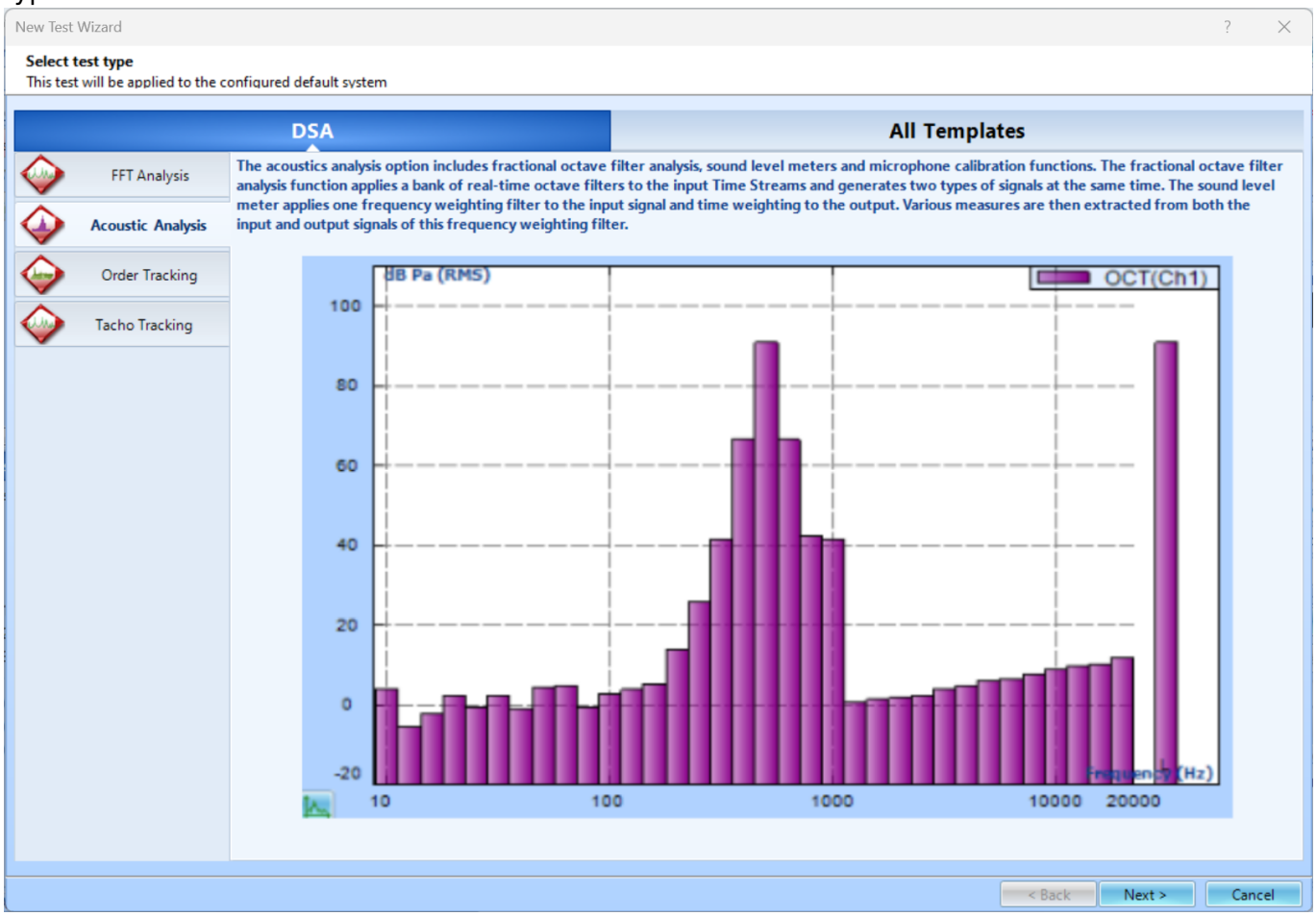
# DSA Acoustic Analysis

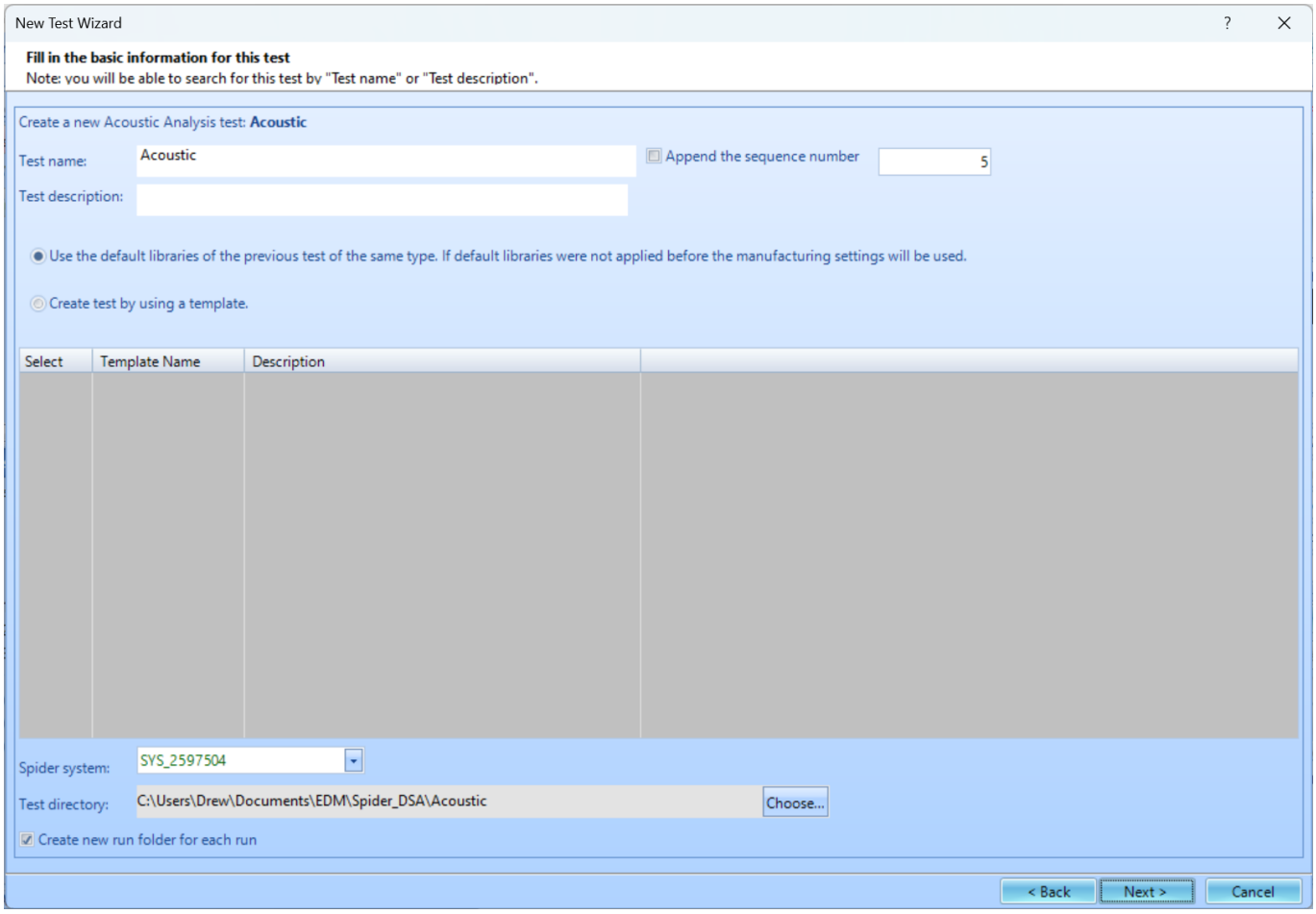
Follow the guided steps below on how to set-up an Acoustic or Octave Analysis in EDM to use with Spider hardware.

