Maintenance Quality System Database: User Tutorial

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Racing Surfaces Testing Laboratory

What is the Maintenance Quality System (MQS)?

- The MQS is a database with a user-interface that allows racetrack maintenance crews to document what they do to their tracks on a daily basis
  - Including: **maintenance** routines, **moisture**, **cushion-depth** , and **penetration-depth** measurements
- Ability to see trends in the track over time from the data entered

- Secure access to users with personal logins, and the ability to view all tracks they are associated with from the same account

- Customizable equipment names

- Ability to download all data entered, plus weather data, for any period of time into a simple .csv file

- Can be accessed anywhere with an internet connection

Creating Your Account

1. Contact RSTL with your e-mail address and Racetrack(s) that you wish to interact with

2. Once and administrator (someone with RSTL) creates your account, check your inbox for a verification e-mail

3. Follow the link in that e-mail to create your password

Tips & Tricks:
- Always check your spam/junk folder for the verification e-mail if you cannot find it in your traditional inbox

- The link in the verification e-mail **will expire after 24 hours!** Contact RSTL for a new one to be sent if you need to

Logging in

1. Go to:
   https://www.racingsurfaces.net
   and login with your e-mail address
   and newly created password

   Tips & Tricks:

   - You have to include *both* **https:// AND www.** for the URL to work
   - Your **e-mail address is case sensitive** when logging in
   - Save URL to Favorites for easy access

Dashboard

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Menu:
- Dashboard
- Site List
- Data Summary
- View Definitions
- Pole Maintenance

WEATHER
- Tabular/Summary

7 Day Forecast — Weather Maps — Current Weather

Partly Cloudy
Temp: 57.05°
Wind: 12.25 mph

	Today	Fri	Sat	Sun	Mon	Tue	Wed	Thu
High	57.61°	67.57°	72.07°	74.03°	74.59°	75.41°	66.09°	63.38°
Low	34.38°	43.48°	47.74°	44.97°	47.43°	60.79°	38.88°	43.8°

Main Track | Turf Track | Training Track

- This is your menu, the row highlighted in green is the selected screen
- Click on the three bars to close the menu bar, click again to re-open menu

- Choose which track is displayed on the remainder of the dashboard
- The selected track is highlighted in the darker color

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Dashboard

- **Today's Racing Card**: a pdf of your racing card
- **Training Time:** shows a graph of training times per day; separated by workout lengths (furlongs)
- **Training Pace:** shows a box-and-whisker plot of training paces over time

Main Track - Maintenance And Test Reports (as of Thursday, October 20, 2022)

RACING / TRAINING

Today's Racing Card   Training Time   Training Pace

ACTION

Maintenance Report   Maintenance Data Entry   Maintenance Manual

- **Maintenance Report:** search for past maintenance entries AND/OR add a new one
- **Maintenance Data Entry:** start a maintenance data entry for the selected track on the current day
- **Maintenance Manual:** pulls up a pdf, *if* RSTL made a manual for your track

