories and accepted by the Kiwa Board of Experts Watercycle (CWK), in which all relevant parties in the field of repair clamps and repair couplings are represented. The Board of Experts also supervises the certification activities and if necessary will make adjustments to this evaluation guideline. All references to Board of Experts in this evaluation guideline pertain to the above mentioned Board of Experts.

This evaluation guideline will be used by Kiwa in conjunction with the Kiwa Regulations for Certification, which establish Kiwa's general rules for certification.

In this adapted version, the difference between repair clamps and repair couplings has been clarified. These differences have been incorporated in the requirements and test methods.

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Validation
This evaluation guideline has been validated by Kiwa on 23 December 2016.

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Contents

1 Introduction

1.1 General

This evaluation guideline includes all relevant requirements which are employed by Kiwa when dealing with applications for the issue and maintenance of a product certificate for repair clamps and repair couplings.

This guideline replaces evaluation guideline BRL-K777 dated 23-12-2016,
The quality declarations issued on basis of that last evaluation guideline will remain valid after validation of this evaluation guideline..

For the performance of its certification work, Kiwa is bound to the requirements as included in NEN-EN-ISO/IEC 17065.

1.2 Field of application / scope

The products are intended to be used in piping systems with a maximum water pressure of 1,0 MPa, a water temperature of not more than 30°C and a nominal diameter larger than or equal to 15 mm and less than or equal to 400 mm. The products are intended to repair cracks, holes and fractures and to make permanent connections with the mentioned piping systems.

1.3 Acceptance of test reports provided by the supplier

If the supplier submits reports from test institutions or laboratories to prove that the products meet the requirements of this evaluation guideline, the supplier shall prove that these reports have been drawn up by an institution that complies with the applicable accreditation standards, namely:

- NEN-EN-ISO/IEC 17020 for inspection bodies;
- NEN-EN-ISO/IEC 17021-1 for certification bodies certifying systems;
- NEN-EN-ISO/IEC 17024 for certification bodies certifying persons;
- NEN-EN-ISO/IEC 17025 for laboratories;
- NEN-EN-ISO/IEC 17065 for certification bodies certifying products.

Remark:
This institution will be deemed to meet this criteria if a certificate of accreditation can be submitted, issued either by the Board of Accreditation (RvA) or by one of the institutions with which an agreement of mutual acceptance has been concluded by the RvA.
The accreditation shall refer to the examinations as required in this evaluation guideline. If no certificate of accreditation can be submitted, the certification institution itself will verify if the accreditation standard has been met or it will perform the respective examination itself or have it performed on its behalf.
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1.4 Quality declaration

The quality declarations to be issued by Kiwa based on this evaluation guideline will be referred to as Kiwa product certificates.
A model of the product certificate has been included for information as Annex.

2 Terms and definitions

2.1 Definitions

In this evaluation guideline, the following terms and definitions apply:

- **Board of Experts**: the Board of Experts Watercycle (CWK);
- **Certification mark**: a protected trademark of which the authorization for its use is granted by Kiwa to the supplier whose products can be considered to comply on delivery with the applicable requirements on delivery. A label specifically designed for this purpose specifying the quality information about the application of the product may be added, based on the result as laid down in the report issued by Kiwa about the inspection of the prototype;
- **Distribution network**: a piping system and connected couplings, valves, and other technical facilities for the transport and delivery of drinking water, not being a collective piping systems (source: Dutch Drinking Water Act);
- **DN:** in accordance with NEN-EN-ISO 6708;
- **Drinking water:** water intended or intended as well, for drinking, cooking or food preparation or other household purposes, with the exception of hot tap water, which is made available to consumers or other customers by means of pipe lines (source: Dutch Drinking Water Act);
- **Drinking water installation:** an installation directly or indirectly connected to the public drinking water distribution network of a drinking water company (source Dutch drinking water act);
- **Evaluation Guideline (BRL)**: the agreements made within the Board of Experts on the subject of certification;
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- **Household water:** potable water that does not comply with the requirements of drinking water and which may only be used within premises for flushing toilets (source Dutch drinking water act);
- **Installation:** configuration consisting of the pipe work, fittings and appliances;
- **Inspection tests**: tests carried out after the certificate has been granted in order to ascertain whether the certified products continue to meet the requirements recorded in the evaluation guideline;
- **IQC scheme (IQCS):** a description of the quality inspections carried out by the supplier as part of his quality system;
- **Initial investigation**: tests in order to ascertain that all the requirements recorded in the evaluation guideline are met;
- **PEA**: allowable test pressure in accordance with NEN-EN-805;
- **PFA**: allowable operating pressure: in accordance with NEN-EN-805;
- **Piping systems**: piping systems for the transport of tap water employing pipes and their connections made of different materials;
- **PMA**: maximum allowable operating pressure, in accordance with NEN-EN-805
- **PN**: alphanumeric indication used for referential purposes, and which refers to a combination of mechanical and dimensional properties of a component of a piping system in accordance with NEN-EN-1333;
- **Private Label Certificate:** a product certificate that exclusively specifies products included in the product certificate of another supplier certified by Kiwa, the only difference being that the products and product information of the private label holder bear a brand name that belongs to the private label holder ;
- **Product certificate**: a document in which Kiwa declares that a product on delivery may be deemed to comply with the product specification recorded in the product certificate;
- **Product requirements**: requirements made specific by means of measures or figures, focusing on (identifiable) characteristics of products and containing a limiting value to be achieved, which can be calculated or measured in an unequivocal manner:

- **Raw water**: underground water, surface water or sea water that has been extracted for the preparation of drinking water;
- **Repair clamp:** clamp intended to repair cracks and holes and to make permanent connections in piping systems;
- **Repair coupling**: clamp intended to repair sections of pipes that are completely separated due to fracture with the purpose of making permanent connections in piping systems;
- **Reparation surface:** The size of a damaged area that can be repaired with a repair clamp or repair coupling;
- **Supplier**: the party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based;
- **Tap water**: water intended for drinking, cooking or food preparation or other household purposes
  Remark: Tap water can refer to drinking water or warm tap water

3 Procedure for granting a product certificate

3.1 Initial investigation

The initial investigation to be performed is based on the (product) requirements as contained in this evaluation guideline, including the test methods, and includes, depending on the type of product to be certified the following:

- (type) testing to determine whether the products comply with the product and/or functional requirements;
- production process assessment;
- assessment of the quality system and the IQC-scheme;
- assessment on the presence and functioning of the remaining procedures.

3.2 Granting the product certificate

After finishing the initial investigation, the results are presented to the Decision maker (see 9.2). This person evaluates the results and decides whether the certificate can be granted or if additional data and/or tests are necessary.

3.3 Investigation into the product and/or performance requirements

Kiwa will investigate the products to be certified against the certification requirements as stated in the product requirements and/or performance requirements.
The necessary samples will be drawn by or on behalf of Kiwa.

3.4 Production process assessment

When assessing the production process, it is investigated whether the producer is capable of continuously producing products that meet the certification requirements.
The evaluation of the production process takes place during the ongoing work at the producer.
The assessment also includes at least:

- The quality of raw materials, half-finished products and end products;
- Internal transport and storage.

3.5 Contract assessment

If the supplier is not the producer of the products to be certified, Kiwa will assess the agreement between the supplier and the producer.
This written agreement, which will be made available to Kiwa, shall include at least:
That accreditation bodies, scheme managers and Kiwa will be given the opportunity to observe the certification activities carried out by Kiwa or on behalf of Kiwa at the producer.

4 Requirements

4.1 General

This chapter contains the requirements that repair clamps and repair couplings have to fulfil, as well as the determination methods to establish that the requirements are being met.

