Ocean Transport for Woodchips: From the Perspective of a Woodchip Supplier

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Vessel chartering for woodchip cargoes
A Charterers perspective
Stephen Roffey – Midway Limited
Introduction

- Midway overview and chartering history
- Available vessels
- Bulk carriers – Midway’s experience
- Hard learnt lessons
- Chartering considerations
- Is there a perfect vessel to charter?
Midway overview & chartering history
A leading company in the Australian forestry sector, primarily involved in the production and export of high quality woodchip fibre to producers of pulp, paper and associated products in China and Japan.

Founded in 1980, Midway wholly owns strategic processing and export facilities in Geelong and is the majority stakeholder in strategic processing and export facilities in Portland and Brisbane.

Core business components:
- Procurement, processing, handling, marketing and export of wood fibre
- Asset ownership, plantations and underlying freehold land
- Management of plantation assets owned by investment schemes

Primary markets
- Three woodfibre products sold from three export facilities (Plantation Hardwood, Native Hardwood and Softwood)
- Exported to Japan since 1986: 21M GMT
- Exported to China 2003 - 06 and 2011 - current: 7M GMT
- Softwood sawlog sales from company owned softwood plantations: 2.4M GMT
## Midway overview

### Hardwood woodchip capacity
- ~4.0 million GMT per annum

### Softwood woodchip capacity
- ~0.4 million GMT per annum

### Key Points
- **19 ha of freehold land adjacent to Port of Geelong**
- **Two woodchip mills** (separate plantation and native processing facilities)
- **Three stockpiles including three reclaimers with 200,000 GMT total capacity**
- **Capacity to process and export up to 1.8 million GMT per annum hardwood (includes plantation and native) and 100,000 GMT per annum softwood**

### QCE Brisbane
- **Sole woodchip exporter from Brisbane Port**
- **4ha leased site with the Brisbane Port for producing, storing & loading**
- **GrainCorp provides toll ship loading**
- **300,000 GMT per annum softwood woodchip export capacity**
- **Hardwood exports commenced in 2008. Capacity of 300,000 GMT per annum**
- **Stockpile capacity: 100,000 GMT of softwood and/or hardwood**

### South West Fibre / Portland
- **South West Fibre plantation hardwood processing and marketing operation in the Green Triangle**
- **Myamyn - 1.2 million GMT per annum current site capacity + in-field chipping and “upstream” chip and log storage**
- **Portside woodchip receival, storage and loading facilities contracted with GrainCorp**
- **80,000 GMT woodchip stockpile capacity**
- **Woodchip receival capacity of 1.8 million GMT per annum**
- **Joint Venture with Mitsui**

### Midway Geelong
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Midway overview

Total export volumes since 1986 (million GMT)

Note: Includes 100% contribution from SWF (Portland), Geelong and Brisbane.
Note: The above is based on calendar year
Source data: Midway Group (SWF and QCE are totals and not adjusted for the Midway Group’s share)
Midway chartering history

Sales from 1986 to 2013 – all FOB – over 400 shipments

Commenced CIF / CFR sales in 2013.

Since 2013 committed to 63 voyages as spot voyages or Consecutive Voyage Service (CVS). CVS min 2 - max 8.

### Shipments FOB vs CIF

- **2013**: FOB 13, CIF 0
- **2014**: FOB 10, CIF 10
- **2015**: FOB 10, CIF 18
- **2016**: FOB 10.5, CIF 18
Midway chartering history

- Underlying ship owners – seven.
- Negotiating counter parties – eight. Four direct with owner and four via broker.
Available vessels
Woodchip carrier fleet

- Total fleet approx. 140.
- In 2010 total fleet was over 160 – new build rate declined post GFC
- Total MOL / NYK / Kline approx. 64%.
- Total MOL / NYK / Kline in 2010 approx. 70%. - the number of owners is increasing

Source: RISI International Pulpwood Trade Review 2016
Woodchip carrier fleet

- 2016 average vessel size 3.8mcft. 2010 3.5mcft – increased average due to larger new builds and scrapping of older, smaller vessels.

Source: RISI International Pulpwood Trade Review 2016
Woodchip carrier fleet

Woodchip Carriers by Age Class – Jan 2016

- 88% of fleet < 25 years old.
- In 2010 99% of fleet < 25 years old.

Source: RISI International Pulpwood Trade Review 2016
Bulk carrier fleet

At the Savannah (2015) conference Cogent Fibre highlighted the opportunities for using bulk carriers for woodchip cargoes.
Bulk carrier fleet

- Total fleet > 10,000 vessels.
- Panamax fleet with approx. capacity similar to average woodchip carrier 1,870 vs woodchip carrier fleet of approx. 140.
Bulk carriers – Midway’s experience
Midway’s experience

- First bulk carrier (non woodchip carrier) chartered in December 2015.
- Before December 2015 all 27 voyages chartered were woodchip carriers.
- Since first bulk carrier voyage – 36 voyages chartered, 31 (over 85%) employing bulk carriers.
- Why??
Clean decks

- Most ports in China use shore cranes for discharge.
- Ships gear is not required.
- The lack of obstructions on the deck of a bulk carrier makes both loading and discharge operations easier for stevedores.
- Some carriers have only five hatches – less movements.
- Less incidents. Less claims for stevedore damage.
Clean decks
Easier voids to load

- Most bulk carriers have larger hatch openings meaning a moveable ship loader can get closer to the corners of the hold and the hatch coamings are smaller.

