

The Concept

B//B/O, the white sugar trading and transport system, became operational with its first vessel 'CHL Innovator', in August 1986. She was followed by the larger 'CHL Progressor' in 1992, and by the newly-built 'Pioneer' in 1996. As a result of the combined B//B/O expertise of ED&F Man and its partners, traders and customers now have access to highly sophisticated vessels which can cut costs and time. Pioneer is currently owned and operated by Sugar Australia Pty Ltd, Sydney.

The B//B/O system:

- Bulk loads 750 tonnes per hour in all weathers.
- Ships 20,000 tonnes of cargo [Innovator and Pioneer] or 40,000 tonnes [Progressor].
- Bulk discharges up to 750 tonnes per hour, where appropriate facilities exist.
- Discharges bags at up to 6,000 tonnes per day.
- Keeps white sugar fully conditioned at sea.
- Delivers out-turn quantity and quality to very fine tolerances in undamaged bags.



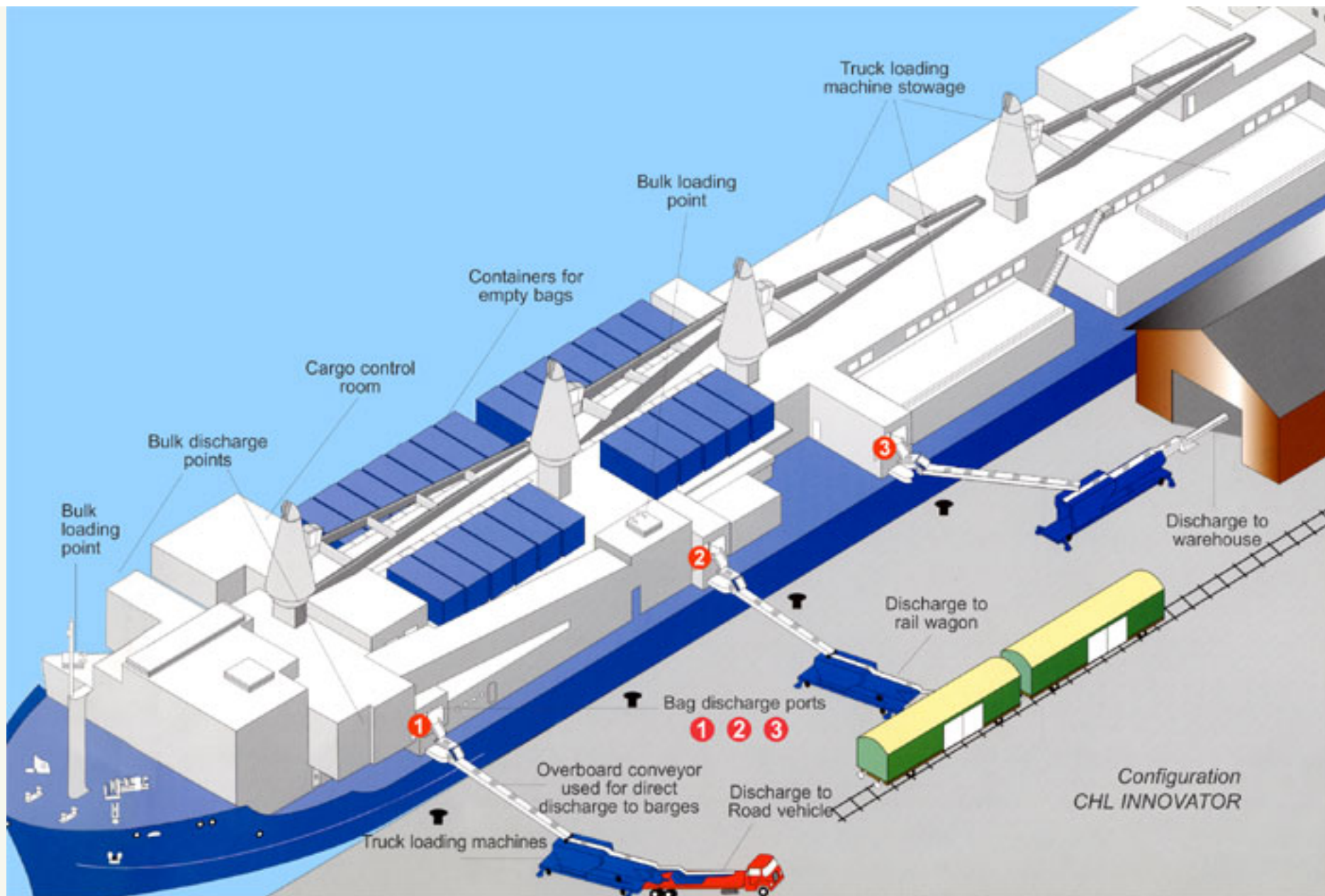
There are six stages in the B//B/O process:

1. Sugar is loaded by means of bulk conveying systems in enclosed conditions from the refined sugar terminal to the ship's holds.
2. The holds are insulated and air-conditioned.
3. At the destination port, sugar is transferred from the holds to the onboard bagging plant.
4. Sugar is accurately weighed into B//B/O bags- usually Polythene-lined polypropylene, jute or paper sacks.
5. Filled bags are discharged direct from the ship's conveyors to trucks, rail wagons or barges alongside the vessel (or into an adjacent quayside store, as required).
6. Alternatively, sugar may be discharged in bulk to suitable storage facilities at up to 750 tonnes per hour.

What do the buyers and receivers require?

The operators of the B/I/B/O vessels have considered the requirements of sugar buyers at all times. Sugar loaded and subsequently discharged by B/I/B/O has to be maintained to the specifications laid down by its producer - and expected by its buyer.

Refined sugar requires very careful storage and handling if its nature and crystalline structure is to be maintained. Where the transport of food grade products for human consumption is involved, manual handling has to be reduced to a minimum to avoid the possibility of damage or contamination.



The **B//B/O** vessels therefore incorporate a number of highly

developed, hygienic features. These include:

- Fully insulated holds.
- Temperature and humidity controlled handling areas.
- Smooth, food grade inner surfaces.
- Extensive use of stainless steel.
- High quality, food grade paint coatings.
- Special 'white', food grade conveyor belting.
- Centralised cleaning and dust extraction facilities.
- Screening and metal detection.

Extensive insulation and air conditioning ensures that sugar remains unaffected by external weather and/or temperature conditions, creating an ideal balance between energy efficiency and safe cargo storage. Extensive experience has provided the operators with all the information needed to maintain these conditions in any circumstances.

The detailed technical specifications permit the operators to ensure that the prime objective is achieved - that sugar is delivered safely to the end user in the best possible condition.