

DAP Deutsches Akkreditierungssystem Prüfwesen GmbH

Als Leitender Begutachter wurde Herr Dr. rer. nat. K. Kolb von der DGZfP-Fachgesellschaft akkreditierter ZfP-Prüfstellen (F-GZP) benannt.

Anlage zur Akkreditierungsurkunde DAP-IS-3685.00 nach DIN EN ISO/IEC 17020:2004

Gültigkeitsdauer: 2007-11-28 bis 2012-11-27

Urkundeninhaber:

**Applus RTD Belgium
(Röntgen Technische Dienst nv)**

Energielaan 10A
2950 Kapellen
BELGIEN

für ihre Inspektionsstelle Typ A

Inspektionen in den
Bereichen:

Untersuchungen von individuellen Erzeugnissen oder Anlagen mit Hilfe zerstörungsfreier Prüfverfahren (Dichtheitsprüfung, Durchstrahlungsprüfung, Eindringprüfung, Magnetpulverprüfung, Ultraschallprüfung, Sichtprüfung, Wirbelstromprüfung) sowie Härteprüfung, Verwechslungsprüfung und Feststellung ihrer Übereinstimmung mit bestimmten normativen Anforderungen

verwendete Abkürzungen: siehe letzte Seite

Inspektionen nach der Inspektionsanweisung: RTD-primary prozess - PRIM-01 auf der Basis von zerstörungsfreien Prüfverfahren

1 Durchstrahlungsprüfung

ASME V Art. 2 & 22
2007-07

Art. 2: Radiographic examination
Art. 22: Radiographic standards

ASME VIII Div.1&2
2007-07

Rules for construction of pressure vessels
(*here: radiographic testing*)

ASME B31.3
2006

Process Piping
(*here: radiographic testing*)

AD 2000-Merkblatt HP 5/3
2007-02

Herstellung und Prüfung der Verbindungen
Zerstörungsfreie Prüfung der Schweißverbindungen
(Manufacture and testing of joints - Non-destructive testing of welded joints)
(*here: radiographic testing*)

Anlage zur Akkreditierungsurkunde DAP-IS-3685.00

API 1104 2005-11	Welding of pipelines and related facilities
PD 5500 2006-01 with amd. 16422 2006-09	Specification for unfired fusion welded pressure vessels (<i>here: radiographic testing</i>)
RTOD T0111/82-12 2004-11 RTOD T0201/91-07 2004-11	Radiographic weld examination - Requirements & Procedure
CODAP 2000 2002-12	Contrôle, inspection et evaluation de la conformité
EN1435 1997-08 with amd. A2 2003-12	Radiographic testing of welded joints
EN 13480-5 2002-05	Metallic industrial piping - Part 5: Inspection and testing
EN 13445-5 2002-05 with amd. A 10 2007-08	Unfired pressure vessels - Part 5: Inspection and testing (<i>here: radiographic testing</i>)
EN 12681 2003-01	Founding - Radiographic examination

2 Ultraschallprüfung

ASME V Art. 4, 5 & 23 2007-07	Art. 4: Ultrasonic examination methods for inservice inspection Art. 5: Ultrasonic examination methods for materials and fabrication Art. 23: Ultrasonic standards
ASME VIII Div1&2 2007-07	Rules for construction of pressure vessels (<i>here: ultrasonic testing</i>)
ASME CC 2235-8 2005-10	Use of ultrasonic examination in Lieu of radiography Section I and section VIII, Div.1 & 2
ASME B31.3 2006	Process Piping (<i>here: ultrasonic testing</i>)
PD 5500 2006-01 with amd. 16422 2006-09	Specification for unfired fusion welded pressure vessels (<i>here: ultrasonic testing</i>)

Anlage zur Akkreditierungsurkunde DAP-IS-3685.00

AD 2000-Merkblatt HP 5/3 2007-02	Herstellung und Prüfung der Verbindungen - Zerstörungsfreie Prüfung der Schweißverbindungen (Manufacture and testing of joints - Non-destructive testing of welded joints) (<i>here: ultrasonic testing</i>)
ENV 583-6 2000-01	Non-destructive testing - Ultrasonic examination - Part 6: Time-of-flight diffraction technique as a method for detection and sizing of discontinuities
EN 10160 1999-07	Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)
RTOD T0202/85-12 2004-11 RTOD T0117/85-12 2004-11	Ultrasonic Examination: Procedure
EN 1714 1997-08 with amd. A2 2003-12	Non destructive examination of welds - Ultrasonic testing of welded joints
ISO 4386-1 1992-02	Plain bearings - Metallic multilayer plain bearings - Part 1: Non-destructive ultrasonic testing of bond
EN 12680-1 2003-01	Founding - Ultrasonic examination - Part 1: Steel castings for general purposes
EN 12680-2 2003-01	Founding - Ultrasonic examination - Part 2: Steel castings for highly stressed components
EN 13445-5 2002-05 with amd. A1 2007-06	Unfired pressure vessels - Part 5: Inspection and testing (<i>here: ultrasonic testing</i>)

