InSite guides

Import and harvesting of DTA files from Mistras systems

Functionality available in InSite version 3.17 or higher

Interfaces in 'Data import' and 'InSite Leach' in InSite allow working with Acoustic Emission files acquired using Mistras systems. These systems record the data in binary files with the extension .DTA. Each file contains the time series data for an individual channel, and are recorded independently when a trigger criteria is met at an individual sensor.

To work with these files, DTA must be selected from the drop-down list of available data formats in the 'Data import' dialog window or the 'Leach' dialog. Further settings must be specified clicking on the 'Data Properties' button next to the drop-down list of available data formats in the 'Data management' dialog when importing full files into InSite or the 'Settings button in the 'Leach' dialog when harvesting events from the record. This action launches the dialog shown in the figure below, and the following information must be entered to work with the files:

1) Sampling time used in the acquisition
2) Time units for the sampling time (drop-down list)
3) Expected maximum time difference (in the units specified above and used for the sampling time) between files (corresponding to hits at different receivers) corresponding to a single AE event. It is recommended that this value is higher than the maximum time for a signal to travel between the sensors with the largest separation within the monitoring array to ensure all traces for an AE event are grouped correctly and not assigned as separate events.