

## Product Certification according MSBFS 2018:3

Flammable fluids are potentially dangerous. Therefore, the Swedish Civil Contingencies Agency MSB have issued the Ordinance MSBFS 2018:3, i.e. a national law that contains regulations for governing requirements for the design, manufacture, installation and inspection of tanks with ancillary piping or hose lines for handling flammable liquids, as well as requirements for corrosion protection systems.

Product certification applies to tanks, piping, hoses and corrosion protection system.

Regarding tanks, piping and hoses, there are two separate ways to comply with MSBFS 2018:3, (Chapter 4, §7 point 2):

- All individual products are checked and inspected. (not covered by this document)
- The products are certified after examination of individual examples and the manufacturer's quality management system, i.e. quality approval of manufacturing. (Product Certification)

*Definition of a tank: Containers and related safety equipment and accessories for flammable liquid, where the pressure above the liquid surface can neither exceed the atmospheric pressure by more than 0.5 bar or be below the atmospheric pressure by more than 0.0065 bar*

*If the flash point is less than 100° C e.g. liquid is considered as flammable, class 1-3.*

Regarding corrosion protection system in the form of a coating the only way of approval is by product certification (MSBFS Chapter 3, §2).

Kiwa Sweden provides product certification according to MSBFS 2018:3 as a certification body EN ISO 17065. Kiwa Sweden has also been granted the mandatory accreditation by SWEDAC for the service.

A certificate from Kiwa Sweden proves that your equipment and manufacturing meets the safety requirements in design, manufacturing, testing and corrosion protection. And once your equipment or system for corrosion protection meet the requirements, your Swedish customer may use the equipment in compliance with Swedish law, i.e. MSBFS 2018:3.

The certification process is such that Kiwa Sweden reviews the technical documentation in order to verify that the requirements related to design, manufacturing and testing are according to appropriate standards. Thereafter an audit is made to assure that manufacturing, testing and inspection comply with the approved technical documents.

Typically EN 14015, EN 12285 or EN 13121 are the most common standards for tanks, however others can be accepted. The standards must however cover all aspects regarding design, manufacturing and testing. The most common standard for metallic pipes and hoses is typically EN 13480 and for plastic pipes EN ISO 14692.

Before certification the manufacturer must be made aware of the certification process (this document) and Kiwa Sweden General Sales and Special Sales Contract Terms e.g. the Conditions for certification service.

Above is validated by client signing Application, T14ib1. Kiwa Sweden Sweden's General Sales and Special Contract Terms are available through <https://www.kiwa.com/se/sv/om-kiwa/allmanna-leveransvillkor/>

## Certification Process

Before signing the application and sending a commercial order it is recommended to ask Kiwa Sweden of the specific certification process.

The certification process may vary depending on the preparations made by the client as well as his skills in the technology. The applicant does not have to be the physical manufacturer, an agent or sales representative may be the applicant.

**Main steps for certification of tanks, piping and hoses:**

- Document review – design, manufacturing, testing and inspection.
- Prototype inspection (verification that a tank complies with approved technical documentation)
- Audit (verification that the manufacturer has the ability to comply with requirements on manufacturing, testing and inspection over time)

*Audit may be dismissed if new types are similar in technology as previous approved ones.*

Once the above listed items have been done Kiwa Sweden will issue a certificate that is typically valid for 7 years. In order for the certificate to remain valid Kiwa Sweden must as a minimum perform one follow-up audit each year at the workshop.

Unexpected visits (payable) might be necessary if problems arise.

**Main steps in the process corrosion protection system:**

- Document review – check performance, instructions and outcome of laboratory tests.
- Audit (manufacturer shall show that he is able to produce corrosion protection system according to requirements over time).

Expansion and/or reduction of the certification scope are handled whenever the need arise. For major changes such as entirely new types, a new or revised certificate might be necessary.

Customer shall provide Kiwa Sweden with relevant information to the extent that the certification may be accomplished. Examples of suitable technical file to be submitted is found in Application, T14ib1.

If Kiwa Sweden should need additional information to be able to carry out the certification service, we will inform the client of this need of necessary additions to the technical file.

Customer shall allow and facilitate Kiwa Sweden access to the locations of manufacturing and if necessary allow Kiwa Sweden examine representative specimens of production. With access is also meant the possibility to access to the locations of any subcontractor(s).

Customer shall inform Kiwa Sweden whether the customer uses other inspection or certification bodies for the certification of its quality system for similar equipment or the same production unit.

Existing valid quality system certificates, such as an ISO 9001 certificate or similar, related to manufacturing might reduce the scope of Kiwa Sweden audits.

