Procedure P017 - Calibrated Equipment Window

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MAIN PANEL > MATERIALS MANAGEMENT > APPROVED LISTS > CALIBRATED EQUIPMENT

Use the Calibrated Equipment window to add and modify date and inventory information for laboratory equipment.

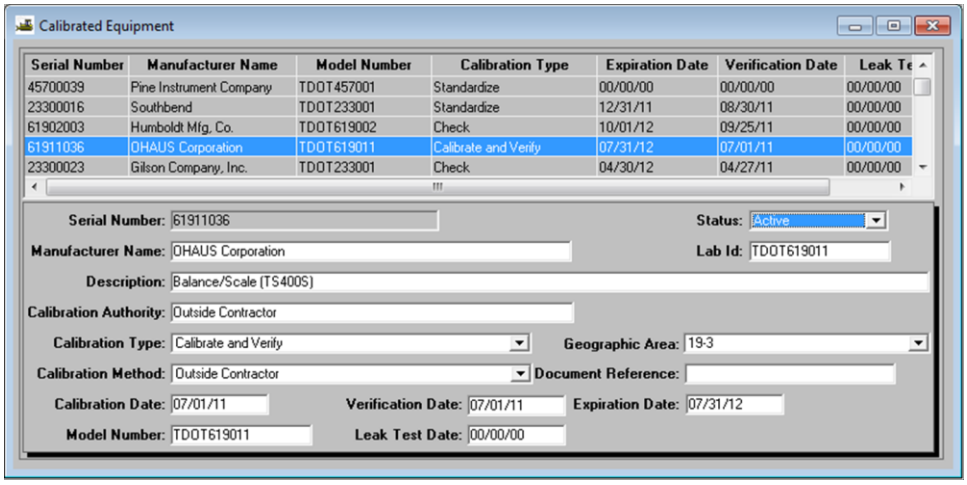

Figure 1. Procedure P017 - Calibrated Equipment Window

Field Name	Description
Serial Number	The unique identifier for the calibrated equipment. System-required. Protected after saving. In the upper pane, click the Serial Number column heading to sort records in ascending order by this number. **Usage:** Assign a serial number using the following format to each piece of equipment. Format: **RCCLLSSS**, where **R** represents the region number (**1-4**) where the lab equipment is assigned with the following exception: ▪ **6** if the equipment is assigned to Headquarters. **CC** represents the county code where the equipment is located with the following exceptions: ▪ Nuclear gauges should use the county code for the regional M&T office. **LL** represents the lab unit number for Headquarters labs with the following exceptions: ▪ **00** if a regional lab or Headquarters Field Operations. **SSS** represents a 3-digit sequence number. **Note:** Each lab must record the unique serial number on the equipment to which it is assigned. Use the following format when recording the number on the equipment: **SM-RCCLLSSS**, where '**SM-**' represents SiteManager.
Status	Indicates the status of the calibrated equipment. (U: CALBSTAT) Choices include: ▪ **Active** - Has been calibrated, checked, standardized or verified. ▪ **Inactive** - Not currently in use or is in need of repair. ▪ **Surplus** - Has been surplused. ▪ **Expired** - Requires calibration, verification, standardization or a check.
Manufacturer Name	Manufacturer of the equipment. Maximum 30-character length. In the upper pane, sort records in ascending order by this name. **Usage:** Do not use ALL CAPS unless the actual name of the manufacturer uses all caps. If the serial number was incorrectly recorded, this field should contain the word 'INVALID' instead of a manufacturer's name.