4.2 Public law

4.2.1 Suitability for contact with drinking water

Products and materials which (may) come into contact with drinking water or warm tap water, shall not release substances in quantities which can be harmful to the health of the consumer, or negatively affect the quality of the drinking water. Therefore, the products or materials shall meet toxicological, microbiological, and organoleptic requirements as laid down in the currently applicable "Ministerial Regulation materials and chemicals drinking water and warm tap water supply", (published in the Government Gazette). Consequently, the procedure for obtaining a recognised quality declaration, as specified in the currently effective Regulation, has to be concluded with positive results.
Products and materials with a quality declaration[1], e.g. issued by a foreign certification institute, are allowed to be used in the Netherlands, provided that the Minister has declared this quality declaration equivalent to the quality declaration as meant in the Regulation.

4.3 Private law requirements

4.3.1 Technical product information

In the supplied technical product information, the supplier shall indicate in the Dutch language:

- the minimum and maximum pipe diameter for which the repair clamp or the repair coupling may be used;
- the maximum allowable size of an area damaged by cracks and holes that may be covered by a specific type of repair clamp;
- the maximum size of the crack that can be repaired with a repair coupling. In this case, it will be assumed that the crack covers the entire diameter of the pipe. The product information shall specify the maximum allowable distance between the pipe sections in axial direction to procure a crack repair.
- what torque should be applied to the fasteners to achieve a watertight connection;
- for which piping materials the repair clamp can be used.

4.3.2 General product requirements

4.3.2.1 Hygienic treatment of products in contact with drinking water

The supplier must have a procedure in place that protects the products in such way, that hygiene is ensured during storage and transport.

[1] The Regulation (article 16) reads: “A quality declaration issued by an independent certification institute in another member state of the European Union or in another state party to the agreement to the European Economic Area, is equivalent to a recognised quality declaration, to the extent that, to the judgment of the Minister on the first mentioned quality declaration, at least equivalent requirements as meant in the Regulation materials and chemicals drinking water- and warm tap water supply are met.

In addition, the supplier shall inform the customer about the handling of products delivered under the certificate, which come into contact with drinking water and warm tap water, from arriving at the construction site through to the realization and commissioning. The primary reason for providing this the information is to contribute to the awareness of the importance of hygienic work as a 'prevention measure'.

4.3.2.2 Pressures

Repair clamps that are intended for piping systems are designated with PN values and shall be designed in such a way that they are resistant against PFA, PMA en PEA pressures as described in Table 1

Table 1: pressures

PN	PFA (bar)	PMA (bar)	PEA (bar)[2]
6	6	8	12
10	10	12	17

4.3.2.3 Fastenings

Applied fastenings to achieve the clamping function of the repair clamp shall comply with:

- NEN-EN-ISO 4016: Hexagon head bolts - Product grade C;
- NEN-EN-ISO 4034: Hexagon regular nuts - Product grade C;
- NEN-EN-ISO 7091: Plain washers - Normal series - Product grade C.

4.3.2.4 Sealing materials

Rubber sealing materials shall comply with BRL-K17504, chapters 2.4 and 2.5

4.3.3 Corrosion protection

Repair clamps that because of their type are not considered corrosion resistant, shall be provided with a corrosion resistant layer in accordance with 4.3.3.1 and 4.3.3.2.

4.3.3.1 Coating system in contact with drinking water

The coating system must comply with the requirements of BRL-K759. Application of the coating shall be carried out in accordance with relevant aspects of BRL-K746

Remark:

- *If a coating is applied that is included in a Kiwa product certificate in accordance with BRL-K759, this condition is deemed to have been met.*
- *If the coating procedure is included in a Kiwa process certificate in accordance with BRL-K746, this condition is deemed to have been met.*

4.3.3.2 Coating exterior

If the exterior of the repair clamps and repair couplings are provided with a passive protection layer, this layer shall comply with article 4.5.1 of NEN-EN 545.

