Virtual Engineering …

… Engineering Services for the Industry (Rotating Machinery)
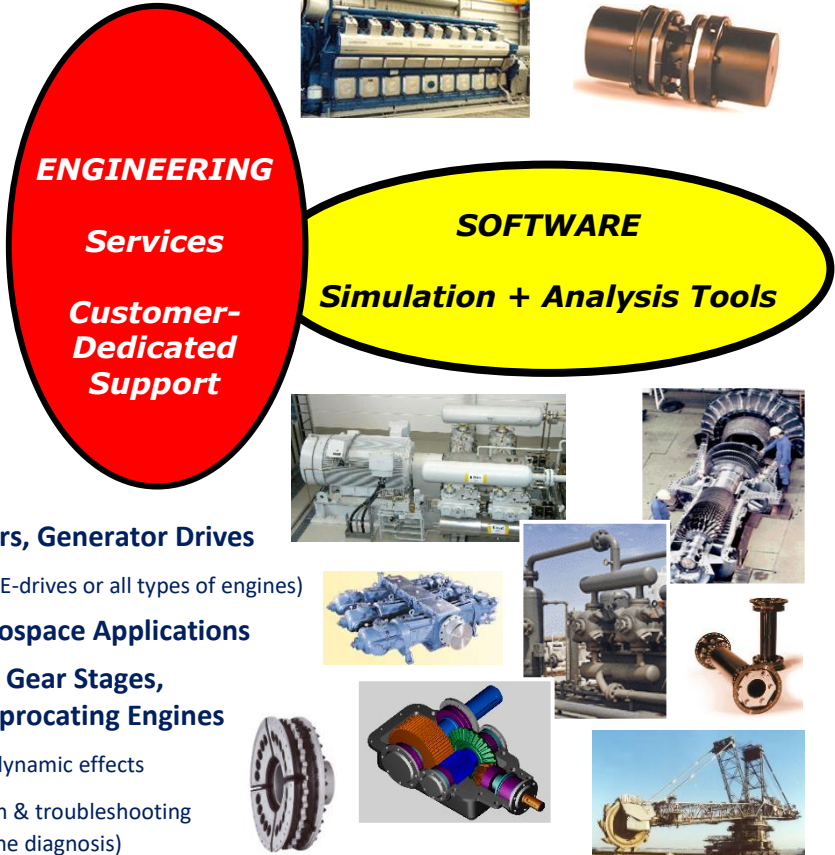
Computer Simulation of Drive Systems (Drivelines) in Industrial Applications (Rotating Machinery)

Customer-Dedicated Engineering Services

*Application and Distribution
of User-Friendly Software
for PCs (Windows 10 and later)*

Dr.-Ing. Andreas Laschet is specialist in computer simulation technology. Due to longterm experiences in the simulation of complete drive systems, he offers a professional customer **CAE Service for Engineers** worldwide including consultation, analysis, troubleshooting and computer simulation of **TORSIONAL & LATERAL VIBRATIONS IN ROTATING MACHINERY**:

ENGINEERING

Services

Customer-Dedicated Support

SOFTWARE

Simulation + Analysis Tools

- **Turbomachinery**
- **Compressors** (all types)**, Pumps, Fans/Blowers/Ventilators, Generator Drives**
- **Vehicle and Ship Drivelines** (with E-drives or all types of engines)
- **Drive Systems in Aviation & Aerospace Applications**
- **Drives with Couplings, Clutches, Gear Stages, Universal Shafts, E-Motors, Reciprocating Engines**
- **Test Rig Optimization** considering dynamic effects
- **Driveline Matching** crucial for design & troubleshooting (measurements, field testings, and machine diagnosis)

The **CAE Service** provides the customer with a project-oriented analysis and interpretation of vibrations caused by external or internal excitation or parametrically excited disturbances. Nonlinear characteristics like backlash or torque-angle-hystereses can be taken into account, too. In order to meet all customers' requirements, **Dr.-Ing. Andreas Laschet** uses and distributes high-sophisticated simulation software in close cooperation with software & engineering companies like *Concepts NREC, USA* with the rotordynamic software **ARMD** (www.rbts.com).

I present "**Service for Engineers**" regularly at international conferences and exhibitions: ASME, POWER-GEN, SAE, IMechE, VDI, EFRC, TVS, etc. Please also visit the **International Rotordynamic Seminars** in close cooperation with *Concepts NREC, USA*.
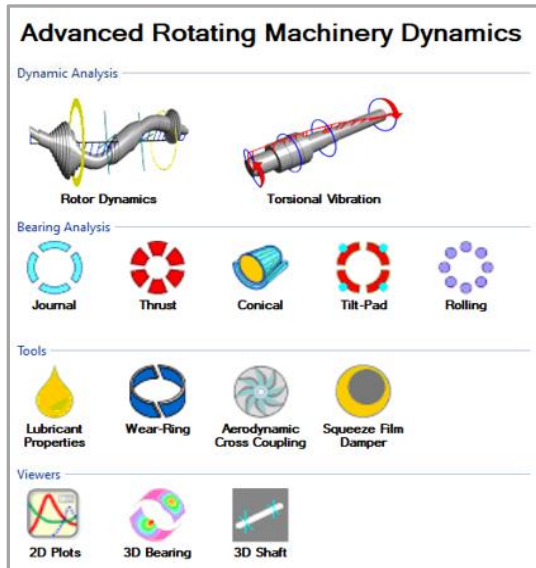
Measurements and field testings are done via my cooperative partners worldwide. In all these cases, we combine the design results and offer the customer a **complete design solution including CAE and test results** – carried out by a professional team of experts.

Concepts NREC

**International Seminar:
ROTOR DYNAMICS & BEARINGS**

**Customer Trainings
Short Courses**

The Professional Engineering Service ...

... supported by *Concepts NREC's* simulation software **ARMD 6.2** *– software & training service*

Advanced Rotating Machinery Dynamics

ARMD consists of 4 main modules:

- **Rotor Dynamics**
- **Torsional Vibration**
- **Bearing Analysis**
- **Lubricant Performance**

... with a variety of features, including:

- user-friendly interface
- project and file management system
- 2D/3D graphics capabilities
- intermodule communication and data exchange
- powerful help tools & model templates