



Service For Engineers

Computer Simulation of Drive Systems & Powertrains in Industrial Applications (Rotating Machinery, Automotive & Marine & Aviation Engineering)

Customer-Dedicated Engineering Services

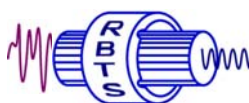
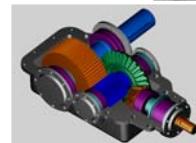
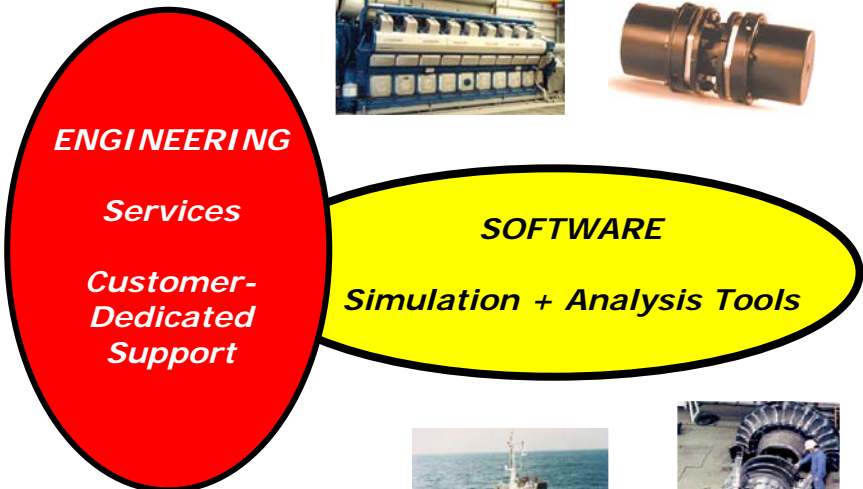
Application and Distribution of
User-Friendly Software for PCs
(Windows XP / Vista / 7)

ARLA is a specialist in computer simulation technology. Due to longterm experiences in the simulation of drive systems and powertrains, ARLA offers a professional customer **SERVICE FOR ENGINEERS** worldwide including consultation, analysis and computer supported diagnostics concerning the **DYNAMICS IN ROTATING MACHINERY**:

- Turbomachinery
- Reciprocating compressors, pumps, generator drives
- Vehicle and ship drivetrains with reciprocating engines
- Drive systems in aviation & aerospace applications
- Drives with couplings, clutches, gear stages, universal shafts
- Test rig optimization considering dynamic effects
- Powertrain & drivetrain matching
(considering measurements and machine diagnosis)

ARLA's engineering 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, ARLA uses and distributes high-sophisticated simulation software in close cooperations with software & engineering companies like RBTS, Inc., USA.

ARLA presents "Service for Engineers" regularly at international conferences and exhibitions: ASME, POWER-GEN, SAE, IMechE, VDI, HdT, EFRC, etc. Please also visit our international rotordynamic seminars in cooperation with our partner RBTS, USA.



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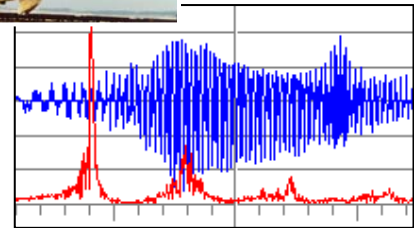
Tel: +49 2267 6585-0 · Fax: +49 2267 6585-70 · E-mail: info@arla.de · www.arla.de



ARLA's High-Sophisticated Engineering Service ...

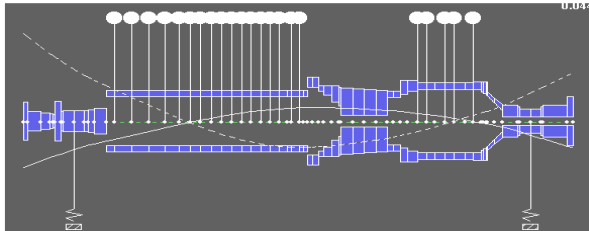
● Simulation in the Time-Domain by ITI®-SIM or by SimulationX

- mechanics
- control engineering
- hydraulics
- pneumatics
- thermics
- interfaces to:
Matlab, Simulink, ADAMS, ANSYS

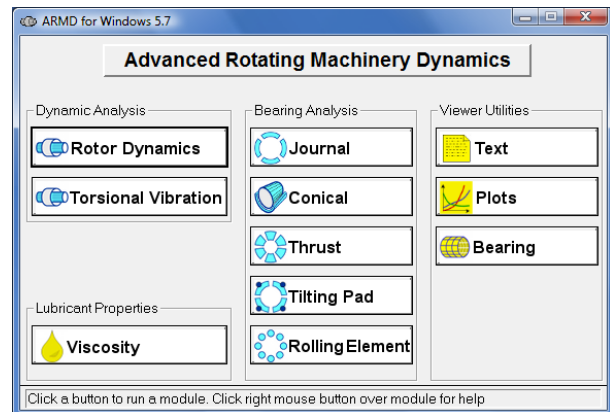
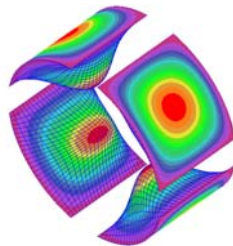
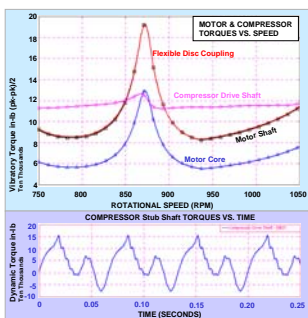


● Rotordynamic & Bearing Simulation by ARMD™

- lateral & torsional vibrations (stability analysis, critical speed maps, response curves)
- analysis of rolling element & fluid-film (journal) bearings



Power Generation
GAS TURBINE ROTOR MODEL
WITH SUPERIMPOSED MODE SHAPE



● Steady-State Torsional Vibration Analysis (TVA)

supported by ITI®-STAT based on ARLA®-SIMSTAT, or by new algorithms of the new software version of SimulationX

● Torsional Vibration Analysis (TVA) and Advanced Studies of Transient Effects

supported by ARLA® Software Tools for engineering purposes