## Create Test

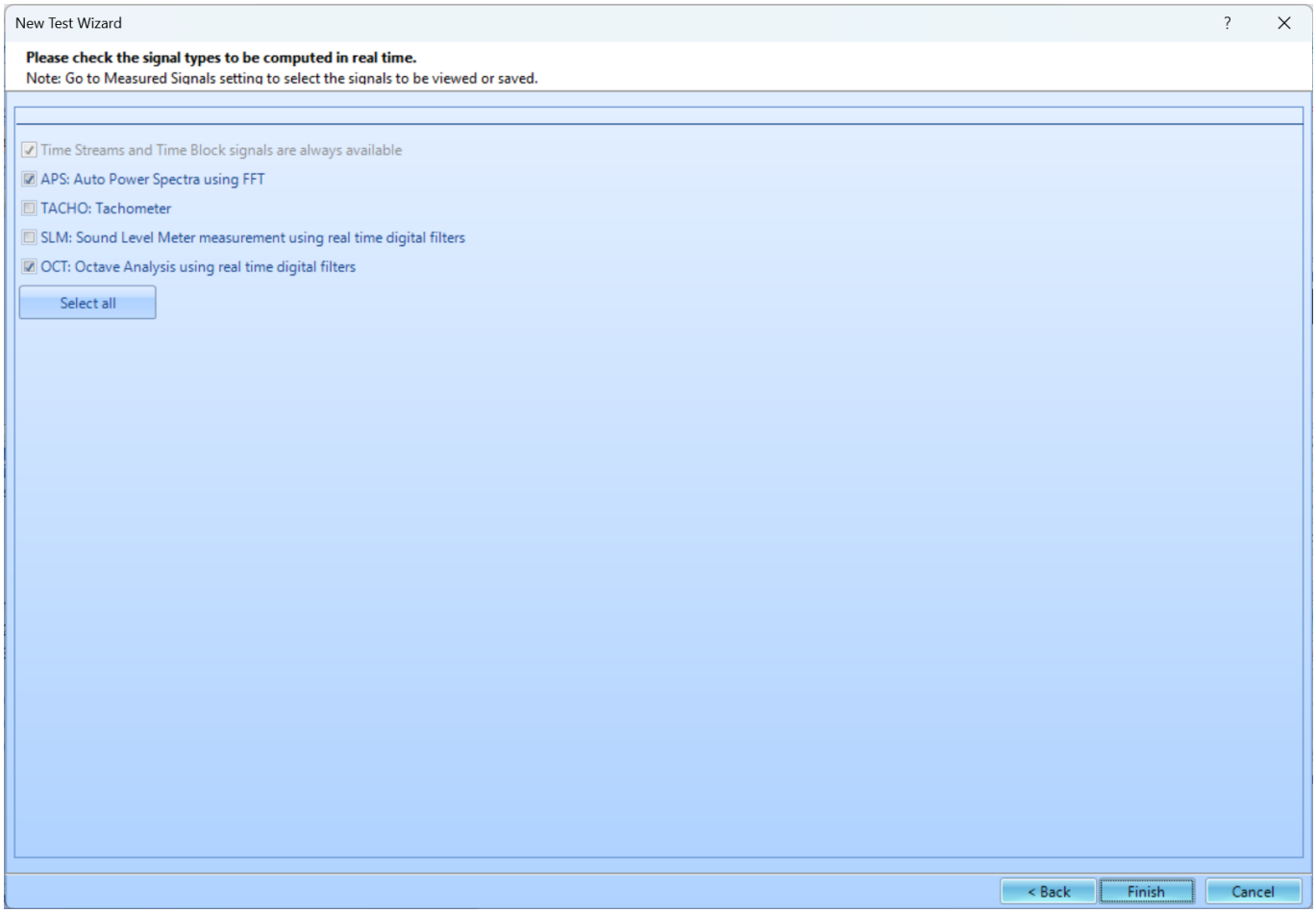
In EDM, select to create a new test. From the New Test Wizard, select the **Acoustic Analysis** test type.




