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Autore	Welfens Paul J. J.
Titolo	Transatlantisches Handels- und Investitionsabkommen / / Handels-, Wachstums- und industrielle Beschaftigungsdynamik in Deutschland, den USA und Europa
Pubbl/distr/stampa	Stuttgart, [Germany] : , : Lucius & Lucius, , 2014 ©2014
ISBN	3-11-050736-6
Descrizione fisica	1 online resource (126 pages)
Collana	Europaische Integration und Digitale Weltwirtschaft, , 1868-0607 ; ; Band 8
Disciplina	382.094
Soggetti	BUSINESS & ECONOMICS / General European Union countries Commerce
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Frontmatter -- Vorwort -- Inhaltsverzeichnis -- Abbildungsverzeichnis -- Tabellenverzeichnis -- 1. Einführung -- 2. Transatlantische Handels- und Investitionspartnerschaft: Ein Blick auf ausgewählte Analysebefunde -- 3. Methodische Fragen zur Wirkungsanalyse von Input- Output-Tabellen -- 4. Ausgangsperspektiven -- 5. Sektorale Analysebefunde -- 6. Perspektiven zur Investitionspartnerschaft und Herausforderungen der Wirtschaftspolitik -- 7. Wirtschaftspolitische Konsequenzen -- Literaturverzeichnis -- Anhang 1: Ausgewählte Wirtschaftsdaten für die USA und die EU -- Anhang 2: Detailed consumption of intermediate inputs - observed sectors in the US -- Anhang 3: Detailed consumption of intermediate inputs in the EU (Irawan/Welfens, 2014) -- Anhang 4: CEPII-Szenarios zu TTIP -- Anhang 5: Bruttoexporte und Wertschöpfungsexporte sowie Bruttoimporte und Wertschöpfungsimporte -- Kurzfassung -- Backmatter
Sommario/riassunto	Das Transatlantische Handels- und Investitionsabkommen zwischen der Europäischen Union und den USA könnte die größte Freihandelszone der Welt schaffen und ein für Deutschland und alle Länder der Weltwirtschaft wichtiger Expansion- und Innovationsimpuls werden. Neben den Außenhandelseffekten werden auch

		Direktinvestitionsaspekte bzw. multinationale Unternehmensperspektiven betrachtet. Der Fokus richtet sich insbesondere auf die Industriesektoren Automobilwirtschaft, Chemie, Pharma, Informations- und Kommunikationstechnologie und den Maschinenbau.

2.	Record Nr.	UNINA9910830140103321
	Titolo	Flow-induced vibration handbook for nuclear and process equipment / / edited by Michel J. Pettigrew, Colette E. Taylor, Nigel J. Fisher
	Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, Inc., , [2022] ©2022
	ISBN	1-5231-5515-9 1-119-81097-3 1-119-81099-X 1-119-81098-1
	Descrizione fisica	1 online resource (494 pages)
	Collana	Wiley-ASME Press
	Disciplina	532.5
	Soggetti	Nuclear power plants - Piping - Vibration Chemical plants - Piping - Vibration Pressure vessels - Vibration Pressure vessels - Fluid dynamics Piping - Fluid dynamics Hydrodynamics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Preface -- Acknowledgments -- Contributors -- Chapter 1 Introduction and Typical Vibration Problems -- 1.1 Introduction -- 1.2 Some Typical Component Failures -- 1.3 Dynamics of Process System Components -- 1.3.1 Multi-Span Heat Exchanger Tubes -- 1.3.2 Other Nuclear and Process Components -- Notes -- References -- Chapter 2 Flow-Induced Vibration of Nuclear and Process Equipment: An Overview --

