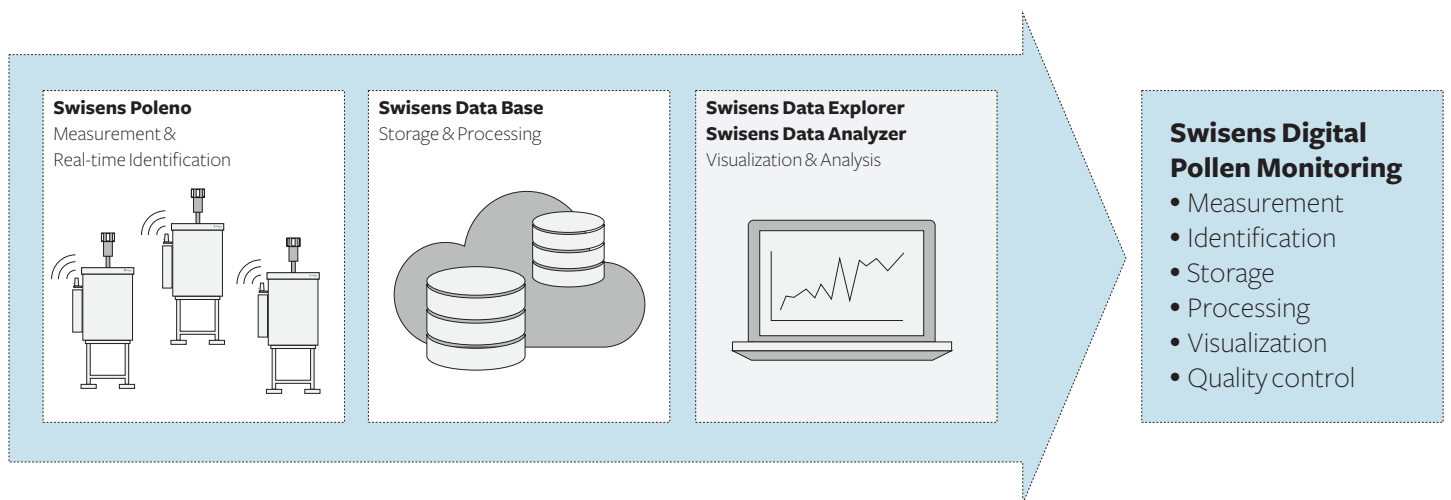


Swisens Digital Pollen Monitoring identifies particles within seconds and allows for the calculation of the actual local pollen-taxa concentration with a time resolution in the range of minutes. This data can be used as input for pollen forecasts and numerical models.



Swisens Digital Pollen Monitoring

- Better and reliable quality of pollen-taxa data
- Real-time data of local pollen concentration
- High time resolution of local pollen-taxa concentration
- Instant verification of classification results
- Optimized classification SW by Swisens Ecosystem
- Full data service solution for real-time pollen taxa-data

With Swisens Digital Pollen Monitoring, pollen measurement networks can be managed centrally. Every Swisens Poleno features customizable data management by the Swisens Data Base. Swisens Data Explorer and Swisens Data Analyzer visualize and analyze the raw measurement data and illustrate the results delivered by the identification software.

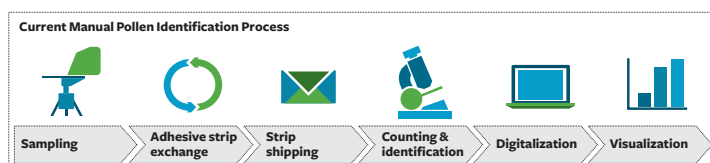


Figure 1: Traditional method for pollen measurement by Hirst pollen traps

Current Manual Pollen Identification

The pollen forecast today is incredibly inaccurate due to the lack of appropriate means for real-time pollen measurement. The method of measurement presently in use relies on the counting and identification of pollen by trained specialists using a microscope. It is mostly done as manual labor and follows a time-consuming sequence of tasks as shown in figure 1. This is expensive and it requires several days before the measurement results are available. Furthermore, in practice the accuracy is limited due to the small analyzed area.

Advantages Of Swisens Digital Pollen Monitoring

- Maintenance friendly
- No consumables for operation
- Remote access and control
- Intelligent device status monitoring and notification
- Full solid state electronics and optics

The design with full solid-state electronics and optics allows for an operation time of at least 10 years with a maintenance interval of 9-12 months.