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Graphs/Maps on Dashboard

- Choose a date and time to view past maps/graphs

Tips & Tricks:
- For moisture measurements, choose "Volumetric" (same units the TDR readings are in)
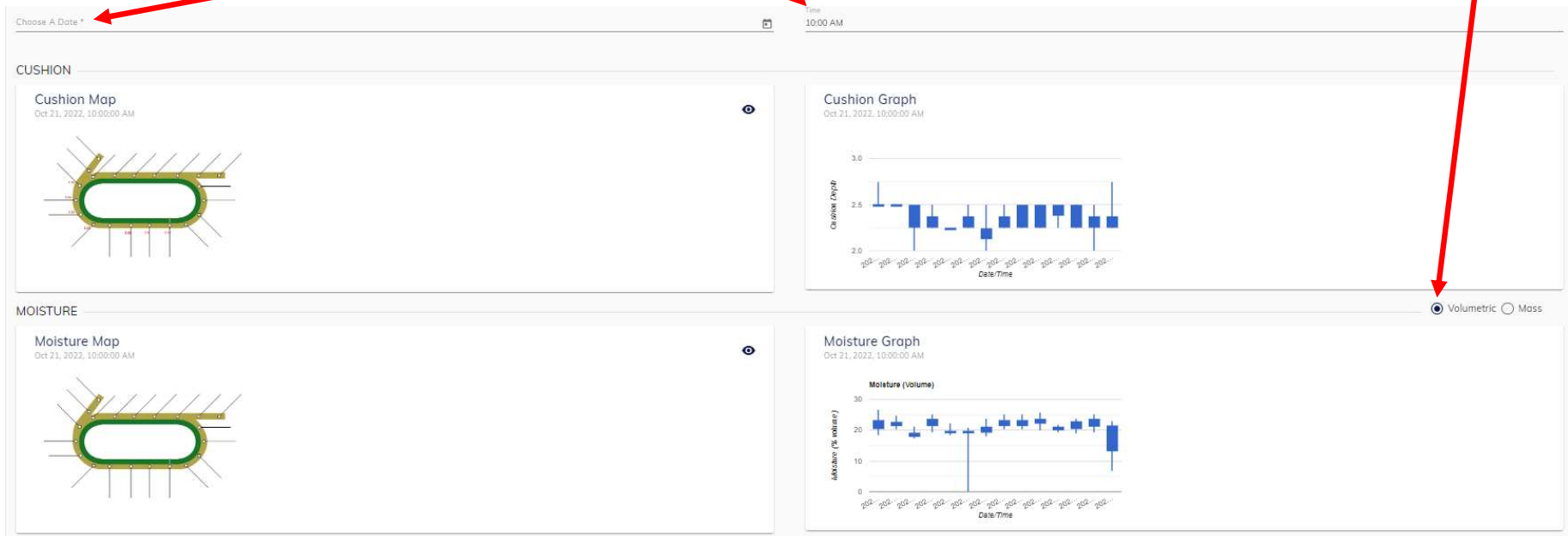
- The most recent date with data for either moisture or cushion will be the default date shown on maps
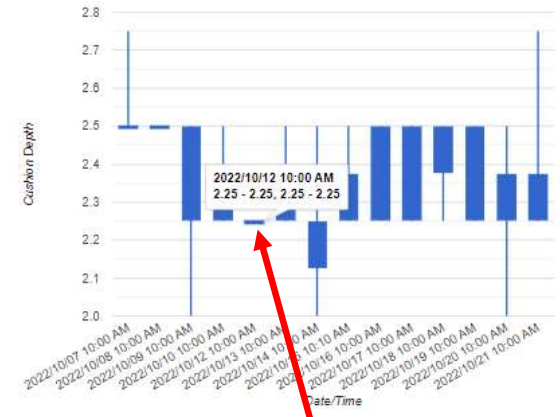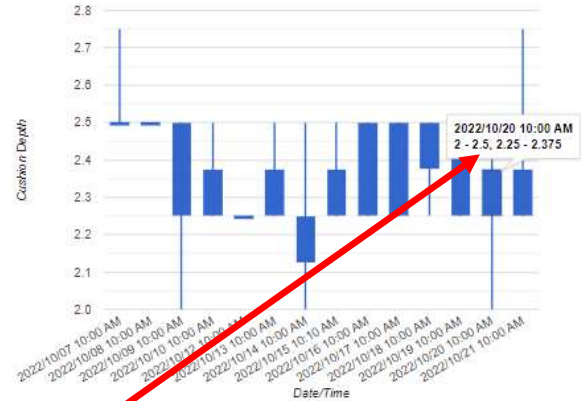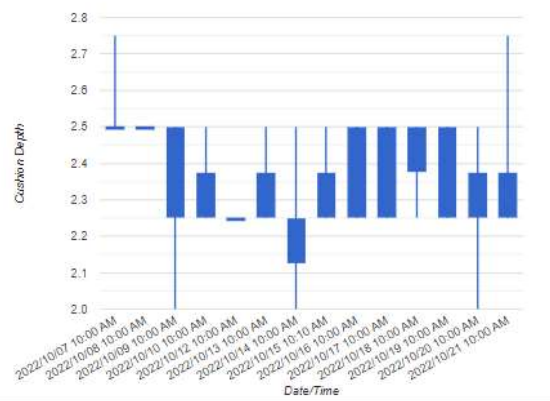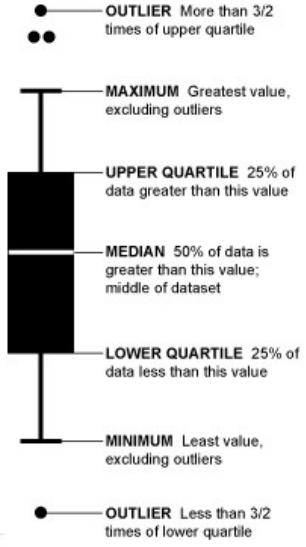 - Example: Oct. 21st, 2022

- Box-and-Whisker plots show the last two weeks of measurements.
  - *Learn to read these plots on the next page*

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Reading Box-and-Whisker Plots

Tips & Tricks:
- Hover over a box to see the date, time, and details of the data

- Box-and-Whisker plots show the last two weeks of measurements.
  - Box = majority of the data falls in this range
  - Upper whisker = maximum
  - Lower Whisker = minimum

OUTLIER More than 3/2 times of upper quartile

MAXIMUM Greatest value, excluding outliers

UPPER QUARTILE 25% of data greater than this value

MEDIAN 50% of data is greater than this value; middle of dataset

LOWER QUARTILE 25% of data less than this value

MINIMUM Least value, excluding outliers

OUTLIER Less than 3/2 times of lower quartile

2022/10/20 10:00 AM
2 - 2.5, 2.25 - 2.375

2022/10/12 10:00 AM
2.25 - 2.25, 2.25 - 2.25

- 2 - 2.5 : Total range of all values, from minimum to maximum
- 2.25 - 2.375 : Range of box, 50% of data lies between the values of 2.25 and 2.375