2.1 Introduction -- 2.1.1 Flow-Induced Vibration Overview -- 2.1.2 Scope of a Vibration Analysis -- 2.2 Flow Calculations -- 2.2.1 Flow Parameter Definition -- 2.2.2 Simple Flow Path Approach -- 2.2.3 Comprehensive 3-D Approach -- 2.2.4 Two-Phase Flow Regime -- 2.3 Dynamic Parameters -- 2.3.1 Hydrodynamic Mass -- 2.3.2 Damping -- 2.4 Vibration Excitation Mechanisms -- 2.4.1 Fluidelastic Instability -- 2.4.2 Random Turbulence Excitation -- 2.4.3 Periodic Wake Shedding -- 2.4.4 Acoustic Resonance -- 2.4.5 Susceptibility to Resonance -- 2.5 Vibration Response Prediction -- 2.5.1 Fluidelastic Instability -- 2.5.2 Random Turbulence Excitation -- 2.5.3 Periodic Wake Shedding -- 2.5.4 Acoustic Resonance -- 2.5.5 Example of Vibration Analysis -- 2.6 Fretting-Wear Damage Considerations -- 2.6.1 Fretting-Wear Assessment -- 2.6.2 Fretting-Wear Coefficients -- 2.6.3 Wear Depth Calculations -- 2.7 Acceptance Criteria -- 2.7.1 Fluidelastic Instability -- 2.7.2 Random Turbulence Excitation -- 2.7.3 Periodic Wake Shedding -- 2.7.4 Tube-to-Support Clearance -- 2.7.5 Acoustic Resonance -- 2.7.6 Two-Phase Flow Regimes -- Note -- References -- Chapter 3 Flow Considerations -- 3.1 Definition of the Problem -- 3.2 Nature of the Flow -- 3.2.1 Introduction -- 3.2.2 Flow Parameter Definitions -- 3.2.3 Vertical Bubbly Flow -- 3.2.4 Flow Around Bluff Bodies -- 3.2.5 Shell-Side Flow in Tube Bundles.
3.2.6 Air-Water versus Steam-Water Flows -- 3.2.7 Effect of Nucleate Boiling Noise -- 3.2.8 Summary -- 3.3 Simplified Flow Calculation -- 3.4 Multi-Dimensional Thermalhydraulic Analysis -- 3.4.1 Steam Generator -- 3.4.2 Other Heat Exchangers -- Acronyms -- Nomenclature -- Subscripts -- Notes -- References -- Chapter 4 Hydrodynamic Mass, Natural Frequencies and Mode Shapes -- 4.1 Introduction -- 4.2 Total Tube Mass -- 4.2.1 Single-Phase Flow -- 4.2.2 Two-Phase Flow -- 4.3 Free Vibration Analysis of Straight Tubes -- 4.3.1 Free Vibration Analysis of a Single-Span Tube -- 4.3.2 Free Vibration Analysis of a Two-Span Tube -- 4.3.3 Free Vibration Analysis of a Multi-Span Tube -- 4.4 Basic Theory for Curved Tubes -- 4.4.1 Theory of Curved Tube In-Plane Free Vibration -- 4.4.2 Theory of Curved Tube Out-of-Plane Free Vibration -- 4.5 Free Vibration Analysis of U-Tubes -- 4.5.1 Setting Boundary Conditions for the In-Plane Free Vibration Analysis of U-Tubes Possessing Geometric Symmetry -- 4.5.2 Development of the In-Plane Eigenvalue Matrix for a Symmetric U-Tube -- 4.5.3 Generation of Eigenvalue Matrices for Out-of-Plane Free Vibration Analysis of U-Tubes Possessing Geometric Symmetry -- 4.5.4 Free Vibration Analysis of U-Tubes Which Do Not Possess Geometric Similarity -- 4.6 Concluding Remarks -- Nomenclature -- References -- Chapter 5 Damping of Cylindrical Structures in Single-Phase Fluids -- 5.1 Introduction -- 5.2 Energy Dissipation Mechanisms -- 5.3 Approach -- 5.4 Damping in Gases -- 5.4.1 Effect of Number of Supports -- 5.4.2 Effect of Frequency -- 5.4.3 Vibration Amplitude -- 5.4.4 Effect of Diameter or Mass -- 5.4.5 Effect of Side Loads -- 5.4.6 Effect of Higher Modes -- 5.4.7 Effect of Support Thickness -- 5.4.8 Effect of Clearance -- 5.5 Design Recommendations for Damping in Gases -- 5.6 Damping in Liquids -- 5.6.1 Tube-to-Fluid Viscous Damping.
5.6.2 Damping at the Supports -- 5.6.3 Squeeze-Film Damping -- 5.6.4 Damping due to Sliding -- 5.6.5 Semi-Empirical Formulation of Tube-Support Damping -- 5.7 Discussion -- 5.8 Design Recommendations for Damping in Liquids -- 5.8.1 Simple Criterion Based on Available Data -- 5.8.2 Criterion Based on the Formulation of Energy Dissipation Mechanisms -- Nomenclature -- Subscript -- References -- Chapter 6 Damping of Cylindrical Structures in Two-Phase Flow -- 6.1 Introduction -- 6.2 Sources of Information -- 6.3

