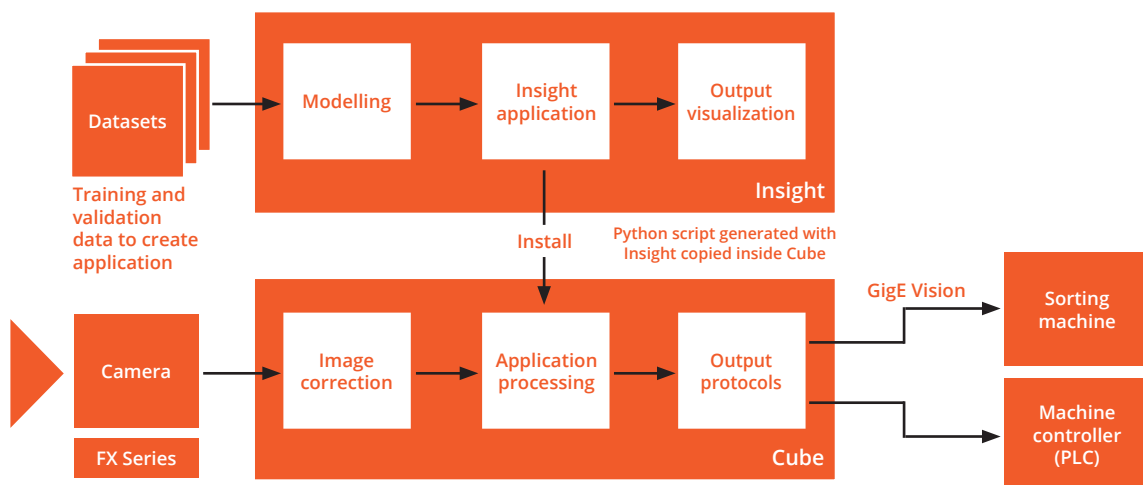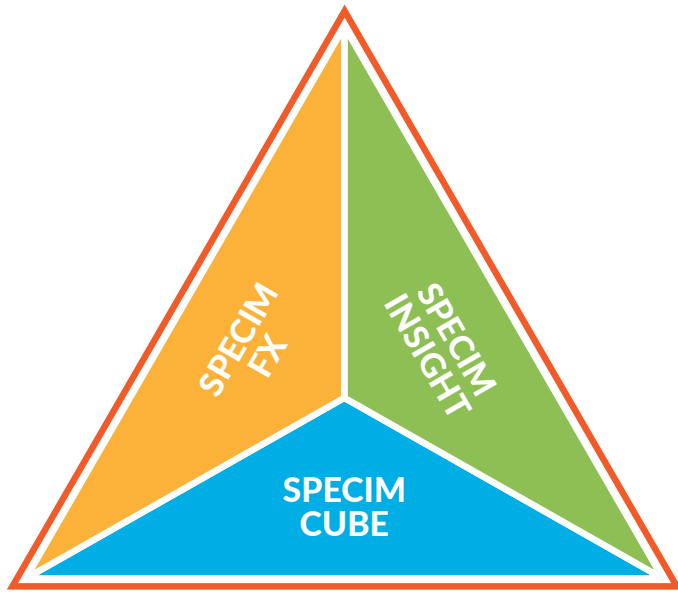# specimONE

SPECTRAL IMAGING PLATFORM FOR SORTING

SpecimONE spectral imaging platform revolutionizes hyperspectral technology adaptation to industrial sorting applications. With SpecimONE machine builders, vision systems integrators and other OEM's can classify different materials based on their spectral signature off-line and apply those classification models into your in-line system in real-time. The result is a new industrial sorting application without coding or in-depth knowledge of spectral imaging.

BENEFITS:

- Shorter time to market
- The flexibility of hyperspectral imaging technology allows an unlimited amount of applications
- Compatible with major industrial standards, seamless integration with machine vision systems (e.g., Halcon, Sherlock)
- Single point of contact with a global presence
- Specim's proprietary platform guarantees full compatibility and seamless operation between Specim FX cameras, modeling, and real-time software tools

SPECIMONE

SpecimONE platform includes:

- Industry-proven Specim FX camera

- SpecimINSIGHT software to build classification models for your sorting application

- Powerful image processing hardware, SpecimCUBE, to run the sorting models in real-time

SPECIM INSIGHT

SpecimINSIGHT Sorting is an off-line software tool that allows users to browse and explore data, create and validate classification models.

Current feature set focuses on sorting industry requirements:
- A robust yet fast classification algorithm PLS-DA and support for MROI functionality to benefit from FX series camera speed
- Support for all Specim dataset format cameras

SPECIM CUBE

SpecimCUBE is a high-performance processing platform to run classification models created by Insight in realtime. It is based on Xavier, a system on a chip developed by Nvidia and includes optimized software to meet industry requirements for throughput, latency and jitter.

SpecimCUBE receives the data from Specim FX cameras and processes it in real-time based on classification model. The sorting results are streamed over GigE Vision to the target systems (sorting machine, existing machine vision systems)

Specim Cube provides excellent performance for real-time sorting applications with the flexibility to switch and run different models.

SpecimCUBE is currently compatible only with Specim FX series CameraLink cameras.

SPECIM FX SERIES

Specim FX series cameras are the first hyperspectral instruments designed specifically for industrial use. Cameras' high frame rate meets the industry speed requirements, and robust structure and small size allow flexible installation location.

Specim FX series cameras give reliable classification results based on the target's chemical composition. Non-contact, non-destructive optical method offers 100% imaging coverage. Inspect a variety of end products and different system properties without changing the camera.