



IHS Markit™

Design Decision Support Tool

Validated Design Methods Developed
by Engineers for Engineers



ESDU by IHS Markit provides validated engineering design data, methods and software that form an important part of the design operation of companies large and small throughout the world.

Available via the Internet, ESDU's vast range of industry-standard design tools are presented in over 1500 design guides with supporting software. ESDU has over 70 years of experience in providing engineers with the information, data and techniques needed to continually improve fundamental design and analysis. Guided and approved by independent international expert Committees, and endorsed by key professional institutions, ESDU methods are developed by industry for industry. The tools ESDU provides include:

- Data Items - Data Items are validated design and analysis guides covering specific engineering components or problems with, in many cases, associated computer programs (ESDUpacs and/or VIEWpacs) and Interactive Graphs.
- Software
- Engineering Service - allows direct access to ESDU engineers responsible for the relevant Data Items and software via telephone, email or FAX to help you gain maximum value on related engineering topics covered by your subscription.

Validated engineering methods, data, principles, worked examples, programs, and related equations on over 1500 specific aerospace, process, structural, and mechanical engineering topics can help reduce time-to-market and make the most of valuable engineering resources. The extensive knowledge and experience of committee members and ESDU engineers is immediately available on every desktop.

The ESDU engineers, guided by international Committees of industrial experts and researchers, gather and carefully analyze information from a variety of academic, industry, and hard-to-obtain private sources. This information is developed and validated into comprehensive design methods with charts and graphs, guidance notes, and computer programs, and then published as methods that are in clear, concise formats.

All ESDU data and related software are:

- Multi-sourced for accuracy
- Committee led for authority
- Presented for easy and rapid application
- Programmed, where applicable, for accessibility

Validated research data you can trust

ESDU Series

- Aerodynamics
- Aircraft Noise
- Composites
- Dynamics
- Fatigue - Endurance Data
- Fatigue - Fracture Mechanics
- Fluid Mechanics, Internal Flow
- Fluid Mechanics, Internal Flow (Aerospace)
- Heat Transfer
- Mechanisms
- Performance
- Physical Data, Chemical Engineering
- Stress and Strength
- Structures
- Transonic Aerodynamics
- Tribology
- Vibration and Acoustic Fatigue
- Wind Engineering

ESDU Collections and Packages

- Aerodynamics Design Collection
- Aerospace Package
- Aerostructures
- Automotive
- Nuclear Package
- Process Engineering Technology
- Structures Design Collection

ESDU Segments

- Aerofoils and Wings
- Analysis of Joints
(Bolted, Bonded and Welded)
- Controls and Flaps
- Ejectors and Jet Pumps
- Flow in Pipes, Fittings and Ducts
- Nuclear Building/Environmental Impact
- Nuclear Plant Mechanical/Structural Design
- Nuclear Plant Thermo-hydraulic Design
- Nuclear Ventilation Systems
- Shell and Tube Heat Exchanger Analysis
- Stability of Aircraft
- Strength Analysis of Plates and Panels
- Strength Analysis of Struts and Beams
- Stress Concentrations

ESDU Aerospace Materials Data

- MMDH - Metallic Materials Data Handbook
- MMPDS - Metallic Materials Properties and Standardization



Committees of engineering experts guide every step of development

In the development of ESDU design methodologies, our engineers collaborate with world renowned experts from industry, universities and research institutes. Only after a rigorous review process and unanimous approval by the Committees does a methodology become part of the ESDU product. The 200+ Committee members who volunteer their time to produce ESDU's unique and reliable information are from distinguished organizations such as:

- NASA
- Boeing
- Northrop Grumman
- BAE Systems
- Airbus
- Rolls Royce
- Exxon Mobil
- BP
- Dow Chemical Company
- Shell
- Total

ESDU and IHS Markit – A suite of critical information tools that are essential to your job

Powerful IHS Markit desktop information tools used in conjunction with ESDU provides immediate access to specifications, standards, catalogues, parts data, purchasing information, regulatory data and engineering methodology needed by engineering professionals throughout government and industry across the globe.

Specifications and Standards

Quickly determine the best design and testing requirements for your projects with this collection of current and historical commercial and military specifications and standards.

Parts and Logistics Data

Government purchasing and logistics data helps you manage government procurement and logistics with immediate access to award history, technical characteristics and alternate sources.

Regulatory information

Access government regulations needed to maintain a safe work environment and avoid financial penalties and litigation.

Improving engineering design, performance and methodology

A complete ESDU subscription includes:

- Validated methods, equations, worked examples and associated software.
- Regular updates and amendments. As new methods are developed the content in your subscription expands.
- Customer support including direct access to ESDU engineers via telephone, e-mail and fax to help you gain maximum value from your subscription.

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About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

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