Farm Milk Tank Exam Training

Presented by: Wisconsin Department of Agriculture, Trade and Consumer Protection

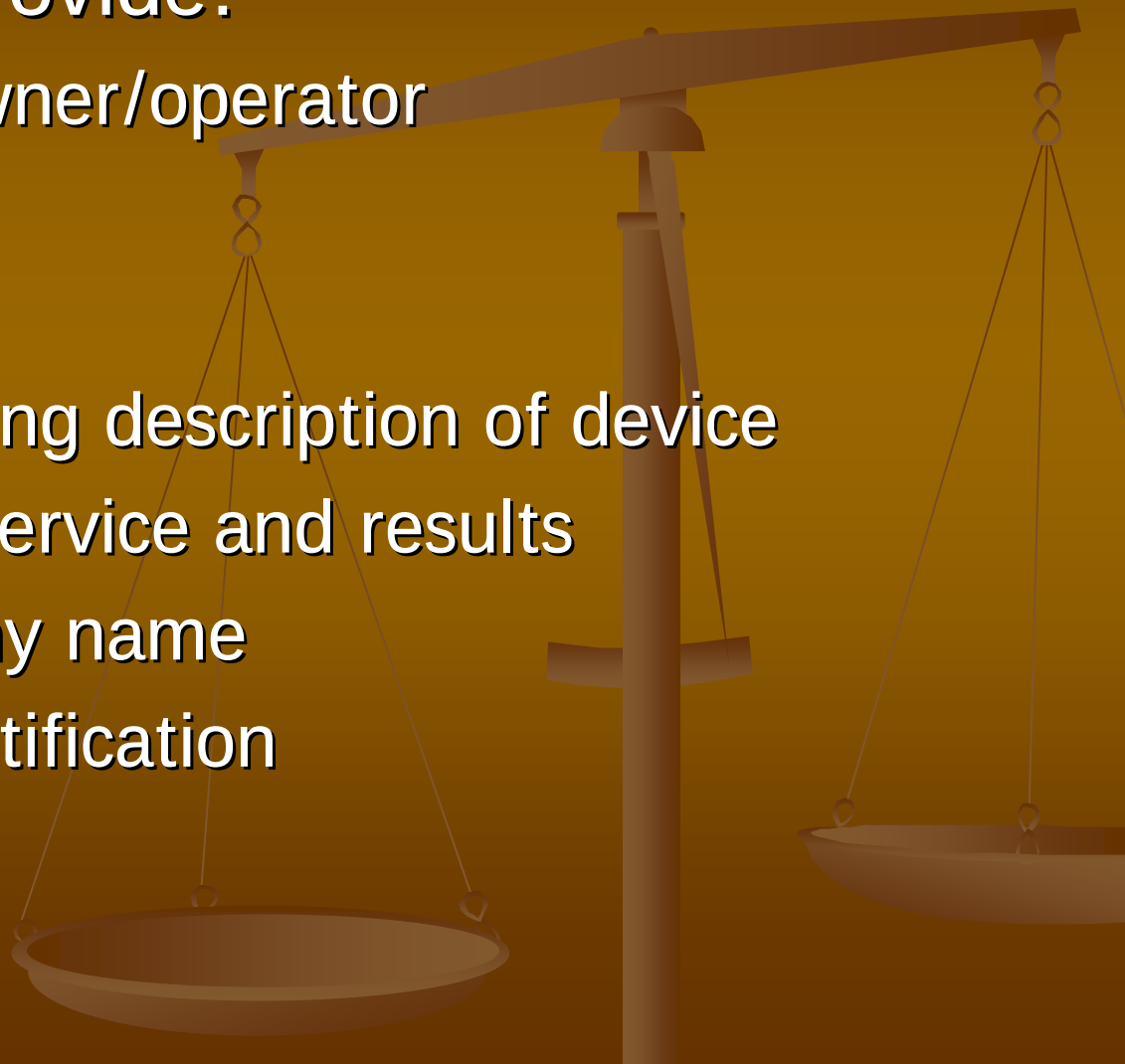
Dated: Fall 2005

Registered Technician Requirements

- Must be employed by a licensed service company
- Pass the exam with a 70% score or higher
- Maintain certification every 5 years
- Submit report within 10 days of service to owner.
- If device rejects, report is submitted to municipality or state

