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High-Temperature Reactor Components and Systems

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HTR-E WP1 Turbine
EVO design data and measurements for specified load cases

Günter Zahn

EVO

Germany

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Compilation of Documentation

and

Publications about the

Helium-Turbine-Plant

of

Energieversorgung Oberhausen AG (EVO)

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   Gerhard Deuster and Robert Plür, EVO (1970)

2. **The 50-MW-Helium-Gasturbine-Plant in Oberhausen**
   Robert Plür and Horst Wilzhoff, EVO (1976)

3. **Some aspects for the construction of the 50-MW-Helium-Turbine-Plant at EVO Oberhausen AG**
   Dr. Peter Zenker, EVO (1974)

4. **The 50-MW-Helium-Turbine-Plant Oberhausen**
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5. **The closed cycle Gasturbine - historical development and importance in future**
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   Gutehoffnungshütte Sterkrade AG Oberhausen (1967)

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   Professor Karl Bammert (1974)

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   Professor Karl Bammert und Gerhard Deuster (1974)

10. **Instrumentation and Procedures to the Measurement at the Dynamic Behaviour at the Helium-Turbine-Plant Oberhausen**
    Karl Bammert, Joachim Johanning, Erich Weidner (1983)

H. Collection of EVO-Research (1970 - 1983)

1. Investigation of shaftvibrations of the LP-Compressor and the HP-Parts of the Helium-Turbine of Energieversorgung Oberhausen

Report on experiment "A" (24.11.1978)

Prof. Dr. Ing. O. Mahrenholtz
Dr. Ing. B. Grabowski
Dipl.-Ing. V. Schlegel

Institut for mechanical engineering, Hannover University

2. Investigation of shaftvibrations of the LP-Compressor and the HP-Parts of the Helium-Turbine of Energieversorgung Oberhausen.

Final report on experiment "A" (31.08.1981).

Prof. Dr.-Ing. O. Mahrenholtz, Institut for mechanical engineering, Hannover Universität

3. Intermediate Report regarding Acoustic Measurements of the EVO-Plant (29.11.1978)

Prof. Dr.-Ing. G. Dibelius, Chair and institute for steam and gas turbines, Rheinisch Westfälische Technische Hochschule RWTH Aachen (Institute for Technology).

4. Acoustic and vibration measurement of the Helium Turbine of EVO

Technical report (January 1979)

K.H. Thode, Interatom

5. Acoustic and vibration measurement of the helium turbine of EVO

Final report on carried out measurements during experiment „B“
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K.H. Thode, Interatom

6. Intermediate report concerning the assessment of the expansion of the inner tubes of the Helium Turbine of EVO

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Prof. Dr.-Ing. H. Öry
Dipl.-Ing. H. Lahme

Institut for light construction Rhein.-Westf. Technische Hochschule Aachen.

7. **Final report concerning the assessment of the expansion of the inner tubes of the Helium-Turbine, EVO (August 1981).**

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Prof. Dr.-Ing. Öry
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Dipl.-Ing. H. Lahme
Dipl.-Ing. M. Wahle

Institut of light construction, Rhein.-Westf. Techn. Hochschule Aachen

8. **Investigation of the Behaviour of the inner insulator of the coaxial tube of the Helium-Turbine, EVO**

Final report on carried out measurements during experiment "C" from February 1977 to Dezember 1980 (Dezember 1981)

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9. **Investigation of the dynamism of the auxiliary systems Experiment "E" (October 1978).**

GHH-Sterkrade AG

10. Temperature profile measurements in the heat exchanger of the helium turbine, especially the bypass mixer

Final report of the period 1979 - 1981

K. Freckmann, GHH-Sterkrade AG

11. Instrumentation of the coaxial tube experiments of the helium turbine, EVO

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H. Stehle, H.-H. Thode, J. Wolf, Interatom

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W. Nickel, R. Schmidt, Interatom

13. Investigation of the coaxial inner tube insulation and extreme pressure and temperature conditions.

Technical report on measurements up to May 1978 (06.04.1979)

14. Investigation of extreme force on the casing of the LP-Turbine due to the 50 MW-Helium Pant in Oberhausen

Report Nr. 8015 (18.03.1980)

Dipl.-Ing. K. Latsch,
Ingenieurbüro Dr.-Ing. K. Pitscheider

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