4.3.4 Functional product requirements

4.3.4.1 Mechanical strength

When testing in accordance with 5.2, repair clamps and repair couplings must resist an internal pressure of the highest of the following two PEA values: or 1.5 x PFA.

[2]PEA must not be lower than 1,5xPMA or PMA+5; the lowest value will be applicable.

4.3.4.2 Watertightness at internal pressure

When testing in accordance with 5.3, repair clamps must resist an interior water pressure of 1.5 x PFA) bar for a period of 2 hours and in accordance with the provision of 5.3 they shall not have any leakages or permanent deformation.

4.3.4.3 Watertightness at extenal pressure

When testing in accordance with 5.4 repair clamps and repair couplings must resist an absolute pressure of approx. 0,1 to 0,02 bar for a period of 2 hours. When testing in accordance with 5.4 the pressure shall not increase by more than 0,09 bar.

4.3.4.4 Bending

When testing repair couplings[3] in accordance with 5.5 the couplings shall comply with 4.3.4.2.

4.3.4.5 Watertightness in case of variable internal pressure

When testing in accordance with 5.6, after 24.000 cycles with changing pressures between PMA and PMA 5, the repair clamps must comply with 4.3.4.2.

[3]This test does not apply to repair clamps.

5 Test methods

5.1 General

5.1.1 Pressures and temperatures

To perform the following tests, whereby with the addition of water the required pressures can be achieved, the following applies:

- pressures shall be measured with a precision pressure gauge in accordance with NEN 927;
- the ambient pressure is atmospheric;
- the test pressure shall not be higher than the required pressure and not lower than 95% of the required pressure;
- the water temperature shall be lower than 30°C;
- the ambient temperature shall be between 20ºC ± 10˚C.

5.1.2 Models to be tested

Table 2 indicates per DN group which DN shall be tested.

Table 2: Models to be tested

DN group	15<DN≤140	150<DN≤300	>300
Model to be tested	DN 100	DN 200	DN 400
	PN 10[4]	PN 10	PN 10
Length L	1.0 m	1.0 m	1.0 m

5.1.3 Assembly of repair clamps/repair couplings

The tests described below are performed with two separate pipe sections and a repair clamp. The repair clamp shall be fixed in accordance with the supplier's installation instructions.
The tests according to 5.3, 5.4 and 5.5 are carried out on the piping materials as shown in the Technical product information (see 4.3.1).

5.2 Determination of mechnical strength under internal pressure

5.2.1 Test installation and tools

For the determination of watertightness under internal pressure, the repair clamp/repair coupling is installed in the test installation according to *Figure* ***Error! Reference source not found.***.

5.2.2 Process

(a) Fill the test installation with water, vent it and close the vent opening, on the understanding that force F will not be applied;
(b) Gradually apply, within 30 s, a pressure to the test installation up to the pressure according to 4.3.4.2 and maintain this pressure for 2 hours;
(c) During the test, no leakage or permanent deformation shall occur.

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5.3 Determination of watertightness under internal pressure

[4] PN 10 comprises PN6.

5.3.1 Test installation and tools

For the determination of watertightness under internal pressure, the repair clamp is installed in the test installation according Figure 1 .

5.3.2 Process

(a) Fill the test installation with water, vent it and close the vent opening, on the understanding that force F will not be applied;
(b) Gradually apply, within 30 s, a pressure to the test installation up to the pressure according to 4.3.4.2 and maintain this pressure for 2 hours;
(c) During the test, no leakage or permanent deformation shall occur.

5.4 Determination of watertightness under external pressure

5.4.1 Test installation and tools

For the determination of watertightness under external pressure, the repair clamp is installed in the test installation according Figure 1 on the understanding the force F will not be applied.