Field Name	Description
Lab ID	Identifies the testing laboratory that uses the equipment. **Usage:** Format for labs within TDOT: **TDOTRCCSSS** **R** represents the region number (**1-4**) with the following exceptions: ▪ **5** if the lab is out-of-state; ▪ **6** if the lab is a Headquarters lab; ▪ **7** if the lab is out-of-country. **CC** represents the county where the lab is located with the following exceptions: ▪ Assign nuclear gauges to county code **99**. **SSS** represents a 3-digit sequence number. **Note:** Assign nuclear gauges to the 'TDOT699001 - TDOT Field Lab.' Valid choices include: *Main Office Labs* TDOT619001 TDOT Aggregate Lab TDOT619002 TDOT Asphalt - Emulsion Lab TDOT619003 TDOT Asphalt - Liquid Lab TDOT619004 TDOT Asphalt - Mix Design Lab TDOT619005 TDOT Cement Lab TDOT619006 TDOT Chemical Lab TDOT619007 TDOT Concrete Cylinder/Core Lab TDOT619008 TDOT Physical Lab TDOT619010 TDOT Research and New Products Lab TDOT619011 TDOT Soils Lab *Regional Labs* TDOT190001 TDOT Region 1 - Johnson City TDOT147001 TDOT Region 1 - Main Lab TDOT271001 TDOT Region 2 - Cookeville TDOT233001 TDOT Region 2 - Main Lab TDOT216001 TDOT Region 2 - Tullahoma TDOT455001 TDOT Region 4 - Bethel Springs TDOT457001 TDOT Region 4 - Main Lab TDOT409001 TDOT Region 4 - Mckenzie TDOT479001 TDOT Region 4 - Memphis *Field Lab* TDOT699001 TDOT Field Lab *Contractor Lab* TDOT698001 TDOT Contractor Lab

Field Name	Description	
Description	Description of the equipment. Maximum 60-character length. **Usage:** Acceptable descriptions follow: ▪ Autoclave ▪ Analytical Balance ▪ Balance/Scale ▪ Bending Beam Rheometer ▪ Blaine Air Permeability Apparatus ▪ Breaking Head (Marshall) ▪ CBR Mold ▪ CBR Penetrating Piston ▪ Collar and Float ▪ Compaction Hammer (Marshall) ▪ Compaction Mold (Marshall) ▪ Compression Machine ▪ Conical Mold and Tamper ▪ Consultant's Equipment ▪ Contractor's Equipment ▪ Drying Oven ▪ Ductility Testing Machine ▪ Dynamic Shear Rheometer ▪ Elastic Recovery Apparatus ▪ Flash Cup ▪ Flow Table ▪ FWD ▪ Gas Flow Meter ▪ Gillmore Test Apparatus ▪ Grooving Tool ▪ Ignition Furnace ▪ L.A. Abrasion Machine ▪ Liquid Limit Device ▪ Manual Rammer ▪ Mechanical Compactor (Asphalt) ▪ Mechanical Compactor (Soil) ▪ Mechanical Mixer ▪ Mechanical Shaker (Coarse) ▪ Mechanical Shaker (Fine) ▪ Molds, Ram Heads, Mold Bottoms (Gyratory)	▪ Nuclear Gauge ▪ Pachometer ▪ Penetrometer ▪ Pressure Aging Vessel ▪ Proctor Mold (4") ▪ Proctor Mold (6") ▪ Proving Ring ▪ Pycnometer ▪ Road Profiler ▪ Rolling Thin Film Oven ▪ Rotational Viscometer ▪ Saybolt Viscometer ▪ SHRP Gyratory Compactor ▪ Skid Rig ▪ Stability and Flow Tester ▪ Standard Height Block ▪ Steel Sphere ▪ Sulfate Drying Oven ▪ Triaxial Testing Apparatus ▪ Vacuum System ▪ Vacuum/Pressure Gauge ▪ Vicat Apparatus/Ring ▪ XRF Spectrometer Record the brand or series and model number of the equipment in parentheses ( ) after the description. ▪ If a state tag is attached to the equipment, record the state tag number exactly as it appears on the equipment and precede it with '**TAG**.' ▪ If no state tag is present, record the manufacturer's model number or manufacturer's serial number exactly as it appears on the equipment. ▪ If neither number is available, record '**--**' instead to indicate that no number is present.

