

TECHNICAL NOTICE

FOR THE DOCUMENTS

ABM, KBM, TBM and TBV

Edition 1, 2018-01-23

The Swedish Nuclear Power Companies have jointly produced this document. Any revision of this document must be approved by mutual consultation between the companies.

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Licensee administrators of the PAKT-documents

TABLE OF CONTENTS

1 INTRODUCTION.....4

2 DECLARED CHANGES TO ABM EDITION 54

3 DECLARED CHANGES TO KBM EDITION 74

3.1 General4

3.2 Application of PED (2014/68/EU) in quality class 4.....4

3.3 1.6.4 Requirements for certification of welders5

3.4 2.1.4 Designations for extent of inspection and supervision.....6

3.5 5.2.1 Pipes and piping systems6

3.6 Appendix 1, EP X-29 Visual testing of materials and welding6

3.7 Appendix 2, EP-425 Inspection of cleanliness.....7

4 DECLARED CHANGES TO TBM EDITION 7.....7

4.1 General7

4.2 3.3.8 Certain requirements for weld joints7

4.3 Appendix 4, Tightness classification.....7

5 DECLARED CHANGES TO TBV EDITION 27

5.1 4.4.1 Designations for extent of inspection and supervision.....7

LIST OF REVISIONS – TECHNICAL NOTICE

Edition	Reason for revision	Applicable pages	Date
1	New document	--	2018-01-23

1 INTRODUCTION

This technical notice constitutes the official addendum to the power plant common application documents ABM, KBM, TBM and TBV prepared by the Swedish licensee.

The technical notice constitutes a clarification, correction or change in the wording of the ordinary PAKT document. The formulations will be processed in each PAKT document upon future updates.

2 DECLARED CHANGES TO ABM EDITION 5

No clarifications, corrections or changes exist.

3 DECLARED CHANGES TO KBM EDITION 7

3.1 General

AFS 1999:4, Tryckbärande anordningar (pressure retaining devices), has been replaced by AFS 2016:1.

The wording Accredited Testing Laboratory changed to Accredited Laboratory to get the same wording as in SSMFS 2008:13.

STAFS 1999:4 changed to STAFS 2011:18 (Amendment 2012:11).

AFS 2005:3, Besiktning av trycksatta anordningar (inspection of pressurised devices), has been replaced by AFS 2017:3, Användning och kontroll av trycksatta anordningar (use and control of pressurised devices). The quality class 4 subdivisions in inspection classes A, B and C are no longer valid and are replaced by AFS-class A, B and "-".

3.2 Application of PED (2014/68/EU) in quality class 4

Standardised stored products

Pressure retaining devices considered as standardised stored products and components of quality class 4 system parts, where deficiencies or malfunctions cannot cause discharge of radioactive substances, can normally be procured in accordance with the requirements of AFS 2016:1 (2014/68/EU) unless otherwise agreed. Any additional requirements in KBM and TBM are usually not applicable for these kinds of products and components.

Products include, for example, pressure vessels, valves etc. Finished products shall be CE labelled with the exception of products in accordance with 8§ (article 4 3§ in 2014/68/EU).

Components constitute, for example, pipes and pipe parts like pipe bends, cones, ends etc. Components are not CE labelled individually.

Pipes and pipe parts are usually reported with SS-EN 10204-3.1 inspection certificates with regards to a harmonised standard and the manufacturers certification according to PED.

Documentation of pressure retaining devices of categories I, II, III and IV, according to AFS 2016:1 (2014/68/EU), which are considered "standard components and inventory" shall at least comply with the basic documentation requirements:

- EU declaration of conformity (12§)
- CE labelling (with the exception of 8§) (36-37§)
- Drawing with parts list, or alternatively, a detailed catalogue sheet, stating pressure class and material.
- Manual and Safety Instructions according to 18§ of AFS 2016:1 (2014/68/EU).

(WPS & WPQR, certification of welders, material certificates, test certificates, etc. do not normally need to be reported for standard components and inventory).

Pressure retaining devices belonging to 8§ according to AFS 2016:1 shall be manufactured according to "Sound Engineering Practice". ("Sound Engineering Practice" according to Article 4 3§ in 2014/68/EU)

Documentation of pressure retaining equipment belonging to 8§ according to AFS 2016:1 (Article 4 Section 3 of 2014/68/EU) shall contain at least:

- Identity certificate according to SS-EN 10204-2.1 or equivalent.
- Drawing with parts list, or alternatively, a detailed catalogue sheet, stating pressure class and material.
- Manual and Safety Instructions according to 18§ of AFS 2016:1 (2014/68/EU).
- The products/components must be labelled with make and type designation.