5.4.2 Process

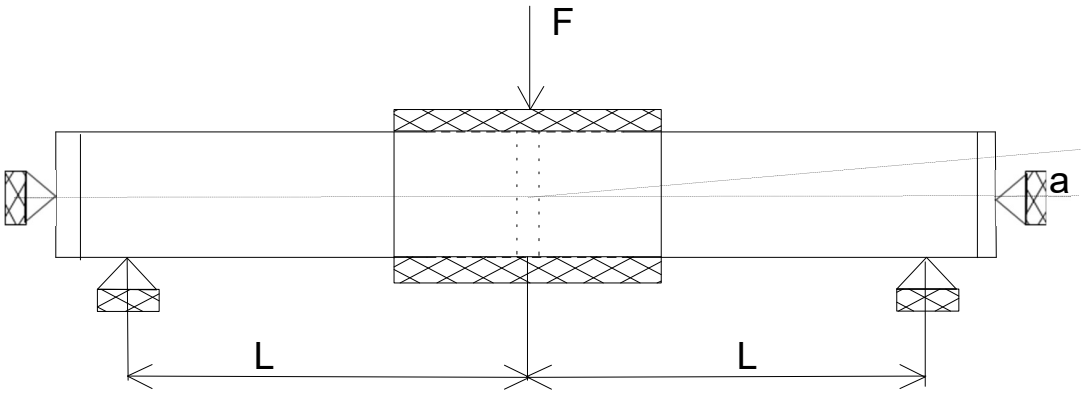
(a) Empty the test installation and connect a vacuum pipe to the vent opening;
(b) Gradually apply, within 30 s, a vacuum to the test installation up to the pressure according to 4.3.4.2 and maintain this pressure for 2 hours;
(c) During the test this pressure shall not increase more than 0,09 bar.

5.5 Determination of watertightness under bending

5.5.1 Test installation and tools

The repair clamp is installed in the test installation according to Figure 1

Figure 1: test installation



5.5.2 Test requirements

Table 3: relation between DN and bending

DN	Angle a
40<DN≤300	3°30’
300<DN≤400	2°30’

5.5.3 Process

(a) Fill the test setup with water, vent it and close the vent opening;
(b) Gradually apply, within 30 s, a pressure to the test installation of a pressure according to Table *3* and the bending force F; based on the values specified in Table 3 and maintain both for 2 hours;
(c) During the test, no leakage or permanent deformation shall occur.

5.6 Watertightness in case of variable internal pressure

5.6.1 Test installation and tools

The repair clamp is installed in the test installation according to **Error! Reference source not found.**.

5.6.2 Process

(a) Fill the test setup with water, vent it and close the vent opening;
(b) Load the test setup evenly within 5 seconds to PMA;
(c) Lower the pressure evenly, within 5 s, to (PMA-5) and maintain this pressure for 5 s;
(d) Increase the pressure evenly, within 5 s, to PMA and maintain this pressure for 5 s;
(e) Repeat paragraphs (b) up to and including (d) 24.000 times;
(f) No leakage or deformation may occur during the determination.

6 Marking

6.1 General

The following marking shall be clearly and properly indicated on every product:

- Name of manufacturer and/or registered trademark;
- Production date or production code;
- Type indication;
- The minimum and maximum pipe diameter for which the repair clamp or the repair coupling may be used;

6.2 Certification mark

After concluding a Kiwa certification agreement, the certified products shall be indelible marked with the certification mark:

For products which come in contact with drinking water:

the Kiwa Water Mark KIWA.

7 Requirements in respect of the quality system

This chapter contains the requirements which have to be met by the supplier's quality system.

7.1 Manager of the quality system

Within the supplier's organizational structure, an employee who will be in charge of managing the supplier's quality system must have been appointed.

7.2 Internal quality control/quality plan

The supplier shall have an internal quality control scheme (IQC scheme) which is applied by them.

The following must be demonstrably recorded in this IQC scheme:

- which aspects are checked by the supplier;
- according to what methods such inspections are carried out;
- how often these inspections are carried out;
- in what way the inspection results are recorded and kept.