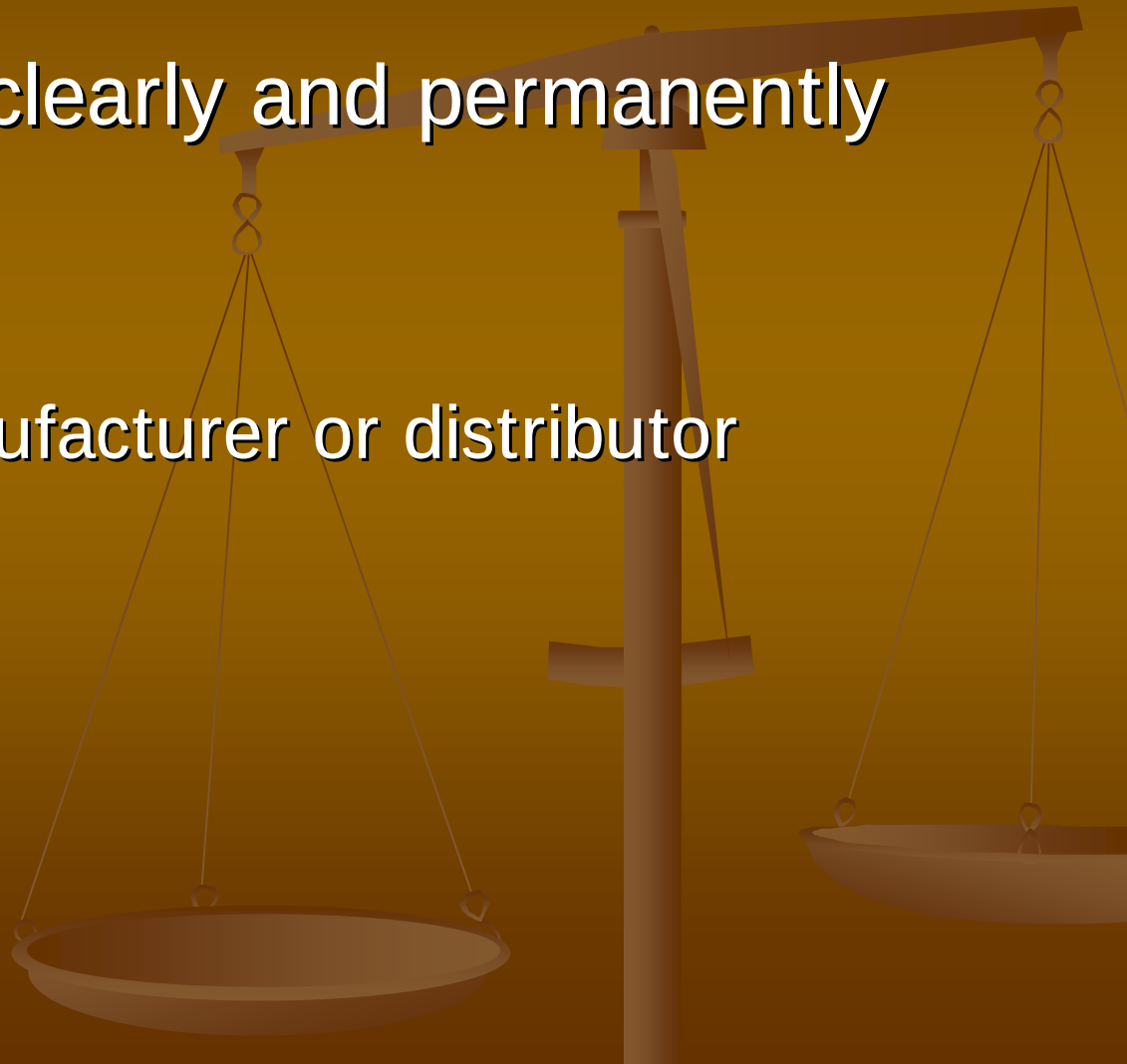
Registered Technician Requirements continued…

- Reports must provide:
  - Name of the owner/operator
  - Device location
  - Date of service
  - Unique identifying description of device
  - Description of service and results
  - Service company name
  - Technician identification



