Innovation and Future

The DMG-Lib is an international unique digital library containing comprehensive knowledge of both historical and modern sources and is based on innovative concepts for interaction, research and analysis. The DMG-Lib aims to give new impetus to the development of future digital libraries.

The continuity of the DMG-Lib is ensured through the society **"Gesellschaft zur Förderung der Digitalen Mechanismen und Getriebebibliothek e. V."**

The purpose of this society is the promotion of science, research and education within the domain of mechanism and machine science, especially by:

- Stimulation of the development, maintenance and use of the DMG-Lib
- Support for collection, systematization, preservation and representation of information and knowledge for the DMG-Lib
- Events for questions concerning the indexing of knowledge collections and their presentation in digital libraries

If you are interested in supporting the development of the DMG-Lib, please find detailed information at:

www.dmg-lib.org/association

Contact

Dr.-Ing. Torsten Brix
Technische Universität Ilmenau
Fakultät für Maschinenbau
FG Konstruktionstechnik
Postfach 100565
98684 Ilmenau
Germany
E-Mail: torsten.brix@dmg-lib.org

Partners

Technische Universität Ilmenau

Engineering Design
University Library
Computer Graphics
Media Production
Information and Knowledge Management
Mechanism Technology
PATON (Patent Centre Thuringia)
University Computer Centre

Rheinisch-Westfälische Technische Hochschule Aachen

Department of Mechanism Theory and Dynamics of Machines

Technische Universität Dresden

Theory of Mechanism
Custody (University Collections)

Digital Mechanism and Gear Library

Deutsche Forschungsgemeinschaft
DFG

Your Access to Scientific Information

You are an engineer busy with designing technical motion systems,

you are a lecturer or a student in the domain of engineering technology with the objective to improve your knowledge of mechanism and machine science,

you are a historian searching for information about well-known engineers in the domain of mechanism and machine science or

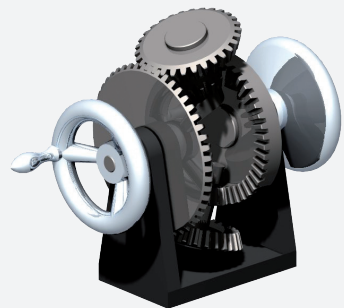you are just interested in technology and engineering in general,

then the Digital Mechanism and Gear Library (DMG-Lib) provides new prospects for you.

The DMG-Lib is **your innovative access** to the worldwide existing knowledge of mechanisms and machines both in theory and practice.

Variety of Heterogeneous Information Sources

The DMG-Lib places at your disposal a variety of different information sources for mechanism and machine science, for instance:

- Technical books
- Journal articles
- Research reports
- Patent specifications
- Gear catalogues
- Functional models
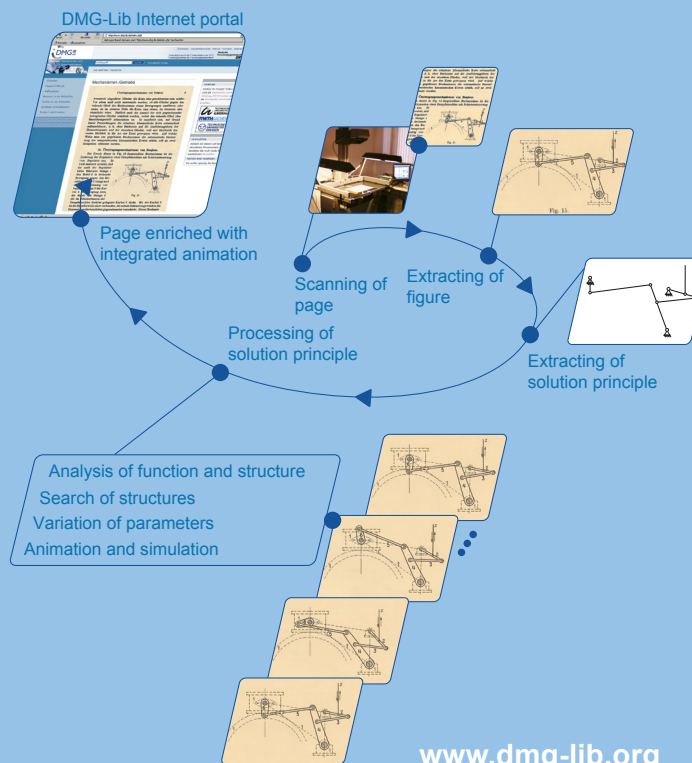- Interactive animations
- Movies, pictures, slides
- Softwaretools

Digitisation*PLUS*
Enhancement as Added Value

The heterogeneous information sources are published as digital documents on the Internet portal of DMG-Lib. Employing innovative technologies the sources' presentation is improved and more than just a digital reproduction.

Digitisation**PLUS** includes enhancement and cross-linking of sources:
- Digitisation of heterogeneous information sources
- Clarification of copyrights
- Providing additional information
- Interactive animation of selected images, e. g. in books
- Cross-linking of contents
- Integration in semantic networks

DMG-Lib Internet portal

Page enriched with integrated animation

Scanning of page

Extracting of figure

Processing of solution principle

Extracting of solution principle

Analysis of function and structure
Search of structures
Variation of parameters
Animation and simulation

www.dmg-lib.org

Your Internet Portal for Mechanism and Machine Science

An extensive and ever increasing collection of information on mechanism and machine science is available on the Internet portal of the DMG-Lib.

Information Retrieval
- Support in various search strategies using quick and advanced search options
- Full-text search and highlighting of search results in text documents
- Systematic search for structures of gears, guidance requirements or transfer function requirements
- Use of semantic technologies for precise search results
- Browsing through the digital library by using various sorting criteria

You are here: Browse > Literature >

Die Normalbeschleunigung a_{4n} ka dius ϱ_4 grafisch ermittelt werden.

$$h^2 = p \cdot q$$

in einem rechtwinkligen Dreieck (

Leonardo da Vinci
1470-1477, Florenz,
1482-1499, Mailand,
1500-1506, Florenz;
1506-1513, Mailand;
1513-1516, Rom;
1516-1519, Frankreic

Leonardo da Vinci ste als Naturwissenschaf auch architektonische Fülle von Maschine Maschinenelementen einnehmen.
Auch wenn Erf mathematisch-theore Verallgemeinerungen Festigkeitsregeln,

* 15.4.1452
Anchiano bei Vinci
† 2.5.1519
Amboise

Number of links	6
Ability to revolve	○ Yes / ○ No / ● Optional
Revolvable driving link	○ Yes / ○ No / ● Optional
Number of driving links	1
Number of driven links	2
Mode of the driving motion	Revolution
Mode of the driven motion	Rectilinear translation
Mode of Guidance	○ Guidance of a point / ○ Planar motion / ● Optional

Introduction to the Knowledge Space
- Virtual Museum: Explore and experience mechanisms in everyday life or discover extraordinary inventions
- Timeline "Mechanisms and machines by the course of time": Enjoy a historical time trip through the world of mechanisms and machines.

Publication and Communication
- Use the DMG-Lib to publish your own works or to reach your audience by presenting your products.
- Find partners for joint projects