This IQC scheme should at least be an equivalent derivative of the model IQC scheme as shown in the Annex.

7.3 Control of test and measuring equipment

The supplier shall verify the availability of necessary test and measuring equipment for demonstrating product conformity with the requirements in this evaluation guideline.
When required the equipment shall be kept calibrated (e. g. recalibration at interval).
The supplier shall assess the validity of the above-mentioned measuring results and record them if at the time of calibration the laboratory and measuring equipment is not working properly.
The measuring equipment shall have an identification which allows for establishing the calibration status.
The supplier must keep records of the calibration results.

7.4 Procedures and working instructions

The supplier shall be able to submit the following:

- procedures for:
  - dealing with products showing deviations;
  - corrective actions to be taken if non-conformities are found;
  - dealing with complaints about products and/or services delivered;
- the working instructions and inspection forms used.

7.5 Other requirements

The supplier shall be able to submit the following:

- the organisation's organogram;
- qualification requirements of the personnel concerned.

8 Summary of tests and inspections

This chapter contains a summary of the following tests and inspections to be carried out in the event of certification:

- **initial investigation**;
- **inspection test**;
- **inspection of the quality system of the supplier**.

8.1 Test matrix

Description of requirement	Article no. of BRL	Tests within the scope of:	
		Pre-certification	Inspection by Kiwa after granting of certificate [a,b]
Material requirements			
Suitability for contact with drinking water	4.2.1	X	X
Product requirements			
Technical product information	4.3.1	X	X
Pressures	4.3.2.2	X	X
Fastenings	4.3.2.3	X	X
Sealing materials	4.3.2.4	X	X
Protection	4.3.3	X	X
Mechanical strength	4.3.4.1		
Watertightness on internal pressure	4.3.4.2		
Watertightness on external pressure	4.3.4.3		
Bending	4.3.4.4	X	
Watertightness in case of variable internal pressure	4.3.4.5	X	
Marking			
General	6.1	X	X
Certification mark	6.2	X	X

a) In case of significant changes, at Kiwa's criteria, of the product or production process, it must be determined whether the performance requirements are being met.

b) During the inspection tests, the inspector verifies the products on basis of a selection from the above mentioned product requirements. The frequency of inspection visits is defined in chapter 9.6 of this evaluation guideline.

8.2 Inspection of the quality system

The quality system of the supplier will be checked by Kiwa on the basis of the IQC scheme.
The inspection shall cover at least those aspects mentioned in the Kiwa Regulations for Certification.

9 Agreements on the implementation of certification

9.1 General

The certification body must dispose of regulations or a similar document that establishes the general rules employed for certification.
These rules are in particular:

- the general rules for conducting the pre-certification tests, in particular:
  - the way suppliers are to be informed about how an application is being handled;
  - how the test are conducted;
  - the decision to be made as a result of the pre-certification tests.
- the general rules for conducting inspections and the aspects to be audited,
- the measures to be taken by the certification body in case of nonconformities,
- the measures taken by the certification body in case of improper use of Certificates, Certification Marks, Pictograms and Logos,
- terms for termination of the certificate,
- the possibility to lodge an appeal against decisions on measures taken by Kiwa.

9.2 Certification staff

The staff involved in the certification may be sub-divided into:

- Certification assessor (**CAS**): in charge of performing design and documentation assessments, attestation investigations, applications, and the evaluation and review of conformity assessments;
- Site assessor (**SAS**): in charge of carrying out external inspections at the supplier's works;
- Decision maker (**DM**): in charge of making decisions in connection with the pre-certification tests carried out, continuing the certification in connection with the inspections carried out and making decisions on the need to take corrective actions.

9.2.1 Qualification requirements

The qualification requirements consist of:

- qualification requirements for personnel of a certification body which satisfies the requirements EN ISO / IEC 17065, performing certification activities
- qualification requirements for personnel of a certification body performing certification activities set by the Board of Experts for the subject matter of this evaluation guideline.

