

ROTEC Training Week on RASdelta measurement system

Week 21, 2026 in Munich

During our training week, you will receive a comprehensive introduction to the ROTECH measurement system RASdelta, along with hands-on training in its practical application. The program also covers detailed instruction on configuring measurement settings within the software and conducting evaluations using filter and spectral analysis.

Content

- ✓ ROTECH RAS Software including measurement settings and analyses in time domain and spectral domain
- ✓ Essential methods of signal processing in torsional vibration analysis (spectrum and filter)
- ✓ Practical training in sensor technology and application

Seminar duration

3.5 days

Language

English

Location

Rotec Munich GmbH
Joseph-Dollinger-Bogen 28
80807 Munich

Registration deadline

April 30th, 2026

Hotel recommendation

HolidayInn - the niu Loco
Frankfurter Ring 228 | 80807 Munich

PLAZA Premium

Frankfurter Ring 228 | 80807 Munich

B&B Hotel München City Nord

Frankfurter Ring 243 | 80807 Munich

Program

BASIC TRAINING (ONE DAY)

- ✓ RASdelta measurement system: application areas
- ✓ What is torsional vibration?
- ✓ Measuring torsional vibration
- ✓ Measuring torsional vibrations - Sources of error
- ✓ RASdelta equipment: Hardware
- ✓ RASdelta measurement principle
- ✓ RASdelta software
- ✓ File Manager

MEASUREMENT DATA

- Restricting the time range of a measurement
- Cursor function & determining the number of teeth
- Correction of measurement

MEASUREMENT SETTINGS

- RASdelta "Choose Frontend" and "Configure Frontend"
- Hardware wizard
- General settings
- Online graphics
- Speed, Analog, CANbus, etc.

EVALUATION

- Syntheses, Analyses, Extras, Diagrams, Pages
- Evaluation examples
- Edit layout

DEFAULT SETTINGS

- ✓ Placeholder and Sequences
- ✓ Integration of measurement data from previous ROTECH system generations
- ✓ Question & answer session

Spectral & Filter Training (two days)

PART 1: SPECTRUM

✓ Basics of the spectral transformation

- Continuous, Discrete and Fast Fourier transformation
- Spectrum as a harmonic analysis
- How FFT works (Animation)
- Integral and derivative

✓ Specifics of the discrete Fourier transformation

- Leakage, Aliasing, Sampling transformation

✓ Specifics of speed signals

- Amplitude damping in speed
- measurement Reference of order spectra

✓ Spectrum in ROTEC evaluation

- e.g. Remove ramp (before FFT), Speed ramp filter, FFT window functions

✓ In-depth studies and additions

- Leakage and window functions
- Undersampling and aliasing

✓ Summation

- Summation in time domain and spectral
- domain Summation and FFT window functions

PART 2: FILTER

✓ Basic types of filters

✓ Filter characteristics

✓ Transfer behavior of typical filters

✓ Example for filtering a signal

✓ Filter without phase shift

✓ Filter operations with the ROTEC software

✓ Speed signals and filtering summary on the spectrum

Practical Training (half day)

- ✓ ROTECH Laser Sensors (LaserTachometer3)
- ✓ ROTECH Speed Sensors
- ✓ Strain gauge application
- ✓ Temperature board application
- ✓ Grounding
- ✓ ROTECH ENGINEERING Demo Vehicle