Other pressure retaining devices

Other pressure retaining devices in quality class 4, in other words non-standardised stored products and components (piece production), are normally procured according to requirements and documentation in the accompanying Delivery Specification/Technical Specification and requirements in detailed control documents based on KBM and TBM. Additional requirements in KBM and TBM shall normally apply to these components unless otherwise agreed.

3.3 1.6.4 Requirements for certification of welders

In quality classes 1-4 and 4A, welding examination according to SS-EN ISO 9606-1 or SS-EN 287-1 shall apply. Re-validations of SS-EN ISO 9606-1 qualifications shall be in accordance with sections 9.3a and 9.3b.

3.4 2.1.4 Designations for extent of inspection and supervision

Section is changed as follows:

- E Inspection and/or testing¹ to be carried out and documented in-house (even by external) on their own responsibility.²
 - L Testing to be carried out and documented by Accredited Laboratory.
 - K Review, inspection, supervision and certification carried out by Accredited Inspection Body.³
 - A Inspection or certification to be carried out by Accredited Notified Body according to 2014/68/EU, AFS 2016:1.
 - T Inspection and/or testing to be carried out and documented by the manufacturer/purchaser. Manufacturers or purchasers requirements.
 - B Activity to be supervised, verified, reviewed and/or approved by the licensee/purchaser.
 - Q Independent review and inspection to be carried out and/or approved by the inspection organisation of the licensee.
- 1) Testing carried out in conjunction with manufacturing of material and shapes may be carried out as in-house inspection provided that the manufacturer possess and adheres to a quality system certified by an Accredited Notified Body according to 1.8.3.
 - 2) Personnel performing work must not inspect and approve their own work. Personnel performing in-house inspection must have the necessary expertise.
 - 3) Accredited Inspection Body according to STAFS 2011:18, (Revised 2012:11) and according to 1.4.3.4.

3.5 5.2.1 Pipes and piping systems

Inspection by "K" is removed from Installation Inspection EP 6-60. Performed during final inspection.

3.6 Appendix 1, EP X-29 Visual testing of materials and welding

Under Application, the first paragraph is no longer valid.

Under Scope, the first paragraph is no longer valid and is replaced by: Where required, according to detailed inspection plan.

Under Acceptance criteria: Tested surfaces must not contain fractures or other external discontinuities that give rise to indications to a greater extent than specified in SS-EN ISO 5817 level B.

Under Certification: A Test certificate shall be prepared according to the requirements in the detailed test procedure and contain at least information corresponding to the requirements in SS-EN ISO 17637.

3.7 Appendix 2, EP-425 Inspection of cleanliness

The partial section 'Welding surfaces' is changed to the following: Stainless welding surfaces in components for process water systems shall, with regard to oxides, fulfill the requirements according to oxide reference "C" according to TBM appendix 3. In non-process water systems, under other circumstances, "D" may be accepted.

4 DECLARED CHANGES TO TBM EDITION 7

4.1 General

AFS 1999:4, Tryckbärande anordningar (pressure retaining devices), has been replaced by AFS 2016:1.

4.2 3.3.8 Certain requirements for weld joints

The paragraph about stainless surfaces is changed to the following: Stainless welding surfaces in components of process water systems shall, with regard to oxides, fulfill the requirements of oxide reference "C" according to appendix 3. In non-process water systems, under other circumstances, "D" may be accepted.

4.3 Appendix 4, Tightness classification

Under Tightness class P, the sentence about globe valves \geq DN65 is changed to the following: Globe valves \geq DN65 and other spindle valves shall have a single stuffing box. Double seals with intermediate drainage shall be avoided, see section 4.3.3.3.

5 DECLARED CHANGES TO TBV EDITION 2

5.1 4.4.1 Designations for extent of inspection and supervision

Section is changed as follows:

- E Inspection and/or testing¹ to be carried out and documented in-house (even by external) on their own responsibility.²
 - L Testing to be carried out and documented by Accredited Laboratory.
 - T Inspection and/or testing to be carried out and documented by the manufacturer/purchaser. Manufacturers or purchasers requirements.
 - B Activity to be supervised, verified, reviewed and/or approved by the licensee/purchaser.
 - Q Independent review and inspection to be carried out and/or approved by the inspection organisation of the licensee.
- 1) Testing carried out in conjunction with manufacturing of material and shapes may be carried out as in-house inspection provided that the manufacturer possess and adheres to a quality system certified by an Accredited Notified Body according to KBM 1.8.3.
 - 2) Personnel performing work must not inspect and approve their own work. Personnel performing in-house inspection must have the necessary expertise.