

Report about an
Unexpected Visit
 Based on the requirements of the
QA-Modules acc. to PED

Dok.: Rev. 04, 19.07.16



Industrie Service

| | |
|---|--|
| Company: | Advanced Thermal Systems Inc. |
| Manufacturing Site: | 15 Enterprise Dr. Lancaster, NY 14086 USA |
| Inspection Directive: | PED 2014/68/EU, Module <input checked="" type="checkbox"/> A2, <input type="checkbox"/> D1, <input type="checkbox"/> E, <input type="checkbox"/> E1, <input type="checkbox"/> H, <input type="checkbox"/> H1 |
| Date of Contract for Certificate Award: | April 30, 2020 |
| Number and Date of the Certificate: | USA-20-05-183-001 |
| Scope of the Certificate: | ATS "S2" Series Thermal Ball Joints (Single and Double) |
| Number of Unexpected Visits per year: | 2 |
| Auditor resp. Inspector: | Bob Moir |

Report: Unexpected Visit acc. to Directive 2014/68/EU (PED) - QS-Modules

1. Assessment of the administrative, the organisational and technical requirements:

| Nr. | FF | PF | NF | NA | | Supp lem. |
|-----|-------------------------------------|--------------------------|--------------------------|-------------------------------------|--|--------------------------|
| 1. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The performance of manufacturing is based on the technical documents | <input type="checkbox"/> |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | There had been no changes concerning the validity of the EU-type examinations – production type | <input type="checkbox"/> |
| 3. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The approvals of applied operating procedures continue to be valid | <input type="checkbox"/> |
| 4. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The approvals for joining (welding) personnel continue to be valid | <input type="checkbox"/> |
| 5. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | NDT personnel approvals continue to be valid | <input type="checkbox"/> |
| 6. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The qualification of other personnel continues to be valid | <input type="checkbox"/> |
| 7. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | There have been no changes in application and using of production-methods and manufacture-equipment | <input type="checkbox"/> |
| 8. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The appropriate methods to ensure traceability of materials are still applied | <input type="checkbox"/> |
| 9. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Without modification the described final inspections are carried out in accordance with Annex I, 3.2 of PED continue to be carried out without modifications | <input type="checkbox"/> |
| 10. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Complying with the requirements the products' marking and labelling is done | <input type="checkbox"/> |
| 11. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Relevant installation and operating instructions continue to be issued unchanged and accompany every pressure equipment item | <input type="checkbox"/> |

2. Technical object assessment

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| <input checked="" type="checkbox"/> | During the Unexpected Visit pressure equipment was inspected. The inspection reports were handed out to the manufacturer. |
| <input type="checkbox"/> | The manufacturer was pledged to announce the beginning of manufacture in order to make possible the technical object assessment. |

3. Performing: An Unexpected Visit was performed on December 07, 2022

Based on the Information from the Manufacturer, there were produced since the former Unexpected Visit the number of **11210** pressure equipment items.

TÜV SÜD Industrie Service GmbH

Notified Body for Pressure Equipment 0036

Location: Wakefield, MA , date: December 2022

Enclosure: Supplement Sheet

Allocator: Manufacturer

PED-QA-Certification Body

For the inspecting laboratory:

Regional certifier:

Bob Moir



Thomas Huettner

Bob Moir, US-IS-EAST

Thomas Huettner, US-IS-EAST

**Inspecting laboratory of
TÜV SÜD Industrie Service GmbH
Notified Body for Pressure Equipment 0036**



Assessment Report of: final inspection
 partial structural inspection
acc. to annex I, 3.2 Directive 2014/68/EU (PED)

Manufacturer: **Advanced Thermal Systems, Inc.** Order-number: **72184688**
Report-number: **P-USA-22-12-183-001**

Pressure Equipment: **Ball Joints** Manufacturing-site: **15 Enterprise Drive
Lancaster, NY 14086 USA**

No. of certificate: **USA-22-12-183-001** Issued: February 3rd, 2023

Inspection Directive: PED 2014/68/EU, Module A2 / C2 / D/D1 / F / G / H/H1, other:

.....
Technical Specification:

Marking and labelling of the pressure equipment:

Marking on: Nameplate permanently attached

- Indication for Identification of the manufacturer: **ATS name/address**
- Year of manufacture: **2022**
- Type- series- or lotidentification: **2.5" S2-SWW-400H-70-20-S-SU-RA-HF**
- Intended use: **Ball joint operations – solar field**

Further relevant aspects:

| | | | |
|---|-----------------|----|----|
| Chamber-identification: | 100903 | -- | -- |
| Max./min. allowed pressure (bar): | 50 / 0 | -- | -- |
| Max./min. allowed working temperature (°C): | 400 / 20 | -- | -- |
| Volume (Liter): | DN50 | -- | -- |
| Fluid: | Water | -- | -- |

Design-approval and Certification / EU Type Examination / Design Examination by: **Advanced Thermal Systems, Inc.**

drawing- / document-number or similar classification: **BJ-22-2127**
these documents are available. They are still valid.