Approach -- 6.4 Two-Phase Flow Conditions -- 6.4.1 Definition of Two-Phase Flow Parameters -- 6.4.2 Flow Regime -- 6.5 Parametric Dependence Study -- 6.5.1 Effect of Flow Velocity -- 6.5.2 Effect of Void Fraction -- 6.5.3 Effect of Confinement -- 6.5.4 Effect of Tube Mass -- 6.5.5 Effect of Tube Vibration Frequency -- 6.5.6 Effect of Tube Bundle Configuration -- 6.5.7 Effect of Motion of Surrounding Tubes -- 6.5.8 Effect of Flow Regime -- 6.5.9 Effect of Fluid Properties -- 6.6 Development of Design Guidelines -- 6.7 Discussion -- 6.7.1 Damping Formulation -- 6.7.2 Two-Phase Damping Mechanisms -- 6.8 Summary Remarks -- Nomenclature -- Subscripts -- Note -- References -- Chapter 7 Fluidelastic Instability of Tube Bundles in Single-Phase Flow -- 7.1 Introduction -- 7.2 Nature of Fluidelastic Instability -- 7.3 Fluidelastic Instability: Analytical Modelling -- 7.4 Fluidelastic Instability: Semi-Empirical Models -- 7.5 Approach -- 7.6 Important Definitions -- 7.6.1 Tube Bundle Configurations -- 7.6.2 Flow Velocity Definition -- 7.6.3 Critical Velocity for Fluidelastic Instability -- 7.6.4 Damping -- 7.6.5 Tube Frequency -- 7.7 Parametric Dependence Study -- 7.7.1 Flexible versus Rigid Tube Bundles -- 7.7.2 Damping -- 7.7.3 Pitch-to-Diameter Ratio, P/D -- 7.7.4 Fluidelastic Instability Formulation -- 7.8 Development of Design Guidelines.
7.9 In-Plane Fluidelastic Instability -- 7.10 Axial Flow Fluidelastic Instability -- 7.11 Concluding Remarks -- Nomenclature -- Subscript -- References -- Chapter 8 Fluidelastic Instability of Tube Bundles in Two-Phase Flow -- 8.1 Introduction -- 8.2 Previous Research -- 8.2.1 Flow-Induced Vibration in Two-Phase Axial Flow -- 8.2.2 Flow-Induced Vibration in Two-Phase Cross Flow -- 8.2.3 Damping Studies -- 8.3 Fluidelastic Instability Mechanisms in Two-Phase Cross Flow -- 8.4 Fluidelastic Instability Experiments in Air-Water Cross Flow -- 8.4.1 Initial Experiments in Air-Water Cross Flow -- 8.4.2 Behavior in Intermittent Flow -- 8.4.3 Effect of Bundle Geometry -- 8.4.4 Flexible versus Rigid Tube Bundle Behavior -- 8.4.5 Hydrodynamic Coupling -- 8.5 Analysis of the Fluidelastic Instability Results -- 8.5.1 Defining Critical Mass Flux and Instability Constant -- 8.5.2 Comparison with Results of Other Researchers -- 8.5.3 Summary of Air-Water Tests -- 8.6 Tube Bundle Vibration in Two-Phase Freon Cross Flow -- 8.6.1 Introductory Remarks -- 8.6.2 Background Information -- 8.6.3 Experiments in Freon Cross Flow -- 8.7 Freon Test Results and Discussion -- 8.7.1 Results and Analysis -- 8.7.2 Proposed Explanations -- 8.7.3 Concluding Remarks -- 8.7.4 Summary Findings -- 8.8 Fluidelastic Instability of U-Tubes in Air-Water Cross Flow -- 8.8.1 Experimental Considerations -- 8.8.2 U-Tube Dynamics -- 8.8.3 Vibration Response -- 8.8.4 Out-of-Plane Vibration -- 8.8.5 In-Plane Vibration -- 8.9 In-Plane (In-Flow) Fluidelastic Instability -- 8.9.1 In-Flow Experiments in a Wind Tunnel -- 8.9.2 In-Flow Experiments in Two-Phase Cross Flow -- 8.9.3 Single-Tube Fluidelastic Instability Results -- 8.9.4 Single Flexible Column and Central Cluster Fluidelastic Instability Results -- 8.9.5 Two Partially Flexible Columns.
8.9.6 In-Flow Fluidelastic Instability Results and Discussion. -- 8.10 Design Recommendations -- 8.10.1 Design Guidelines -- 8.10.2 Fluidelastic Instability with Intermittent Flow -- 8.11 Fluidelastic Instability in Two-Phase Axial Flow -- 8.12 Concluding Remarks -- Nomenclature -- Subscripts -- Note -- References -- Chapter 9 Random Turbulence Excitation in Single-Phase Flow -- 9.1 Introduction -- 9.2 Theoretical Background -- 9.2.1 Equation of Motion -- 9.2.2 Derivation of the Mean-Square Response -- 9.2.3 Simplification of Tube Vibration Response -- 9.2.4 Integration of the Transfer Function -- 9.2.5 Use of the Simplified Expression in Developing Design Guidelines -- 9.3 Literature Search -- 9.4 Approach Taken -- 9.5

