

# Measuring Logs on Trucks

Keys to Accurate & Expedient Truck Scaling

April 7, 2010

Pacific Rim Log Scaling Bureau



There are three critical factors that affect the accuracy and efficiency of truck scaling.

Properly designed and maintained scale racks

Properly manufactured and presented logs

A knowledgeable, safe, and dedicate scaler.



Properly Designed and Maintained Scale Racks



Scale racks need to be a minimum of 56'  
This rack is 66'



A drop plank at the rear of the truck provides a walk way across the rear of the load.



Each scale bay has 4 ladders, 2 on each side of the load.





Number boards on the deck, handrails, and scale shack eaves give the scaler quick reference to determine length.



If you are going to scale in the dark, adequate lighting is required.





Some racks are covered.



Properly Manufactured and Presented Logs



The truck must be loaded in a manner that allows access to each end, for proper diameter measurement.



The scaler has no access to these log ends.





Short logs covered with long logs.



The ideal load has long logs on the bunk and sides, followed by medium length logs, and short logs on the top.





Poorly loaded trucks are the primary cause of inaccurate scale.



Knowledge of the contractor and purchaser specifications help the scaler determine lengths when access is limited due to a poorly built load.



Maintaining acceptable variances between rollout and truck scaling becomes more difficult as piece count and defect increase.





Knowledgeable, Safe, and Dedicated Scaler



The scaler must know and follow all prescribed safe work practices.



The scaler follows the same process with every load. Following the same process is the scaler's key to efficient and accurate scale.





Ladders are used to access short logs on the upper portion of the load.  
2 ladders are on each side of the load.



If the load is properly loaded there is a safe cradle in which the scaler can step into to access short logs.



As the scaler proceeds through the load, notes are entered into the handheld to aid in mapping for reference on the front of the load.





To ensure logs are cut with adequate trim partial feet can be entered such as 17.5'. On the other end of the log the scaler knows 2 more inches of trim are required.



An outcome of a truck to ground comparison of well loaded trucks with 2<sup>nd</sup> growth white wood is:  
62 loads, gross volume 305,090 bf, truck defect % 2.4, rollout defect % 3.4



A comparison outcome of high piece count Western Red Cedar. 13 loads, gross volume 61,560 bf, rollout defect percent 5.8%, truck defect 5.7%, truck scale variance gross -7.12% net -7.0%. The discrepancy in the gross volume was attributed to logs buried that the scaler could not see.



## Conclusions-

1. With the proper tools it is possible to get extremely accurate scale on the truck.
  - A. Properly designed scale rack
  - B. Properly presented loads
  - C. Knowledgeable dedicated scalers
2. High piece count loads and highly defective timber can be problematic.
3. Yard costs are reduced with truck scaling.
4. Breakage from handling is reduced with truck scaling.
5. Truck stations can increase wait time for truckers.
6. In most cases rollout scale will produce a higher percentage of defect than truck scale.

At Pacific Rim Log Scaling, truck scaling comprises 40% of our volume. We operate 8 Bureau owned open stations and 5 of our customers have scale racks on site. In the last seven years the trend, in our area, is away from truck scaling.