

BRILL 21E TRUCK AND OTHER TRAM BOGIE/TRUCK REQUIREMENTS

Chaired by Tim Borchers, Bendigo Trust

Background

Tim Borchers's engineering firm has been investigating the feasibility of manufacturing a batch of 21E trucks if there was sufficient demand. The purpose of the meeting was to gauge the likely demand and to decide on the next steps.

Progress to Date

- Originally they were all going to be of one gauge and design (for cost efficiency). However Tasmania wanted 3ft 6ins gauge and Wellington 4ft.
- Issues considered have been:
 - do we need a large production run involving overseas (American) exports
 - can they be fabricated cheaply.
 - do museum's have the purchasing power
 - overseas sales could provide export incentives (up to 70% on setting up costs).
 - practical needs
- The following are available:
 - Working diagram
 - Pattern parts list
 - Patterns
 - Foundry
 - Specialised machinery

So all is on hand to enable manufacture.
- Considered best to use a standard motor.
- The output would be a fully tested, braked and motored truck.

- Envisaged payment 50% up front, 50% on delivery.
- Cost will depend on numbers but likely to be in the range \$10,000-\$20,000. Unless large numbers are produced the cost will probably be at the high end of the range..

Museum Requirements

	<u>Wish List</u>	<u>Likely Actual Purchase</u>
THS	-	-
WTM	3*	1*
MOTAT	nil but some parts may be purchased	
Maitland	2	1
TMSV	-	-
Bendigo	1	-
Ballarat	-	-
MTPS	-	-
Adelaide	-	-
Perth	5	2
Tasmania	2	2**
 Total	 13	 6

* 4ft gauge

** not present so to be confirmed. Would be 3ft 6ins gauge

Gauging

Motors will fit within a 3ft 6in gauge truck. Regauging seems possible.

Wheels and Axles

Tim Borchers advised that it is usually better to order new wheels and axle sets from Commonwealth Steel because of their reasonable price.

Keith Kings advised that 26.5"/28" tyres will probably be available from Melbourne.

Murray Sanders (Tramway Historical Society) mentioned that they had had success with building up worn tyres but other delegates advised of possible cracking/splitting problems. Ian Stewart (MOTAT) said the process was probably okay if the tyre was thick enough.

Wheel and Axle Set Requirements

Perth	6 x 33" wheels
THS	4 sets of spoked 33"
MOTAT	30" tyres, 20" tyres
Adelaide	26" tyres

Conclusion

Mr Borchers advised that he will continue to work on the 21E trucks proposal and, as a next step, will come up with a price.