Next, give the test a name and description.




Finally, select the signal types that are wanted. The options include Auto Power Spectra (APS), Tachometer (TACHO), Octave Analysis (OCT), and Sound Level Meter (SLM). You are **unable** to add more signal types to be computed once the test is created. Press **Finish** to create the test.




# Test Configuration

For Acoustic Analysis, there are two unique parameters that may need to be set up, *Octave Filter* and *Sound Level Meter*. Please go here for more information on basic FFT Analysis Parameters.

### Octave Filter Parameters

If Octave Filters are being applied, their parameters must first be set.

*Octave Resolution*- Defines the octave resolution including: 1/1, 1/3, 1/6, 1/12, and 1/24.

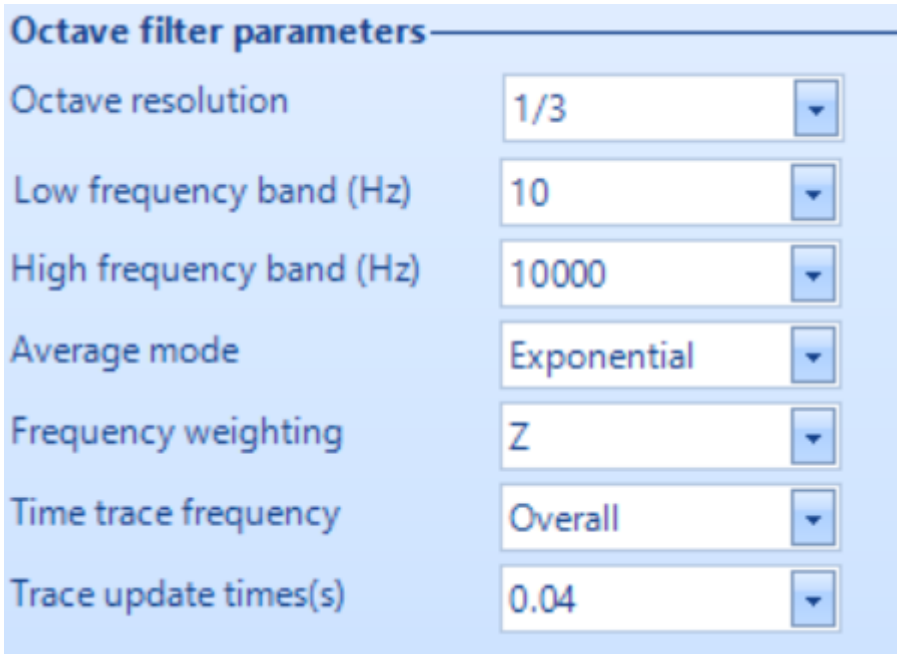
*Low/High Frequency Band*- Defines the low and high frequency of the measurement in Hz.

*Average Mode*- Defines the averaging type: exponential, linear and peak hold.

*Frequency Weighting*- Defines the frequency weighting including A, B, C or Z.

*Time Trace Frequency*- Defines which center band frequency, overall or frequency weighted band is used to plot time traces.

*Trace Update Times*- Defines the time trace display duration. Select a larger update time to create longer time trace display duration.




**Sound Level Meter (SLM) Parameters**

If the SLM is being used, the parameters must first be set.

*Time Trace Type*- Defines the time weighting including L, Leq and LE.

*Analysis Period*- Specifies the time duration for each analysis period.

*Result Update Time(s)*- Defines how many times the result will be updated.

*Result History*- Defines the measurement length of the result history.