One-page Summary of Qualifications / Domain Expertise for Siemens Postal, Parcel & Airport Logistics

Siemens Postal, Parcel & Airport Logistics LLC, headquartered in DFW Airport, TX (USA), is a leading provider of innovative products and solutions for our customers in the postal, parcel, and airport markets. The range of expertise provided by our US employees spans the entire product lifecycle, from innovation through mechanical, electrical, and software engineering to manufacturing, and onsite installation, product and system support.

Singulator – Visicon Polaris Solution
The Polaris is a full-featured Visicon®-based parcel feeder solution that is pre-engineered to the most common of parcel feeding configurations, with everything needed to feed typical linear sorter applications with standard-sized parcels. Polaris converts a metered bulk flow of parcels into a singulated, aligned, and accurately gapped sequence of parcels that keeps up with the bandwidth of a shoe sorter.

Singulator – Visicon Capella Solution
The Capella is a Visicon®-based, pre-engineered singulation solution for small parcels, designed to produce either single or dual output channels of singulated small parcels, as would typically feed either a linear sorter or a circular sorter with two in-feeds. Capella converts a layered, metered bulk flow of small parcels into singulated stream(s) that are ready to scan and sort.

Cross-belt Sorter – VarioSort/VarioSort Twin
Featuring a straightforward mechanical design, a future-oriented industrial standard communication and control system as well as numerous off-the-shelf components, VarioSort is a no-fuss, cost-effective solution for a broad spectrum of sorting requirements. In addition to reliable, proven performance, the system's carrier design allows for easy adaptation to custom product dimensions. The latest addition to the product family, VarioSort Twin, adds more flexibility: Instead of a single cross belt, it has two per carrier. As such, one carrier is perfectly suited to transporting two smaller parcels at a time, thereby increasing system throughput and making the best use of valuable space on carriers and in sorting halls themselves

Recognition and more
Parcel and postal services need reading and coding solutions for a host of demands. The relevant information for processing is contained on every item. Our core competence is the fast and reliable extraction and interpretation of this information for sorting and delivery purposes. Machine or handwritten addresses written in Latin, Cyrillic, Arabic or Chinese characters; linear and 2D barcodes; stamps, stickers, logos and labels – extracted from images generated by single or multi-sided cameras.

Scanning
We offer top-side scanning as well as 6-sided image capturing including barcode reading. For this task we integrate cameras and laser scanners from different manufacturers, recommended by Siemens or selected on request by our customers.

ARTread – Automatic Reading
ARTread is the basis for advanced and optimum solutions for the benefit of postal and parcel services worldwide, tailored to individual needs with regard to recognition tasks, read performance and hence, additional new services.

Video Coding
Parcel images which cannot be finally resolved by the automatic reading function are manually coded by video coding operators. Video coding can be performed online when the parcel piece is processed in the sorting machine or offline when the parcel piece is transported to the subsequent parcel hub. The video coding devices are pooled in a common Video Coding Pool.

ARTid – Fingerprint/Parcel ID
Advanced fingerprint technology has been developed to help international senders and third parties track parcels quickly and accurately. The technology makes use of the fact that no two parcels look exactly the same. Optical characteristics are recorded, such as surface texture and the location and content of marks, including stamps and logos. The parcel's size, volume and weight can also be registered. Instead of manually applying a proprietary ID barcode on every parcel, imaging technology is used to identify a parcel throughout the whole supply chain.

3D Applications
3D reconstruction of parcels for detection of doubles, quality inspection and shape and format classification is also possible. Following a 6-side scan, a 3D model including texture is created. It can be displayed for 'track & trace' or to reduce a carrier's search for a parcel on his/her route.

DWS – Dimension, Weigh, Scanning
Our fully integrated DWS system provides a complete solution of dimensioning, scales, barcode readers and optional optical character recognition, to provide certified parcel profiles. The DWS system integrates the barcode, weight and dimension data into a single message that can be used for sorting and verification. Image data is stored in high-availability storage using state-of-the-art hardware and software.

Siemens providing Swiss Post a solution for efficient processing of cross-border e-commerce parcels
At the international mail sorting center in Zurich, Swiss Post is integrating a new import process of foreign mail items – a large proportion coming from Asia. Processing will take place on a newly erected 160,000 sq ft platform above the existing production environment.

Swiss Post's current operation with fragmented process steps, manual processing (item scanning, initial sorting), and lack of storage space outside customs business hours will be transformed by a new system with harmonized process flow, efficient intra-logistics, independent fully automated customs warehouse with AGVs, automated barcode reading for tracking products, and automated singulation, tracking, and initial sorting (triage to national processes). The solution will yield an overall increase of efficiency and output streams ready for mail delivery sorting.