Discussion of Parameters -- 9.5.1 Directional Dependence (Lift versus Drag) -- 9.5.2 Bundle Orientation -- 9.5.3 Pitch-to-Diameter Ratio (P/D) -- 9.5.4 Upstream Turbulence -- 9.5.5 Fluid Density (Gas versus Liquid) -- 9.5.6 Summary -- 9.6 Design Guidelines -- 9.7 Random Turbulence Excitation in Axial Flow -- Nomenclature -- References -- Chapter 10 Random Turbulence Excitation Forces Due to Two-Phase Flow -- 10.1 Introduction -- 10.2 Background -- 10.3 Approach Taken to Data Reduction -- 10.4 Scaling Factor for Frequency -- 10.4.1 Definition of a Velocity Scale -- 10.4.2 Definition of a Length Scale -- 10.4.3 Dimensionless Reduced Frequency -- 10.4.4 Effect of Frequency -- 10.5 Scaling Factor for Power Spectral Density -- 10.5.1 Effect of Flow Regime -- 10.5.2 Effect of Void Fraction -- 10.5.3 Effect of Mass Flux -- 10.5.4 Effect of Tube Diameter -- 10.5.5 Effect of Correlation Length -- 10.5.6 Effect of Bundle and Tube-Support Geometry -- 10.5.7 Effect of Two-Phase Mixture -- 10.5.8 Effect of Nucleate Boiling -- 10.6 Dimensionless Power Spectral Density -- 10.7 Upper Bounds for Two-Phase Cross Flow Dimensionless Spectra.
10.7.1 Bubbly Flow.

Sommario/riassunto

"Flow-induced vibration is the term for the phenomena of vibration and noise that is caused by fluid flow. Excessive flow-induced vibrations can cause fatigue or failure in process and plant equipment, which can in turn lead to operational disruptions, lost production, and costly repairs. Mechanical engineers can help avoid these issues by performing a flow-induced vibration analysis during the design phase of a project. Industries that employ plants with high capital costs, such as the nuclear, power, petrochemical, and aerospace industries, have a particular interest in understanding and mitigating flow-induced vibrations"--

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Titolo	Progress in Sustainable Energy Technologies: Generating Renewable Energy / / edited by Ibrahim Dincer, Adnan Midilli, Haydar Kucuk
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-07896-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (737 p.)
Disciplina	338.927 621.042
Soggetti	Renewable energy resources Sustainable development Energy systems Renewable and Green Energy Sustainable Development Energy Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Comparative Study of Effect of Cloudiness/Haziness Factor on the Quality of Solar Radiation -- Investigation of a Renewable Energy-Based Integrated System for Baseload Power Generation -- Investigation of Organic Rankine Cycle Performance with Variable Mixture Composition -- Comparative Performance Assessment of Two Geothermal-Based Integrated Systems for Hydrogen Production -- Exergetic Optimization of Two Renewable Energy Based Tri-Generation Systems Using Genetic Algorithm -- Performance Evaluation of Integrated Energy Systems -- Performance Assessment of a Two–Stage Heat Pump–Drying System -- Comparative Assessment of Nuclear Based Hybrid Sulfur Cycle and High Temperature Steam Electrolysis Systems Using HEEP -- Thermodynamic Analysis of a Cycle Integrating a Solid-Oxide Fuel Cell and Micro Gas Turbine with Biomass Gasification -- Exergy Analysis of Scroll-Based Rankine Cycles with Various Working Fluids -- Thermochemical Energy Storage Systems: Design, Assessment and Parametric Study of Effects of Charging Temperature -- Thermodynamic Assessment of Seasonal