3 Eindringprüfung

ASME V Art. 6 & 24 2007-07	Article 6: Liquid Penetrant Examination Article 24: Liquid Penetrant Standards
ASME VIII Div 1&2 2007-07	Rules for construction of pressure vessels (<i>here: penetrant testing</i>)
ASME B31.3 2006	Process Piping (<i>here: penetrant testing</i>)
PD 5500 2006-01 with amd. 16422 2006-09	Specification for unfired fusion welded pressure vessels (<i>here: penetrant testing</i>)

Anlage zur Akkreditierungsurkunde DAP-IS-3685.00

AD 2000-Merkblatt HP 5/3 2007-02	Herstellung und Prüfung der Verbindungen Zerstörungsfreie Prüfung der Schweißverbindungen (Manufacture and testing of joints - Non-destructive testing of welded joints) (<i>here: penetrant testing</i>)
RTOD T0203/92-12 2004-11 RTOD T0110/76-12 2004-12	Surface examination: Procedure
EN 571-1 1997-01	Non destructive testing - Penetrant testing - Part 1: General principles
ISO 4386-1 1992-02	Plain bearings - Metallic multilayer plain bearings - Part 1: Non-destructive ultrasonic testing of bond

4 Magnetpulverprüfung

ASME V Art. 7 & 25 2007-07	Article 7: Magnetic Particle examination Article 25: Magnetic Particle standards
ASME B31.3 2006	Process Piping (<i>here: magnetic particle testing</i>)
PD 5500 2006-01 with amd. 16422 2006-09	Specification for unfired fusion welded pressure vessels (<i>here: magnetic particle testing</i>)
AD 2000-Merkblatt HP 5/3 2007-02	Herstellung und Prüfung der Verbindungen - Zerstörungsfreie Prüfung der Schweißverbindungen (Manufacture and testing of joints - Non-destructive testing of welded joints) (<i>here: magnetic particle testing</i>)
RTOD T0203/92-12 2004-11 RTOD T0110/76-12 2004-11	Surface examination: Procedure
EN 1290 1998-02 with amd. A2 2003-12	Non-destructive examination of welds - Magnetic particle examination of welds
EN 1369 1996-11	Founding - Magnetic particle inspection
ISO 4986 1992-06	Steel castings - Magnetic particle inspection

Anlage zur Akkreditierungsurkunde DAP-IS-3685.00

EN ISO 9934-1
2001-12
with amd. A1
2003-12

Non-destructive testing - Magnetic particle testing - Part 1:
General principles

5 Dichtheitsprüfung

ASME V Art. 10
2007-07

Article 10: Leak Testing

6 Wirbelstromprüfung

ASME V Art. 8
2001 + A02

Eddy Current Examination of Tubular Products

7 Härteprüfung

ASTM A 956
2006-12

Mobile hardness testing methods

HT-91705
2007-09

General procedure for hardness testing with Krautkrämer
Microdur using referential material (in-house procedure)

HT-91704
2007-09

General procedure for hardness testing with Krautkrämer
Dynamic (in house procedure)

8 Verwechslungsprüfung

DT-91902
2007-09

Standard procedure for positive material identification (PMI)
and positive alloy material identification (PMI)
(in-house procedure)

9 Sichtprüfung

ASME V Art. 9
2007-07

Art. 9: Visual examination

ASME B31.3
2006

Process Piping

EN ISO 8501-1
2007-05

Preparation of steel substrates before application of paints
and related products - Visual assessment of surface clean-
less - Part 1: Rust grades and preparation grades of uncoated
steel substrates and of steel substrates after overall removal
of previous coatings

EN 970
1997-02

Non-destructive examination of fusion welds -
Visual examination

EN 13480-5
2002-05

Metallic industrial piping - Part 5: Inspection and piping

verwendete Abkürzungen:

AD-HP	Arbeitsgemeinschaft Druckbehälter; Herstellung und Prüfung von Druckbehältern
API	American Petrol Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing of Materials
DT	Determination testing: Positive Material examination
HT	Hardness testing
Rtod	Regels voor toestellen onder druk