Kiwa Sweden may suspend or revoke issued certificates if:

- The certificate is issued on false grounds
- The certified equipment does not meet the requirements of regulations or standards
- Abuse of certificates or Kiwa Sweden's name or logotype(s)
- Annual follow-up audits could not be made

Issued certificates are Kiwa Sweden's property.

The customer is obliged to document any complaints of tanks, pipes or corrosion protective systems regardless of the source of complaints. Complaints shall be made available for Kiwa Sweden with made corrective actions, if any.

Customer may appeal Kiwa Sweden's decision not to issue, to suspend or revoke certificates. Appeals shall be sent to the head of Quality within fourteen days e.g. after a refusal or revocation.

In connection with the client's marketing where he wishes to refer to a certificate issued by Kiwa Sweden it shall be made clear what the certification covers and the validity. Certificates, reports, etc. issued by Kiwa Sweden must be published in its entirety. Expired certificates and no longer valid reports should not be made available unless request is made by an authority or regulator.

Certificates or reports with sensitive technical or organizational information may be omitted. Customer's use of Kiwa Sweden AB's name or logotype or accreditation number is allowed only after a written agreement with Kiwa Sweden.

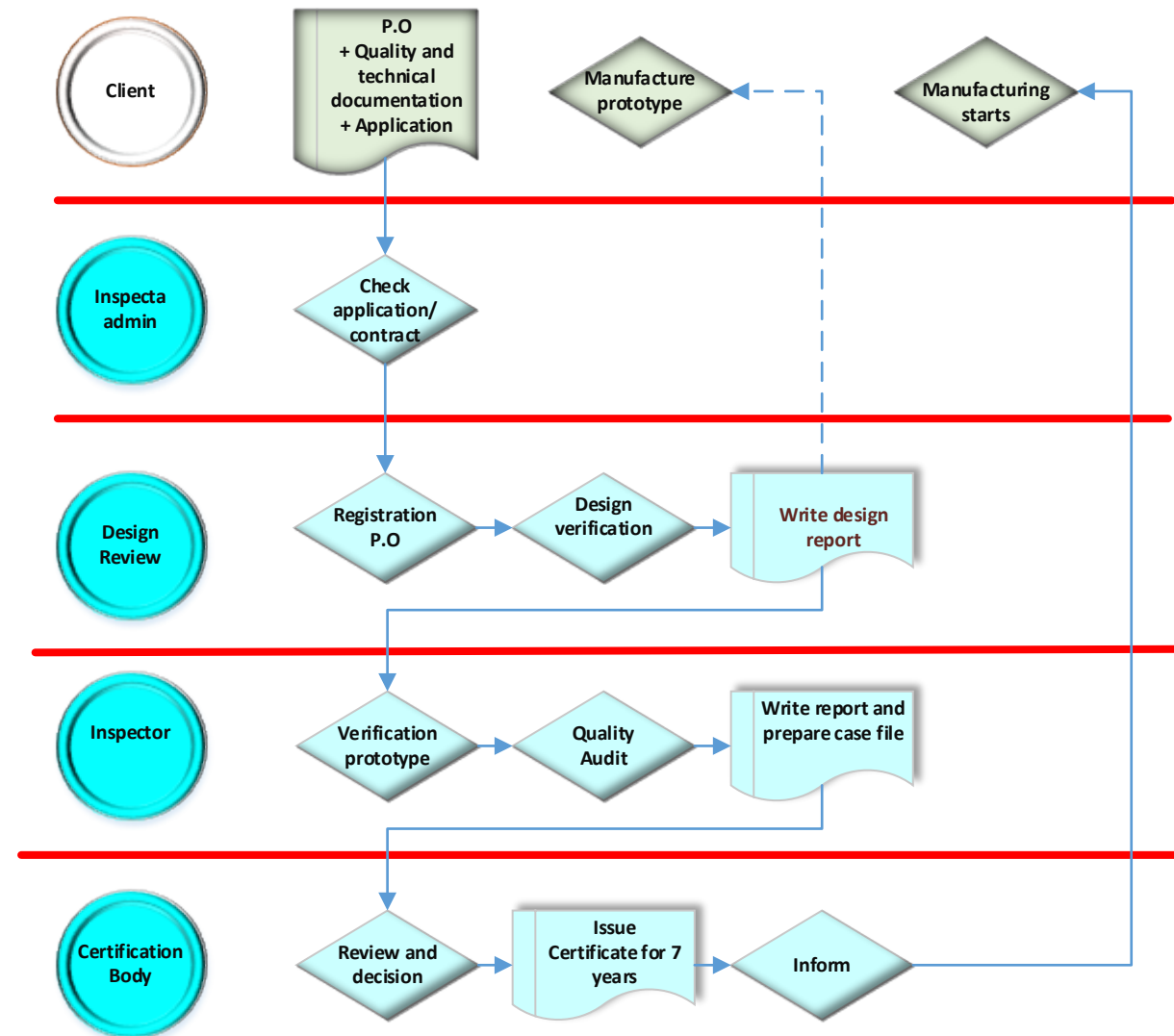
None of the parties may disclose information from the other party without the prior written consent of the other party. Disclosure of information is permitted whenever request is made by government authority or regulator.