Inspection / Partial Structural Inspection / Final Inspection in acc. with 2014/68/EU Annex I, 3.2.1:

by the inspection laboratory of TÜV SÜD Industrie Service GmbH

results from inspections and approvals worked out:

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| <input type="checkbox"/> | NDT approvals and working approvals: doc.-no.: The reports about the working approvals and NDT approvals are available. Performance of these approvals by the inspection laboratory: The results are in accordance with the technical specification: |
| <input checked="" type="checkbox"/> | Valid certificates of calibration figure out that calibrated test equipment is used |
| <input checked="" type="checkbox"/> | The material test certificates are available. They are in accordance with the technical specifications |
| <input checked="" type="checkbox"/> | The approvals of the required qualifications of the joining (welding) personnel and the NDT personnel are available and are still valid |
| <input checked="" type="checkbox"/> | The approvals concerning the required qualifications of the working procedures are available and continue to be valid. |
| <input checked="" type="checkbox"/> | Expert's survey and dimensional inspections were accomplished by random examinations as well as: Inspection of the main welding seams (longitudinal and circular seams, further seams). Surveying and dimensional inspections of significant structural parts by the manufacturer (casing, torispherical heads, further structural parts). |

**Inspecting laboratory of
TÜV SÜD Industrie Service GmbH
Notified Body for Pressure Equipment 0036**



Industrie Service

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| | The examinations had no objections. |
| <input checked="" type="checkbox"/> | Established procedures to assure the traceability: <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> were spot-checked <input type="checkbox"/> were checked during further examinations </div> There were no objections. |

| | | | |
|-------------------------|---------------|--|--|
| Chamber-identification: | 100903 | | |
| Test Pressure (bar): | 96.5 | | |
| Test Medium: | Water | | |

Result:

The Partial Structural Inspection / Final Inspection / and the Pressure Test were accomplished in accordance with the requirements of Directive 2014/68/EU (PED).
The performance of the inspections and the evaluation of the results did not cause any non-conformances.

Remarks:

- The inspection results are relating only to the described assessment object
- To copy this inspection report in extracts without the prior agreement of the Notified Body 0036 is not permitted
- The final inspection and examination in accordance with annex I, 3.2 of Directive 2014/68/EU (PED) was performed by the manufacturer in the presence of a representative of the inspection laboratory.

Further advices:

- The pressure equipment was inspected without its (safety) accessories. Therefore the approval of the (safety) accessories is still required
- Before starting of operation, the pressure device is subject to further examinations as well as periodic inspections in accordance with the relevant provisions of law

TÜV SÜD Industrie Service GmbH
Notified Body for Pressure Equipment 0036

Location: Wakefield, MA date: December 7, 2022

For the inspecting laboratory:

Regional certifier:

Bob Moir

Thomas Huettner

Bob Moir, US-IS-EAST



Thomas Huettner, US-IS-EAST

Enclosures:

(Documents and records of material inspections, approvals of working procedures, assessment of safety accessories etc.):

- Copy of Declaration of Conformity by the manufacturer
- Copy of operating instructions
- Copy of material certificates

CERTIFICAT

CERTIFICADO

‘EPK’ITRAT

認証証書

CERTIFICATE

ZERTIFIKAT



Industrie Service

CERTIFICATE

**Internal Production Control plus Supervised Pressure Equipment
Checks at Random Intervals (Module A2)**

Acc. to Directive 2014/68/EU

Pressure Equipment Directive

Interne Fertigungskontrolle mit überwachten Druckgeräteeprüfungen in Unregelmäßigen Abständen (Modul A2)
nach Richtlinie 2014/68/EU

Certificate-No.: USA-22-12-183-001

Zertifikat-Nr.

For

**Name and Address
of the Manufacturer:**

*Name und Anschrift
des Herstellers*

**Advanced Thermal Systems, Inc.
15 Enterprise Drive
Lancaster, NT 14086
U.S.A.**

According to the audit results, the manufacturer is entitled to mark the pressure equipment produced within the range of this module.

CE 0036

Scope of approval:

Geltungsbereich

ATS "S2" Series Thermal Ball Joints (Single and Double)

Final Assessment Report #: P-USA-22-12-183-001

Abnahmeprüfbericht Nr

Manufacturing plant:

Fertigungsstätte

**Enterprise Drive
Lancaster, NY 14086
U.S.A.**

The certificate is valid until April 30, 2026

Denver, CO, February 3rd, 2023

TÜV SÜD Industrie Service GmbH

Thomas Huettner

Notified Body No.: 0036

TÜV SÜD
Industrie Service GmbH
Westendstrasse 199
D-80686 München

Test Laboratory for Pressure
Equipment: Industrie Service,
TÜV SÜD America, Inc.
401 Edgewater Place
Wakefield, MA 01880