Field Name	Description
Calibration Authority	Pertains to the official body responsible for calibrating, verifying, or checking the equipment. **Usage:** Type the appropriate choice from the following list. Choices include: ▪ **Internal** ▪ **Outside Contractor**
Calibration Type	Identifies the kind of calibration. In the upper pane, sort records in ascending order by this information. (U: CALBTYP) **Usage:** Select the appropriate choice from the following list. Choices include: ▪ **Check** - Select when you confirm measurements of laboratory equipment against specifications. ▪ **Standardize** - Select when you can alter the final settings of laboratory equipment (for example, the temperature for a drying oven or the drop of a compaction hammer). ▪ **Calibrate and Verify** - Select when a calibration is performed and when you subsequently confirm laboratory equipment against a standard.
Geographic Area	Physical location of the lab equipment. **Usage:** Identifies the region and/or county where the equipment is located.
Calibration Method	Method of calibration. (U: CALBMETH) **Usage:** Select the method by which the equipment is calibrated, checked or standardized.
Document Reference	**Usage:** TDOT does not use.
Calibration Date	Identifies the date the equipment was last calibrated or the date the equipment was placed in service. Format: **MM/DD/YY** **Usage:** Populate this date for every record. This date should not be a date in the future. ▪ For re-calibration, record the original calibration date and subsequent recalibrations in the ***Remarks*** field. o Format: Originally Calibrated: MM/DD/YYYY Re-calibrated: MM/DD/YYYY ▪ If the record displays **Calibrate and Verify** in the **Calibration Type** field, record the date the equipment was calibrated. ▪ If the record displays **Check** or **Standardize** in the **Calibration Type** field, record the date the equipment was placed in service. If the placed-in-service date is unknown, use **10/01/90**.

Field Name	Description
Expiration Date	Final day of the valid equipment calibration, verification, check or standardization. In the upper pane, sort records in ascending order by this date. Format: **MM/DD/YY** Note: The latest date for an expiration is **12/31/49**. **Usage:** Required by policy for every record. Date should be the end of the month for the duration as set for piece of equipment.
Leak Test Date	**Usage:** A custom field added to window [Customization: MTC030]. Populate the actual date the leak test was performed for nuclear gauges only. This date should not be a future date. If no leak test is needed, type a **0**. Format: **MM/DD/YY**
Verification Date	**Usage:** A custom field added to window [Customization: MTC030]. Record the actual date the check, verification or standardization was performed. This date should not be a future date. If no verification is needed, type a **0**. Format: **MM/DD/YY**
Model Number	In the upper pane, sort records in ascending order by this number. **Usage:** TDOT re-purposed the Model Number field to identify the Lab ID. Doing so facilitates a search by Lab ID in the top portion of the window. Copy and paste the Lab ID into the Model Number field.
Remarks (General Remarks)	**Usage:** Record the original calibration date and re-calibration history when re-calibration is needed. Format: Originally Calibrated: MM/DD/YYYY Re-calibrated: MM/DD/YYYY

Table 1. Procedure P017 - Calibrated Equipment Window - Fields

Procedure

The Calibrated Equipment window is maintained by the REG – M&T Supervisor and Lab Supervisor security groups.

Equipment should be entered in the Calibrated Equipment window to track dates relating to calibration, expiration, verification, and leak tests of TDOT equipment.

Do not use SiteManager to track the following equipment:

- Cube Mold
- Brass Rings and Assembly

Note: SiteManager does not store calibration results.

Related Reports

Run as needed. All information updates dynamically from the SiteManager database.

- Lab Equipment [Report: RR011]

Step-by-Step Instruction

To assign a new serial number:

1. In the upper pane, click the **Serial Number** column heading.
2. In the list, now sorted in ascending order, locate the last record for the **RCCLL** (see *Serial Number* in table of field definitions).
3. Increment the **SSS** by **1**.

To sort list by equipment located in a region:

1. In the upper pane, click the **Serial Number** column heading.

To sort list by equipment assigned to a lab:

1. In the upper pane, click the **Model Number** column heading.

To record the original calibration date or the re-calibration history when re-calibration is needed:

1. While on the desired record, on the toolbar, click the **Remarks** button.
2. In the **Remarks (General Remarks)** field, type the appropriate label for the date and the original calibration date or the re-calibration date.
3. To close the Remarks window, on the toolbar, click the **Remarks** button again.
4. **Save**.

To mark a record as invalid if a user creates and saves an incorrect serial number:

1. In the **Status** dropdown list, select **Inactive**.

2. In the **Manufacturer Name** field, type **INVALID** in all caps.

3. In the **Lab ID** field, delete all text to prevent the equipment from showing on material test templates.

4. For the **Description**, **Calibration Authority**, and **Model Number** fields, delete all text.

5. For the **Calibration Date**, **Verification Date**, and **Leak Test Date** fields, type **000000**.

6. On the toolbar, click the **Save** button.

To note use of consultant's equipment on a material test template:

1. On the material test template, in the **Equipment** dropdown list, select **88888888 – Consultant's Equipment**.

To note use of contractor's equipment on a material test template:

1. On the material test template, in the **Equipment** dropdown list, select **99999999 – Contractor's Equipment**.