Education and experience of the concerning certification personnel shall be recorded demonstrably.

Basic competences	Evaluation criteria
Knowledge of company processes Requirements for conducting professional audits on products, processes, services, installations, design, and management systems.	*Relevant experience: in the field* **SAS, CAS** : 1 year **DM**: 5 years inclusive 1 year with respect to certification Relevant technical knowledge and experience on the level of: **SAS**: High school **CAS, DM** : Bachelor
Competence for execution of site assessments. Adequate communication skills (e.g. writing reports, presentation skills and interviewing technique).	**SAS**: Kiwa Audit training or similar and 4 site assessments including 1 self-reliant under supervision.

Basic competences	Evaluation criteria
Execution of initial examination	**CAS**: 3 initial audits under supervision.
Conducting review	**CAS**: conducting 3 reviews

Technical competences	Evaluation Criteria
Education	**General**: Education in one of the following technical areas: • Civil Engineering; • Mechanical Engineering.
Testing skills	**General:** • 1 week laboratory training (general and scheme specific) including measuring techniques and performing tests under supervision ; • Conducting tests (per scheme).
Experience - specific	**CAS** • 1 complete application (including the initial assessment of the production site) under the direction of a CAS • 1 complete application self-reliant (to be evaluated by **PM**) • 1 initial assessment of the production site under the direction of the **PM** • 1 complete initial application self-reliant (evaluated by **PM**) **SAS** • 2 inspection visits together with a qualified **SAS** • 1 inspection visit conducted self-reliant (evaluated by **PM**)
Skills in performing witnessing	**PM** Internal training witness testing

Legenda:
- Certification assessor (**CAS**)
- Decision maker (**DM**)
- Product manager (**PM**)
- Site assessor (**SAS**)

9.2.2 Qualification

The qualification of the Certification staff shall be demonstrated by means of assessing the education and experience to the above mentioned requirements. In case staff is to be qualified on the basis of deflecting criteria, written records shall be kept.
The authority to qualify staff rests with the:
- **PM**: qualification of **CAS** and **SAS**;
- management of the certification body: qualification of **DM**.

9.3 Report initial investigation

The certification body records the results of the initial investigation in a report.
This report shall comply with the following requirements:
- completeness: the report provides a verdict about all requirements included in the evaluation guideline;
- traceability: the findings on which the verdicts have been based shall be recorded and traceable;
- basis for decision: the **DM** shall be able to base his decision on the findings included in the report.

9.4 Decision for granting the certificate

The decision for granting the certificate shall be made by a qualified Decision maker who has not been involved in the pre-certification tests. The decision shall be recorded in a traceable manner.

9.5 Layout of quality declaration

The product certificate shall be in accordance with the model included in the Annex.

9.6 Nature and frequency of extarnal audits

The certification body shall carry out surveillance audits on site at the supplier to check whether the supplier complies with his obligations. The Board of Experts decides on the frequency of audits.

At the time this BRL entered into force, the frequency of audits has been established at 2 audits per year for suppliers with a quality management system in accordance with ISO 9001 for their production, which has been certified by an acknowledged accreditation body (in accordance with ISO/IEC 17021) and where the IQC scheme forms an integral part of the quality management system.
In case the supplier is not in possession of any product certificate (issued by Kiwa or any other accredited certification body), the frequency is increased to 3 visits per year for the duration of one year.

The audit program to be carried out by the certification body shall cover at least:

- the product specifications laid down in the certificate;
- the production process;
- the suppliers' IQC scheme and the results obtained from inspections carried out by the supplier;
- the correct way of marking certified products;
- compliance with required procedures;
- handling complaints about delivered products .