Client may submit information to subcontractor(s) without prior written approval to the extent required for the performance of work. Kiwa Sweden doesn't use subcontractors for the service.

The customer must inform Kiwa Sweden if the production of equipment ceases permanently or the customer intends to switch to another certification body than Kiwa Sweden.

# Certification scheme(s) tanks, piping and hoses

## Initial assessment

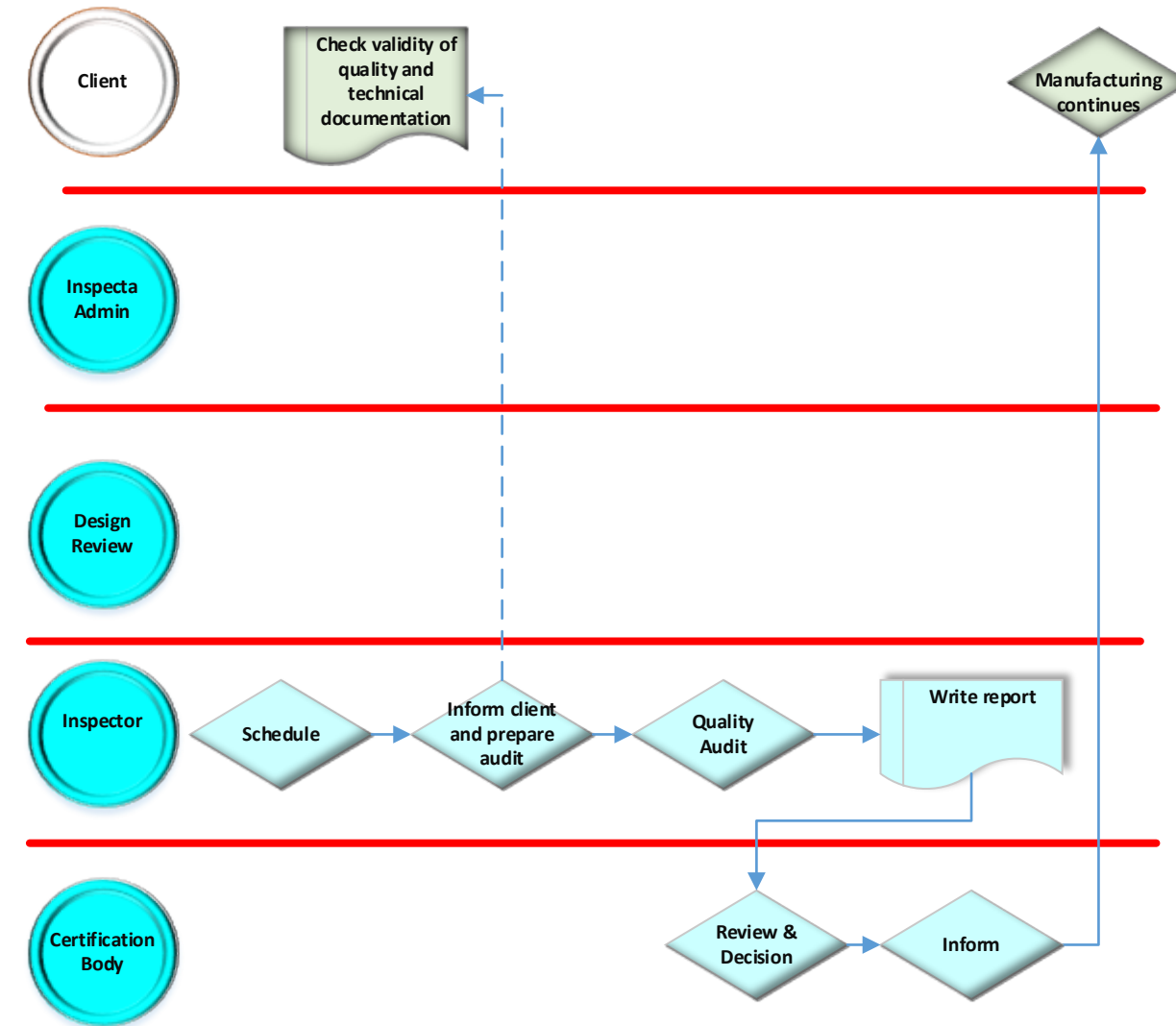


Note - Audit and verification of prototype (test specimen) is possible to combine into one visit.

