



## Torsional Vibration Analysis (TVA) ... ... Offer of Customized Training Courses

**ONLINE or IN-PERSON TRAINING COURSES** on various applications of Rotating Machinery as well as optional courses on applications in the marine and automotive industries



The topics offered focus primarily on:

- RESEARCH & DEVELOPMENT & DESIGN
- SYSTEM RELIABILITY
- CONDITION MONITORING
- TROUBLESHOOTING
- FAILURE ANALYSIS



ONLINE COACHING



VIRTUAL CLASSROOM

**Dr.-Ing. Andreas Laschet** has been a specialist in computer simulation technology for powertrain dynamics for more than 40 years. Thanks to his many years of experience in the vibration analysis of drive systems, he offers engineers worldwide a professional **CAE service** that includes consulting and troubleshooting, focusing primarily on the calculation of **TORSIONAL VIBRATIONS IN ROTATING MACHINES**.

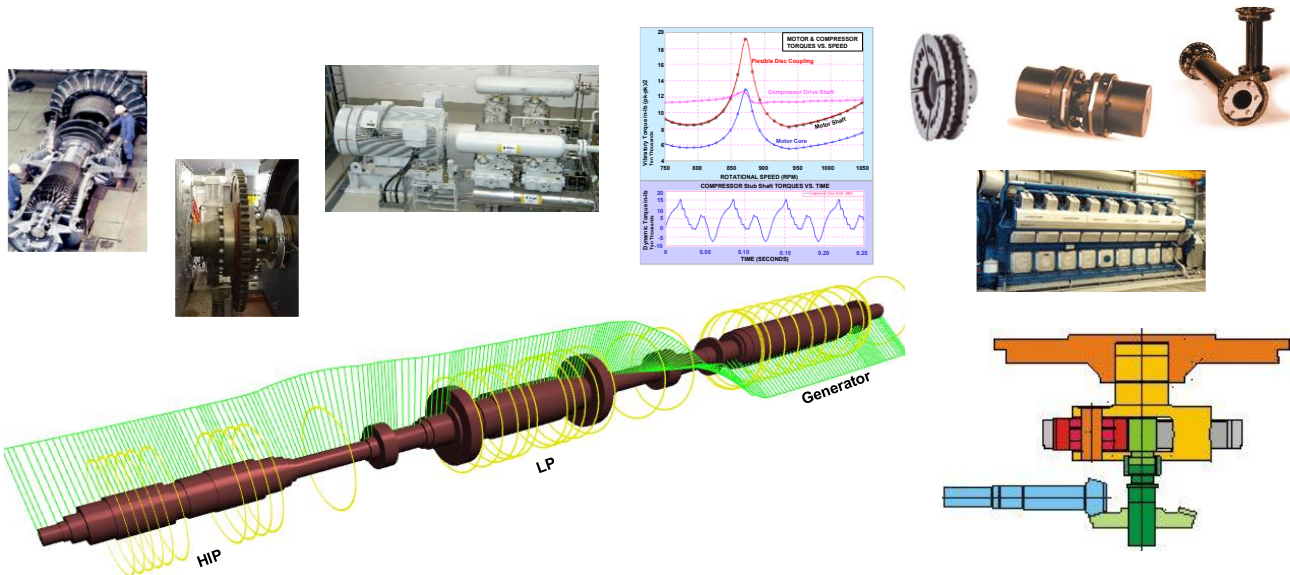
As an additional service, he also offers **customized training courses**, which can be conducted as **ONLINE** or **IN-PERSON** sessions depending on client's preferences. **Standardized online group sessions** can also be offered. To maximize cost-effectiveness, customers prefer to sign up for online training courses.

Since powertrains and complete drive systems typically exhibit dynamic effects caused by torsional vibrations, there is still much to learn about these complex relationships. And these dynamic effects are based on physical principles that occur in similar and comparable ways in many applications.

It is therefore highly beneficial to acquire the necessary expertise through **EXPERT TRAINING COURSES**. Courses like these play a key role in **fostering professional exchange** between the instructor and the participating engineers—whether in a **virtual classroom**, through **one-on-one online coaching**, or in an **in-person course** held at a suitable venue. Training language: ENGLISH or GERMAN.



## Example of a Specialized TRAINING COURSE on the topic of “**TORSIONAL VIBRATIONS**”



### Proposed Training Plan:

Either

#### **Two-Part Training Course as ONLINE Course**

**Part A** (Day #1): *Basic Training* (~ 4 hours) – the most important training session

**Part B** (Day #2): *Extended Training* (~ 3 hours + extra time for discussions)

or

#### **Single Day Training Course as IN-PERSON Course**

*Basic Training (A) + Extended Training (B)* (~ 7 hours + extra time for discussions)

#### Possible Topics:

- **A:** **Model generation**, collecting the “right” **parameters** (inertias, stiffnesses, dampings)
- **A:** **Analysis of excitability** (critical speeds, modes, excitations, resonance diagram)
- **A+B:** **Simulation methods** (steady-state vs. time transient)
- **B:** **System evaluation, analysis steps, comparing calculations with measurements**
- **B:** Discussing various **applications + case studies**  
(electrical motors + VFD, engines, compressors, coupling behavior, gear dynamics)

I can prepare a customized quote – tailored entirely to YOUR needs. Please contact me!