Process data acquisition is used in many application segments. Especially for condition monitoring and process documentation, the precise capture of the process value trend is a key task. National Instruments LabVIEW provides a mighty and comprehensive solution for these applications. Using the netSCOPE data acquisition card enables an easy capture of measurement values for further processing within LabVIEW.

Measurement values are captured directly from the transmitted process data frames. This allows also the cost-effective extension of existing plants because there is no need in adapting the PLC software.

Implementing the measurement application with a netSCOPE device is thereby fast and easy to realize. The device is plugged into the automation network as a passive participator. In LabVIEW only a few steps are needed to acquire process data in a format commonly used in such applications.

Generally, all transported data is recorded from the network, completed with an exact time-stamp representing the time of acquisition. Data is sampled communication-cycle accurate. Therefore a complete and gap-less process data image with history is always available.
Process values acquisition is programmed in LabVIEW in a few steps.

First, the netSCOPE instrument is initialized, after that the signals which shall be acquired are configured. Now, captured process values can be read out and processed within the LabVIEW program.

Once the measurement process is finished, the instrument is closed.