Note - Deviations found might bring along follow-up audits

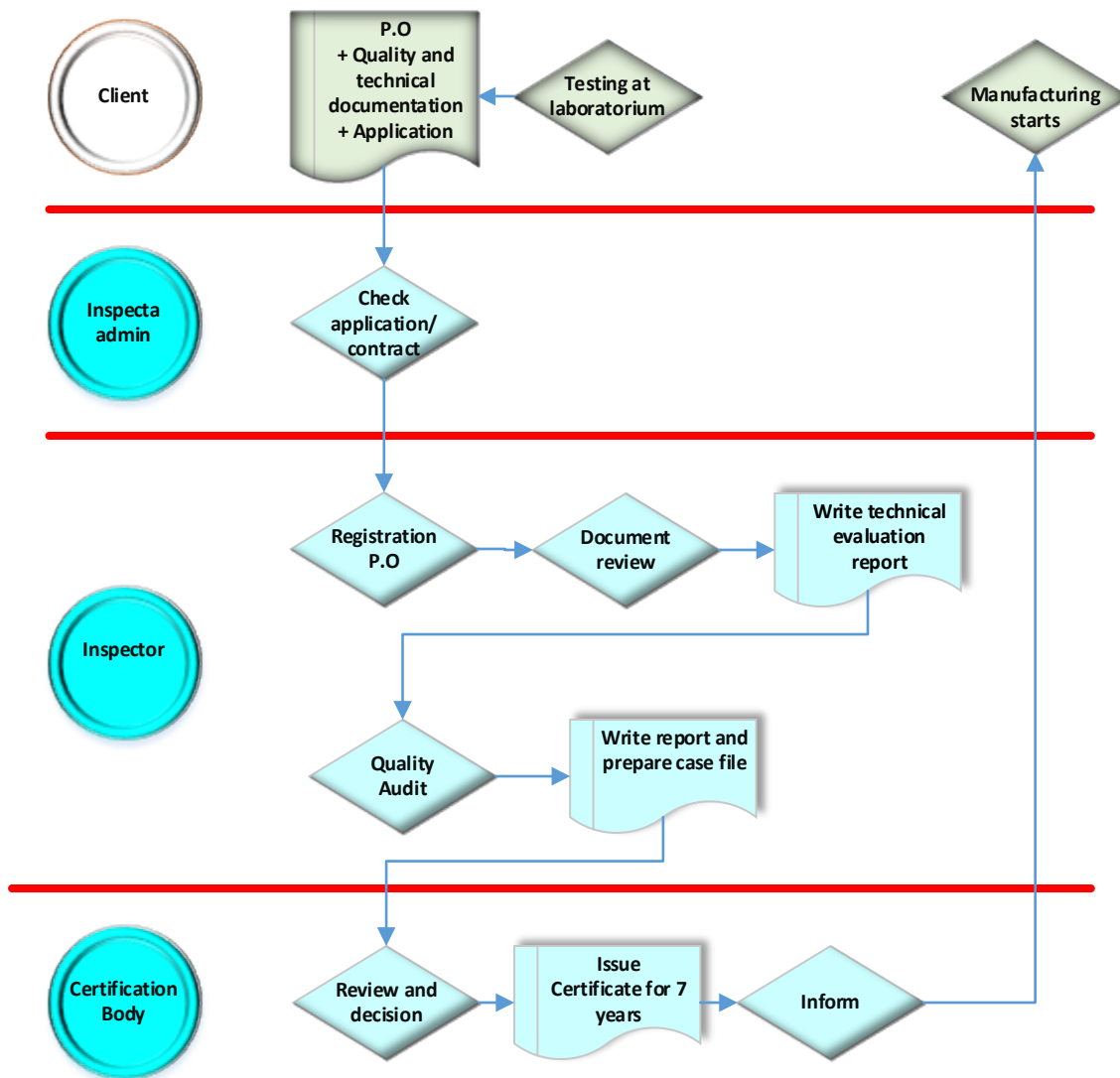
Note – When manufacturer wish to use in-house corrosion protective system for equipment may schemes be combined

## Periodic assessments



# Certification scheme(s) for corrosion protection system

## Initial assessment



Note - Audit and verification of prototype (test specimen) is possible to combine into one visit.

Note - Deviations found might bring along follow-up audits

Note – When manufacturer wish to use in-house corrosion protective system for equipment may schemes be combined

## Periodic assessments