For suppliers with a private label certificate the frequency of audits is established at one audit per two years. These audits are conducted at the site of the private label certificate holder. The audits are conducted at the site of private label holder and focused on the aspects inserted in the IQC scheme and the results of the control performed by the private label holder. The IQC scheme of the private label holder shall refer to at least:

- the correct way of marking certified products;
- compliance with required procedures for receiving and final inspection;
- the storage of products and goods;
- handling complaints about deliver.

The results of each audit shall be recorded by Kiwa in a traceable manner in a report.

9.7 Report to the Board of Experts

De certification body shall report annually about the performed certification activities. This report shall cover the following aspects:

- mutations in number of issued certificates (granted/withdrawn);
- number of executed audits in relation to the required minimum;
- results of the inspections;
- required measures for established nonconformities;
- complaints received about certified products by third parties.

9.8 Nonconformities

When the certification requirements are not met, measures are taken by Kiwa in accordance with the sanctions policy. The Sanctions Policy is available through the “Services” tab on the Kiwa website "Kiwa Regulation for Certification".

9.9 Interpretation of requirements

The Board of Experts may record the interpretation of requirements of this evaluation guideline in one separate interpretation document.

10 Titles of standards

10.1 Public law rules

Public law regulations Government Gazette dated 18 July 2011, no. 11911 with a revision in 2017	Public law regulations "Ministerial Regulation materials and chemicals drinking water and warm tap water supply"

10.2 Standards / normative documents

Number	Title	Version*
BRL-K746	Coating system applications for drinking water applications	
BRL-K759	Coating systems for drinking water applications	
BRL-K17504	Certification of vulcanized rubber products for cold and hot drinking water applications	
NEN 927	Pressure gauges - testing and gauging	
NEN-EN 545:	Ductile iron pipes, fittings, accessories and their joints for water pipelines - Requirements and test methods	
NEN-EN 805:	Water supply – Requirements for systems and components outside buildings	
NEN-EN 1333	Flanges and their joints – Pipework components – Definition and selection of PN	
NEN-EN-ISO 4016	Hexagon head bolts - Product grade C;	
NEN-EN-ISO 4034	Hexagon regular nuts - Product grade C;	
NEN-EN-ISO 7091	Plain washers - Normal series - Product grade C.	
NEN-EN ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection	
NEN-EN ISO/IEC 17021	Conformity assessment - Requirements for bodies providing audit and certification of management systems	
NEN-EN ISO/IEC 17024	Conformity assessment - General requirements for bodies operating certification of persons	
NEN-EN ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories	
NEN-EN ISO/IEC 17065	Conformity assessment - Requirements for bodies certifying products, processes and services	
NEN-EN-ISO 9001	Quality management systems - Requirements	
NEN-EN-ISO 6708	Pipe components - Definition and selection of DN (nominal size)	

I Model certificate (example)

CERTIFICATE

Product certificate
KXXXXXX/0X

kiwa

Issued

Replaces

Page 1 of 1

Name product

STATEMENT BY KIWA
With this product certificate, issued in accordance with the Kiwa Regulations for Certification, Kiwa declares that legitimate confidence exists that the products supplied by

Name customer

as specified in this product certificate and marked with the Kiwa®-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with Kiwa evaluation guideline BRL-xxxx "xxxxxxxxxxxxxxxxxxxxxxxxxx" **dated [dd-mm-yyyy]** inclusive amendment sheet dated dd-mm-yyyy.

Luc Leroy
Kiwa

Publication of this certificate is allowed.
Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

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Company
Name customer
Address customer

Phone number
Fax number
www
Email

Certification process consists of initial and regular assessment of:
- quality system
- product

140410

II Model IQC-scheme (example)

Inspection subjects	Inspection aspects	Inspection method	Inspection frequency	Inspection registration
Raw materials or materials supplied: - recipe sheets - incoming goods inspection raw materials				
Production process, production equipment, plant: - procedures - working instructions - equipment - release of product				
Finished-products				
Measuring and testing equipment - measuring equipment - calibration				
Logistics - internal transport - storage - preservation - packaging - identification				