Weights and Measures Devices

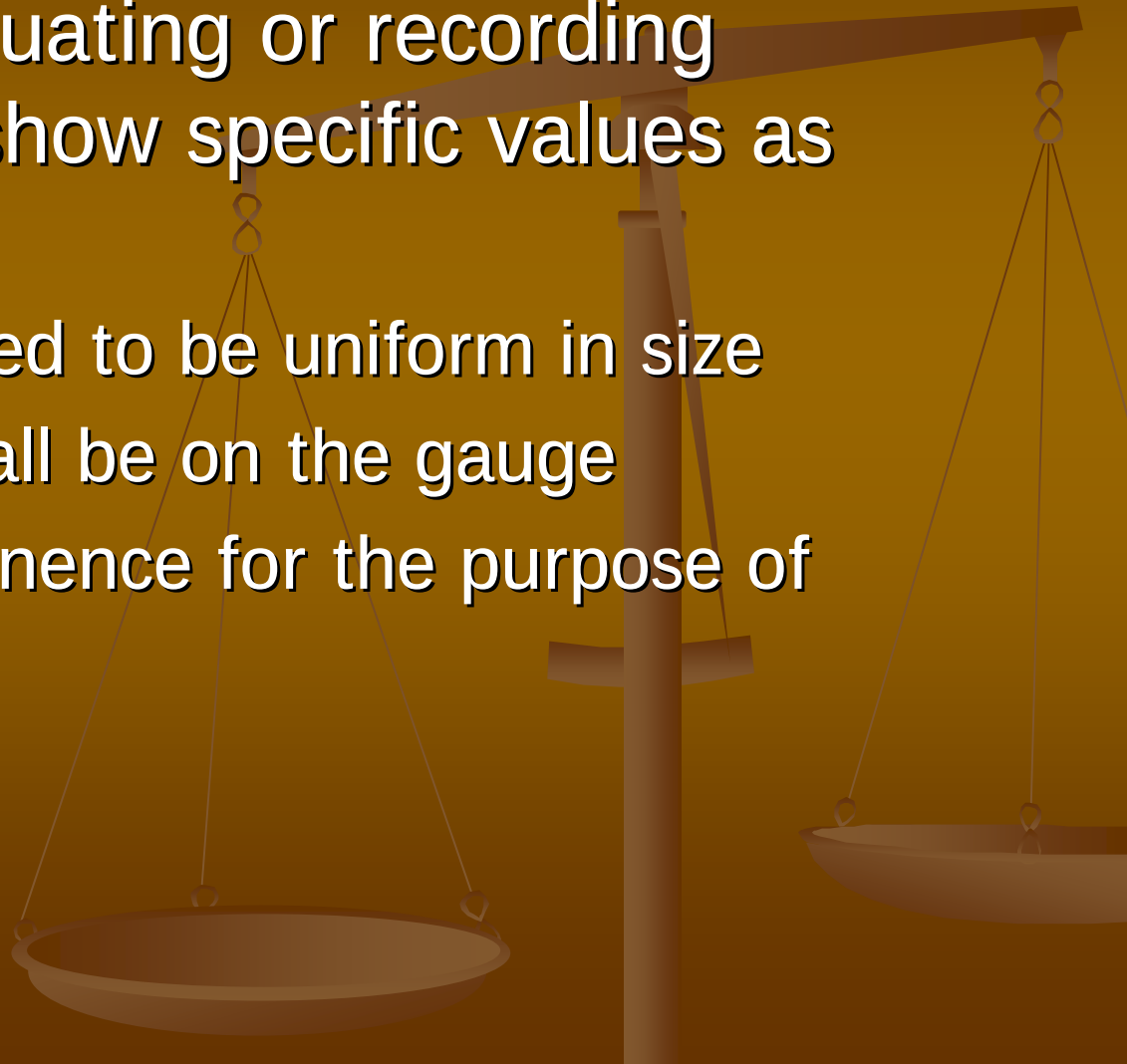
- Devices shall be clearly and permanently marked with:
  - Identifier of manufacturer or distributor
  - Model Type