- A box may not have whiskers if the data range does differ enough
  - Example: If the only value entered is 2.25, that is where the value of the box, and the whiskers, will be

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Entering Daily Maintenance

1. Select which track you are entering maintenance data for

2. Click "Add"

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Maintenance Records

Select A Track *
Main Track

Choose A Date *
12/21/2022

Search   Add

Date	Total # of Events	Race / Dark	Training?	Breaks	Comment	Action
			No Data			

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Tips & Tricks:
- To <u>search for past records</u>:
  1. Choose the track
  2. Choose the date (click on calendar button)
  3. Click "Search"

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Entering Daily Maintenance

1. Select date

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Maintenance Record : Main Track (Dirt)

Back

Select Date *
12/21/2022

Copy Data From

Apply

Race Day

Training Breaks

Leave A Comment

Races

Clear

Save

2. Fill in the respective information
- <u>Race Day</u>: enter the day number of the race meet, *do not fill in if it is a dark day* (dark: no races)
- <u>Races</u>: # of races ran that day, *do not fill in if it is a dark day*
- Enter # of <u>Training Breaks</u> for Maintenance

3. Leave a comment for the day if needed

4. Click "Save"

Entering Daily Maintenance

Examples:

- If "Conditioner" is chosen for equipment, the boxes, "Water x 1000 gallons", and "Yards sand Added" do not apply and cannot be filled.

- If "Water Truck" is chosen, the boxes, "Depth", and "Yards Sand Added" do not apply and cannot be filled.

5. Fill out each row, starting with "Event".

Depending on the equipment chosen, the successive boxes will be either fillable or not.

Tips & Tricks:
- Click on the "Yes" button in the left column to copy the entire previous row.
- You may edit singular columns instead of choosing everything again.

6. Click "Update" to save the daily info above the table if you have changed/made edits to it.

7. Click "Save Table" frequently and again once all rows are completed.

Entering Daily Maintenance

Tips & Tricks:
- For days that have similar maintenance routines, you can use the "**Copy Data From**" function
  - Will copy **all data** from a past record
  - You can **edit daily differences** (i.e. race day, races, etc.) and differences in the table rows

Click "Update Table" to save the table when finished editing

Entering Daily Moisture

MAINTENANCE

- Maintenance
- Cushion
- Moisture
- Going Stick
- Horse Ambulance

Moisture Maintenance

Select A Track *

Choose A Start Date *

Choose An End Date *

Search   Import   Add

Date	Data Points	Comments	Detail Report	Summary Report	Action

No Data

0 of 0

Tips & Tricks:
- To search for past records:
  1. Select Track
  2. Choose the date range (click on calendar buttons)
  3. Click "Search"

1. Click "Add"

Entering Daily Moisture

1. Choose the Track, Date, and Time the moisture measurements were taken, then click "Save"
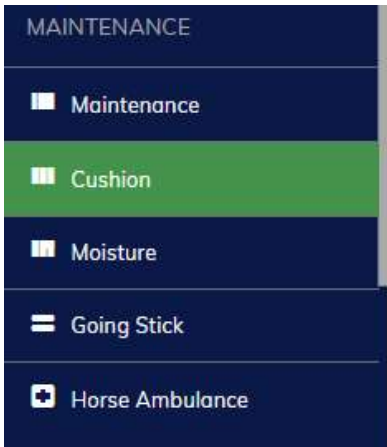
2. Choose the location, and type in the Volumetric Moisture reading (from TDR), then click "Save"

Tips & Tricks:
- "Mass Moisture" will fill in automatically – it is calculated from the volumetric moisture

Entering Daily Cushion-Depth

Tips & Tricks:
- To search for past records:
  1. Select Track
  2. Choose the date range (click on calendar buttons)
  3. Click "Search"

1. Click "Add"

Entering Daily Cushion-Depth

1. Choose the Track, Date, and Time the moisture measurements were taken, then click "Save"

Cushion Maintenance

Back

Track
Main Track

Date *
10/28/2022

Time *
10:00 AM

Comment

Save

Location	Cushion Depth Measurement	Action
	No Data	

0 of 0

Location *
Wire 5'

2.25
2.5
2.75
3
3.25
3.5

2. Choose the location, and choose the cushion and/or penetration depth, then

Tips & Tricks:
- Measurements are listed from 1 to 5 inches, at ¼ inch increments

Entering Daily Cushion-Depth

Location	Cushion Depth Measurement	Action
Wire 5'	3	✏️ 🗑️

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Location *
Wire 15'

Cushion Depth Measurement *
3

[Clear] [Add] [Update]

3. Click "Add" to save that measurement into the table

Exporting Data to a Spreadsheet

REPORTS

- Surface Test
- Monthly
- Maintenance
- Weather
- Cushion
- Moisture
- Going Stick
- Ambulance

1. Choose the type of data you wish to export

Export Moisture Data to Excel

Start Date *
10/1/2022

End Date *
10/28/2022

Track Name *
Main Track

Download

2. Choose the start and end dates, and which track you want to download that data for

3. Press "Download"