

TENDER RESPONSE

Design, Supply, Installation and Commissioning of an Automated Conveyor and Sortation System

Valencia Distribution Centre, Paterna — Brisamar Logistics SA

Submitted by Tidewell Fabrication Ltd — 18 September 2024

Tender reference: NWL-VAL-2024-07 | Tidewell proposal reference: HFL-P-2411

1. Covering letter

Dear Ms Ortega,

Tidewell Fabrication Ltd is pleased to submit its tender response for the automated conveyor and sortation system at Brisamar's new Valencia distribution centre. We have read the invitation to tender dated 26 August 2024 and the site information pack, and we attended the site visit on 5 September 2024.

Our proposal is based on a narrow-belt sorter with 26 divert positions, four receiving lines and full SCADA integration with your warehouse management system. We have delivered systems of this configuration for three clients in the last four years, most recently the Aldgate Hub project for Thames Parcel Services in 2023, which runs at 5,000 cartons per hour.

Our fixed price for the full scope is **€1,195,000** exclusive of VAT, valid for ninety days from the date of this letter. We can mobilise to site within three weeks of contract award and achieve practical completion within 26 weeks of site access.

We look forward to discussing our proposal with you.

Yours sincerely,

Daniel Mercer, Managing Director

2. Understanding of the requirement

2.1 Brisamar requires a system to receive inbound cartons from four dock doors, merge them onto a single sorter and divert them to 26 outbound lanes according to the destination encoded in the GS1-128 shipping label. The sustained design throughput is 4,800 cartons per hour with a peak of 5,400 cartons per hour for periods of up to thirty minutes.

2.2 The installation hall is a new build with a power-floated concrete slab. The site information pack states a floor flatness of 5 mm over 3 m. Our conveyor supports are adjustable by ± 20 mm and can accommodate minor deviations; larger deviations would require local grouting or re-levelling by the Buyer.

2.3 The hall will be served by a 400A three-phase supply from the Buyer's main switchboard. Our controls design assumes this supply is available at the installation hall distribution board before commissioning starts.

2.4 Integration with the Buyer's warehouse management system (Manhattan SCALE) will be over OPC UA, with the sort destination table downloaded hourly and exception reporting in real time.

3. Technical proposal

3.1 **Receiving lines.** Four 24 m powered roller lines with zero-pressure accumulation, 620 mm between frames, 0.8 m/s nominal.

3.2 **Merge.** A 4-to-1 sawtooth merge with gapping belts, controlled by the sorter PLC to maintain a 400 mm minimum gap at the induct.

3.3 **Sorter.** A 68 m narrow-belt sorter with pop-up wheel diverts at 26 positions. The sorter is modular in 3 m sections for ease of transport and installation.

3.4 **Scanning.** Two five-sided camera tunnels (Cognex) with a guaranteed 99.5% read rate on compliant labels.

3.5 **Controls.** Siemens S7-1500 PLC, ET200SP distributed I/O, two 15-inch HMI stations and a SCADA server. PLC programming, HMI and SCADA integration will be performed by our controls partner **Velden Controls BV** of Eindhoven, who have worked with us on every sorter

installation since 2019.

3.6 **Safety.** Perimeter fencing to EN ISO 14120, light curtains at manual induct stations, emergency stop circuits designed and validated to PL d.

4. Project team

Role	Name	Experience
Managing Director / Executive sponsor	Daniel Mercer	22 years in materials handling; founded Tidewell in 2011
Project Manager	Priya Nair	11 years; PM on Aldgate Hub and the Bristol Returns Centre
Lead Installation Engineer	Tomasz Wójcik	14 years; led mechanical installation on 9 sorter projects
Controls Lead (Velden Controls BV)	Jeroen van der Berg	16 years Siemens PLC/SCADA
Site Supervisor	Callum Reid	8 years; NEBOSH certified

4.1 Priya Nair will be the single point of contact for Brisamar throughout the project and will attend site at least two days per fortnight during installation.

4.2 The installation crew will comprise eight Tidewell fitters and two Velden commissioning engineers at peak.

5. Programme

5.1 Our outline programme HFL-VAL-P01 rev A is attached. Key durations from site access:

Activity	Weeks from site access
Design pack issued	4
Design approval	6
Fabrication complete	12
Delivery to site	13
Mechanical completion	18
Commissioning and acceptance	26

5.2 Installation will proceed bay by bay: Bays 1 and 2 (receiving lines and merge) first, then Bay 3 (sorter and outfeeds). Bay 3 is the longest activity and is on the critical path.

5.3 The programme assumes that the floor slab, power supply and access are available as described in the site information pack.

6. Commercial proposal

6.1 Fixed price: **€1,195,000** exclusive of VAT, delivered DAP Paterna (Incoterms 2020).

6.2 Price breakdown:

Element	€
Mechanical equipment (receiving, merge, sorter, outfeeds)	712,000
Controls hardware and software (including Velden)	186,000
Scanning tunnels	64,000
Safety fencing and guarding	48,000
Installation labour and plant	142,000
Commissioning, testing and training	31,000
Project management and design	12,000
Total	1,195,000

6.3 Payment terms proposed: 30% on order, 40% on delivery, 20% on mechanical completion, 10% on practical completion, each invoice payable within 30 days.

6.4 Warranty: 24 months from practical completion on all equipment and software.

6.5 We accept liquidated damages for late practical completion at 0.5% of the contract price per week, capped at 10%, subject to a fair extension-of-time mechanism for events outside our control.

6.6 Validity: 90 days from 18 September 2024.

7. Reference projects

Client	Project	Year	Throughput	Contact
Thames Parcel Services	Aldgate Hub, London	2023	5,000 cph	Operations Director (available on request)
Corvid Retail	Bristol Returns Centre	2022	3,200 cph	Head of Logistics
Alder Pharma Distribution	Rotterdam cold-chain sorter	2021	2,400 cph	Site Manager

7.1 The Aldgate Hub project is the closest comparator in scale and configuration. It was delivered three weeks ahead of programme and has operated at above 98% availability since handover.

8. Health, safety and quality

8.1 Tidewell holds ISO 9001:2015 and ISO 45001:2018 certification. Our installation method statements and risk assessments will be issued in Spanish and English before mobilisation.

8.2 All site personnel will hold a valid construction safety card recognised in Spain and will attend the Buyer's site induction.

9. Assumptions and exclusions

9.1 Building works, floor slab preparation, permanent electrical supply to the hall distribution board, compressed air and data cabling to the SCADA server are excluded and assumed to be provided by the Buyer.

9.2 Import duties and Spanish VAT are excluded.

9.3 The price assumes continuous access to Bays 1 to 3 from week 13 and that no other contractor is working in the installation hall during mechanical installation.

Signed for Tidewell Fabrication Ltd: Daniel Mercer, Managing Director — 18 September 2024