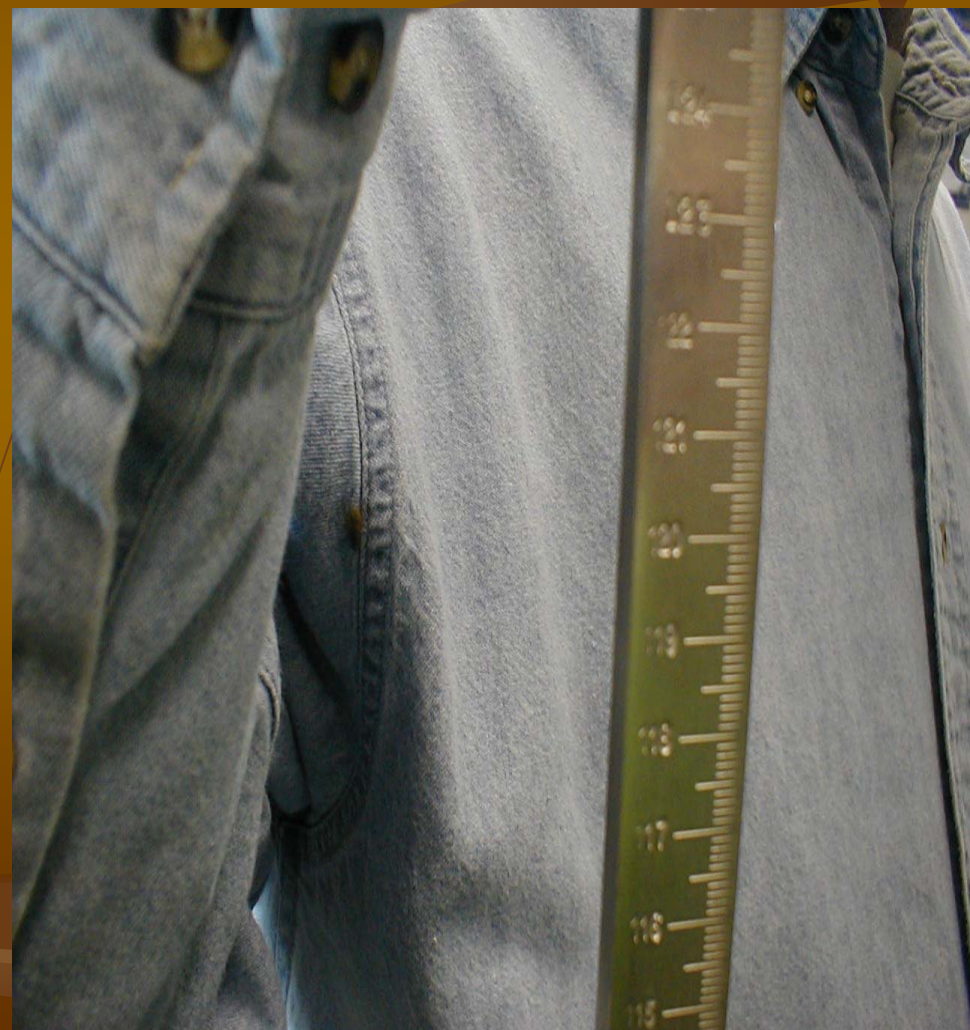
Farm Milk Tank

Weights and Measures Devices

- Indicating, graduating or recording elements shall show specific values as follows:
  - Graduations need to be uniform in size
  - Graduations shall be on the gauge
  - Maintain permanence for the purpose of legibility



Gauge Rod



Farm Milk Tank

- To be considered suitable for commercial use a farm milk tank shall be comprised of:
  - A vessel
  - A means of reading the liquid in the tank
  - A volume chart
- A tank greater than 2000 gallons shall be equipped with an external gauge unless manufactured prior to January 1, 1981

Farm Milk Tank

- A common serial number shall be displayed on the tank, gauge rod, surface gauge and volume chart
- When a tank is gauged using a liquid test measure process the walls should be wetted and the tank drained for 30 seconds after main drain flow ceases.

Insert Photo of Water Measure Process - Calibration

Milk Tank Leveling

- Level in normal operating position
- Permanently equipped with sensitive means to determine if the tank is level

- A tank with a nominal capacity of 500 gallons or more shall have
  - A two-level indicating means in opposite ends of tank

Leveling a Stationary Tank

- Removable blocks or shims under the legs of a tank are not allowed, all means to level a tank must be permanent
- When leveling lugs are provided by the manufacturer, lugs shall not be hammered or filed to establish a level condition of the tank

Example – Shims /Blocks

- Removable shims or blocks are not allowed

Gauge Rods

- Gauge rod supports or brackets shall
  - Provide substantial and rigid support elements
  - Seat itself at a fixed height in a vertical position
  - Have a clearance of at least 7.5cm(3 inches) between the graduated face of the rod and any tank wall or surface it faces

Gauge Rod or Surface Gauge

- Shall not touch the bottom of the tank unless it is required by the design of the supporting element

- Shall designate graduations in

  Inches Centimeters Fractions

  Numerical Series

Gauge Rod or Surface Gauge

- Width of graduation on a gauge rod or surface gauge shall not be less than
  - 0.12mm (0.005 in) in width
  - 0.4mm (1/64 in) between adjacent edges of successive graduations
- The spacing of graduations shall not be more than
  - 1.6mm (1/16in) and not less than 0.8mm (1/32in) center to center

Gauge Rod or Surface Gauge

- Value of graduation interval shall not exceed
  - 2 L for a tank capacity of 1000 L or less

  ½ gallon for a tank capacity of 250 gallons or less
  - 4 L for a a tank capacity of 1001 L to 2000 L

  1 gallon for a tank capacity of 251 gal to 500 gal

Acceptance Tolerances

- Basic maintenance and acceptance tolerance shall be 0.2% of the volume of test liquid in the tank at each test draft
- Tanks tested by the master meter method shall be 0.4% of the volume of test liquid in the tank at each test draft

Questions?