# MDESIGN



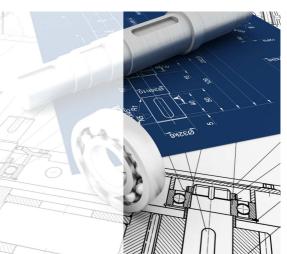
**Calculations in Mechanical Design and Product Development** 

Optimize, verify and document machine elements and assemblies

With more than 500 calculation procedures for mechanical design and engineering the software library MDESIGN has become a reliable partner for more than 30.000 mechanical designers. MDESIGN supports dimensioning and optimization, selecting from catalogues, proving assumptions and it provides documentation and drawings for procurement and quality assurance.

Besides the high accuracy and reliability of the calculations the user interface plays a key role for the users of MDESIGN. The user interface has been standardized for all MDESIGN modules and is easy to understand. It supports all users even if they use MDESIGN less frequent. The intuitive and standardized user interface is one of many reasons for the wide spread and high recognition of MDESIGN.

- User friendly and intuitive user interface
- Powerful online help system with information about standards and rules
- Automatic result documentation including all inputs, outputs, graphical references and database information
- All calculations can be stored with all information
- Documents can be easily configured, viewed and printed



## **Payback Period of MDESIGN within months**

Investment needs short payback periods. The average time required for a series of MDESIGN calculations is considerably less than manually performed calculations. MDESIGN replaces time-consuming browsing in tables, specialized literature, standards and guidelines and performs iterative calculations and variant analysis of complex formulas within seconds. So you will get your money back within months.

# Experience, continuous updating and development

Calculation and optimization procedures in mechanical engineering are subject to continuous change. And so is MDESIGN. Our product development takes care of updating standards, rules, formulas and material properties to give you support that is always state-of-the-art. And you can help us: Let us know about technology trends and research results, discuss implications for the product and help to keep up the quality of the user interface



## **Professional and fast documentation**

MDESIGN generates a documentation that includes all input data, edge conditions, results and graphic outputs. The documentation can be customized according to the user's requirements using special templates for each module. The documentation can be printed or saved as rtf, xml, html, or pdf/a file.

#### **Innovative Solutions with MDESIGN**

The multivariant analysis of MDESIGN helps you to easily find the optimum for your design. It lets you calculate hundreds of variants with a variation of input parameters within minutes. This leads to optimal material consumption and optimal selection of dimensioning characteristics (such as tolerances, type of material and dimensions).

# **MDESIGN** explorer

User interface and formulary, content management for mechanical engineering

#### **MDESIGN** formula

Fast and easy formulary, numerous formulas from various disciplines

#### **MDESIGN** concept

Established calculation tools for basic outlines, drafts and proposals

#### **MDESIGN** mechanical

Design and documentation of machine elements

#### **MDESIGN** bolt

Bolt calculation according to VDI 2230

#### **MDESIGN** shaft -

Shaft calculation according to DIN 743

# **MDESIGN** for Mathcad

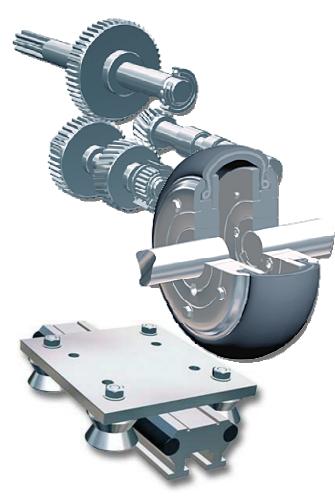
Integration of MDESIGN data base into Mathcad sheets

# **MDESIGN** gearbox

Fast design and calculation of multi stage gears

# Design quality- your competitive advantage

The product quality is influenced by the design process right from the beginning. Using standardized workflows and approved methods help you to make your designing and decision process get transparent and understandable. This helps you to improve the product quality beginning at a very early stage of product development. Moreover, standardized workflows used in the entire company form the basis for ongoing improvements of your development process



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