SALE OF WOOD CHIPS AND CHIP LOGS

R. S. SHIRLEY*

SALE OF WOOD CHIPS

Chips have been produced from sawmill waste, and sold to nearby pulpmills, in the U.S.A., Canada, Japan and Europe, for many years. The first similar sale in New Zealand was in 1965, when the Fletcher Timber Co. sold chips to N.Z. Forest Products. The following year Carters at Marāmarua also made a chip sale from sawmill residues. The first export sale of chips, from the U.S.A. to Japan, was also in 1965, but by 1969 a number of countries, including New Zealand, Malaysia and Tasmania, were exporting chips.

The current unit of measure for internal sale is one cubic foot of solid wood equivalent, normally measured by weight with allowance for moisture content. Export sales are invariably based on a Bone Dry Unit (BDU) which is 2400 lb weight of oven-dry wood. For Pinus radiata the commonly-used factor is 93 cu. ft per BDU, but this varies from 74.5 to 120.5, and chips are regularly sampled while a shipment is being loaded to obtain a mean figure. The BDU is a very precise measure of the wood fibre content.

Specifications for wood chips are usually very stringent. The TAPPI† scale, specifying the maximum or minimum percentage in specific chip lengths, is often used. The standard length used to be $\frac{3}{4}$ in., but is now more commonly as high as $1\frac{1}{8}$ in. Percentage of bark is usually rigidly controlled at 0.5 or 0.6% for export sales, and this can be very difficult to obtain under all conditions.

Because of the quantities carried in one ship, it is necessary to stock-pile large quantities at export ports and to use high-capacity loading gear to ensure quick turn-round. Pneumatic loading gear has been installed at Nelson and belt conveyors at Mount Maunganui. The Japanese have built special ships for the trade, and are the only country buying chips at present. However, the Philippines, Taiwan and South Korea are now interested in this trade.

Chips have in the past been regarded as being produced from material that would otherwise be waste, and have on this ground been accorded a low price. Until recently, internal sales carried a price as low as 10 cents/cu. ft delivered. The first export sales were also negotiated at a low price, for the same reason, and this trend continues. After four sales from New Zealand, the suppliers have eventually grouped under the

---

*General Manager, H. Baigent & Sons Ltd, Nelson.
†Technical Association of the Pulp and Paper Industry.
MARKETING OF FOREST PRODUCTS

chairmanship of the N.Z. Forest Service in order to present a united case for improved prices. Unfortunately, sales were made in U.S. dollars, and the two recent devaluations of that currency have had a substantial effect on realizations. In Australia, the Government set a minimum price limit per BDU which has ensured reasonable prices for local producers. On the other hand the Japanese buyers, through the MITI* Committee, have even gone to the extent of allocating areas throughout the world.

SALE OF CHIP LOGS

By definition, these are logs which do not meet export sawlog specifications or are considered uneconomic because of size to convert to sawn timber. The first export sale was made by P.T.Y. Industries Ltd, from Dunedin, but interest in this trade has increased recently; a sale to Korea is being negotiated, and there have been several trial shipments from a number of ports to Japanese buyers. The first long-term sale from New Zealand was recently made by H. Baigent & Sons Ltd to C. Itoh & Co. Ltd, of Osaka, and it seems likely that the trade will expand considerably in the near future.

Arising from the Korean enquiry, the unit of measure is a cubic metre for overseas sales, but owing to small piece size this material is measured by weight and then converted to volume by an agreed factor. The current factor in Nelson is 32.8 cu. ft per ton (approximately 0.93 m³/tonne).

Specifications for pulp logs are 10 cm minimum top diameter, with no upper limit, and lengths of 4, 6 and 8 metres. There is no specification for straightness, but single stems are required. Logging, loading and cartage are carried out by conventional means, and measuring is over a weighbridge. Individual lots should be reasonably small, and must be identifiable throughout; it is essential that tonnages of individual lots are clearly marked off in the marshalling areas, and that complete lots are loaded on to the vessel.

Most sales, owing to the devaluations of the U.S. dollar, are being negotiated in New Zealand currency. The basic price is $NZ14.65/m³, but sales are being discussed at rates as high as $20.00 for some specifications. Strong interest is evident in the Philippines, Korea, Taiwan and Japan.

DISCUSSION

The market in chips and chip logs is relatively new in this country, but new procedures, new units of measure, and economical handling of these commodities have been successfully introduced. The main problem at present is one of prices. If the export prices of sawn timber, sawlogs, chip

---

logs and chips are compared, an anomalous situation is revealed:

<table>
<thead>
<tr>
<th></th>
<th>cents/cu.ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawn timber</td>
<td>110</td>
</tr>
<tr>
<td>Sawlogs</td>
<td>68</td>
</tr>
<tr>
<td>Chip logs</td>
<td>41</td>
</tr>
<tr>
<td>Chips</td>
<td>30</td>
</tr>
</tbody>
</table>

It is obviously uneconomic to convert sawlogs valued at 68 cents to sawn timber valued at 110 cents. It is even poorer business to convert pulpwood at 41 cents to chips at 30 cents. This serves particularly to highlight the low relative value of chips. There are predictions that world pulp prices will rise by as much as 100%; if this occurs, it could do much to correct the anomaly. But it should be made clear to buyers that New Zealand chips are not simply supplied to obviate waste. They are intrinsically of high quality and should be sold on this basis. The Japanese are fond of quoting low prices being asked for chips held in stockpiles on the West Coast of the U.S.A., but these are low quality spot buys of surplus stocks which cannot be compared with long-term sales of high quality material from New Zealand. It is significant that these stockpiles still exist 18 months after being offered for sale.