Stratified Thermal Storage -- Recent Developments in Solar-Powered Micro CHP Systems -- Evaluation of Transient Behavior of a Single-Effect Absorption Chiller -- Combined Effect of Global Warming and Buildings Envelope on the Performance of Ground Source Heat Pump Systems -- Concentrated Solar Power: A Vision for Rajasthan -- Dynamic Exergy Analysis of a Solar Ejector Refrigeration System with Hot Water Storage Tank -- Combined Photovoltaic Solar Cell – Fuel Cell System: Powering a Dormitory Building -- Investigation of a Combined Air Source Heat Pump and Solar Thermal Heating System within a Low Energy Research Home -- A Solar Water Heater for Subzero Temperature Areas -- Modeling of the Heliostat Field in Central Receiver Systems for a Given Input Power -- Single Pass Solar Air Heater without Absorber -- An Alternative Energy Concept: A Solar Power Plant with a Short Diffuser -- Production of Renewable Hydrogen by Aqueous-Phase Reforming of Glycerol over Ni-Cu Catalysts Derived from Hydrotalcite Precursors -- Effects of Pyrolysis Conditions on Structural Ingredients and Functional Groups of Hybrid Poplar -- Contribution for Solar Mapping in Algeria -- Experimental and Theoretical Investigations of Performance of Psychometric Humidification and Dehumidification Solar Water Desalination System Coupled with an Evacuated Tube Solar Collector -- Optimal Siting of Offshore Wind Farms -- An Investigation into a Small Wind Turbine Blade Design -- Hydrogen Production by Reforming Clathrate Hydrates Using the In-Liquid Plasma Method -- Facilitation of Wind Energy Conversion System Selection as Distributed Generation in Household/Commercial and Agricultural Sectors; Case Study of Iran -- An Integrated Monitoring Framework for Geothermal Space-Heating Systems in Residential Buildings, Fort McMurray -- Characterization of Heat Transport Processes in Geothermal Systems -- The Prospects for Geothermal Application in Algeria -- Thermal Interactions of Vertical Ground Heat Exchangers for Varying Seasonal Heat Flux -- Environmentally Friendly Systems: Earth Heat Pump System with Vertical Pipes for Heat Extraction for Domestic Heating and Cooling -- Thermal Response Test Analysis for an Energy Pile in Ground-Source Heat Pump Systems -- Thermal Performance Comparison between Longitudinal and Lateral Hollow Plate Fin Heat Sinks -- Model-Based Analysis of Singapore’s Energy System -- Analysis of a Combined Power and Heating Thermodynamic System Driven by Low Temperature Heat Source -- A Comparative Life Cycle Assessment (LCA) of Compressed Natural Gas (CNG) and Diesel Powered Refuse Collection Vehicles (RCVS) -- Anaerobic Treatment and Biogas Production af Raw Leachate from Fresh Market Waste Composting by an Anaerobic Hybrid Reactor -- A First Experimental Survey on the Urban Heat Island in Padua (Italy) -- Microwave Enhanced Pyrolysis of Gumwood -- Improving Operating Efficiency of Installed Capacity in a Power and Water Cogeneration Plant -- Simulation, Modeling and Analysis of Water/Power Ratios for a Dual Purpose Water and Power Production Plant.

Sommario/riassunto

This multi-disciplinary volume presents information on the state-of-the-art in sustainable energy technologies key to tackling the world’s energy challenges and achieving environmentally benign solutions. Its unique amalgamation of the latest technical information, research findings, and examples of successfully applied new developments in the area of sustainable energy will be of keen interest to engineers, students, practitioners, scientists, and researchers working with sustainable energy technologies. Problem statements, projections, new concepts, models, experiments, measurements, and simulations from not only engineering and science, but disciplines as diverse as ecology, education, economics, and information technology are included, in

order to create a truly holistic vision of the sustainable energy field. The contributions feature coverage of topics including solar and wind energy, biomass and biofuels, waste-to-energy, renewable fuels, geothermal and hydrogen power, efficiency gains in fossil fuels and energy storage technologies such as batteries and fuel cells.