- Most bulk carriers have “top side ballast tanks” on both the port and starboard side that make the internal shape of the hold easier to fill with woodchip.

- Midway’s experience based on same product, same loader, single pass full loading is that a bulk carrier will achieve 3 - 4% better compaction – cubic feet per bdmt than a woodchip carrier of similar capacity.
Easier voids to load
Loaded draught

- Most Panamax bulk carriers have a dead weight capacity of up to 80,000 tonne.
- Most Panamax bulk carriers will only load up to 50,000 tonne (3.5M cft) with woodchips.
- At 70 tonne per centimetre displacement the 30,000 tonne “not loaded” will reduce the loaded draught of the vessel by up to 4m relative to maximum deadweight.
- Most Panamax bulk carriers loaded with woodchips will not exceed 10m departure draught - a real advantage where the draught of the discharge port is limited – by either actual draught or seasonal tidal conditions.
- In our experience very few woodchip carriers can load full with a departure draught less than 10.5m and most will be fully loaded with a departure draught of 11m or more.
- No issue with winter (high moisture content cargos). Some woodchip carriers will reach deadweight limitations when stowage factors fall to the low 70’s cubic feet per GMT resulting in unavoidable slack space.
The Baltic dry index that tracks daily charter rates for bulk carriers is widely available from brokers and shipping industry information providers.

The number of free woodchip carriers at any one time is only a small subset of the total fleet of approx 140. Market rates for these vessels can only be confirmed by seeking indications from owners and subsequent negotiations.

In our experience if woodchip carriers are open and available they will quickly follow the alternative Panamax bulk carrier market.
And there is always a but ………………………..

LOA restrictions - most Panamax bulk carriers will have an LOA of 224 - 229m. Some discharge ports cannot accept vessels with LOA > 210 - 215m.

Deadweight restrictions – some ports have maximum deadweight restrictions and only take account of the vessel’s registered deadweight not the loaded (displacement) deadweight:

– NB. It is possible for the vessel to re-register its deadweight based on woodchip cargo stowage factors.

A Panamax bulk carrier will most likely use more bunker per day than the equivalent capacity woodchip carrier. It is a heavier vessel designed to load and transport heavier cargos.
BUT !!

- Many bulk carriers load hard commodity cargoes incompatible with woodchips like coal, pet coke, iron ore etc.

- But many also load grain and other soft commodities that are compatible with woodchips and understand the need for “grain clean” presentation of the vessel.

- If you have enough voyages and the market is in your favor most vessels can be cleaned to meet “grain clean” cargo requirements.

- and ........... dedicated woodchip carriers can also fail “grain clean” requirements at the load port.
Hard learnt lessons
Hard learnt lessons

- In vessel chartering you will never know it all. There is always something new to learn...and usually at the most inconvenient time !
- Some of the things that can go wrong:
  - vessel (first voyage) arrested by Australian Admiral Marshall on arrival at load port due to outstanding bunker debt owed by a previous sub charterer!
  - issues at discharge ports in foreign countries a long way away and with different regulatory and legal systems. Accurate communication can be difficult when things are going well..........
  - typhoons, post storm port closures, piracy concerns, port authority priorities, “emergency discharge” priority!.
  - if there is an incident you can guarantee no one will admit responsibility no matter how conclusive the evidence !!
Chartering considerations
Chartering considerations

- Discharge port limitations – maximum flexibility to discharge at the widest range of ports.
- Schedule flexibility.
- Steaming days – not all vessels steam at the same speed and if scheduling is important the wrong vessel can add a number of days to a voyage of approx. 45 days.
- Insurance coverage – charterers liability - what risks are covered / not covered and to what limit.
- Previous cargoes carried by a candidate vessel.
- Counter party – size, fleet, flexibility, experience.
- In our experience vessel chartering is not easy and there can be significant risks. After 63 charters we understand most of the risks and what is required to manage them. At the end of the day some markets will insist on CIF / CFR terms. FOB only sales are no longer an option.
Is there a perfect vessel to charter?
Is there a perfect vessel to charter?

- Is there a vessel that can meet all potential load and discharge port limitations for:
  - LOA
  - Deadweight
  - Departure and Arrival draught
  - Gear requirement
  - Air draught
  - Beam

- In our experience there is no vessel that can carry full cargoes (without slack space summer and winter) within the constraints of all likely discharge ports. A shallow draught woodchip carrier is the most likely candidate.

- Our aim is to charter the most flexible vessel for the most number of potential discharge ports at the best charter rate possible from a reliable counterparty.

- In the last 18 months that aim has led us to charter more Panamax bulk carriers than woodchip carriers.

- In the future .........................??
Thankyou

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