

TechNote #CM7 VIBXPERT®

2-channel-measurements via machine protection systems (e.g. Bently Nevada 3300 series)

Brief description

This technical note describes how VIBXPERT can record 2-channel-measurements (e.g. relative shaft vibration (orbit), balancing in 2 planes, ...) by measuring off the sensor signals on the buffered outputs of a machine protection system (Bently Nevada 3300 ser.).

Measurement configuration

The sensors and machine protection system have already been installed.

Connect the trigger cable (VIB 5.432-2,9) to the VIBXPERT digital input. Use PRÜFTECHNIK's Keyphase adapter (VIB 5.332) and a BNC cable (VIB 344221-1) to connect the trigger cable to the trigger signal output of the Bently Nevada measurement amplifier (3300 series).

Connect two VIBXPERT cables for low signal voltage (VIB 5.433) to the VIBXPERT analog inputs (channel A & B). Connect these cables with two BNC cables (VIB 344221-1) connected to the vibration signal output of the Bently Nevada measurement amplifier (3300 series).

Measurement

Select orbit measurement, and open the sensor setup in the task manager.

Select user-defined (voltage) sensors, and enter the parameters for sensitivity, frequency range, and offset taking into account the specifications of the measurement amplifier.

Start the measurement.

Save the measurement and load the result in OMNI-TREND using 'Multimode-Import'.

The example shows a typical orbit of a gas turbine.

