

MacLean's *Real Time Design* Helical Recommendation Software Walkthrough

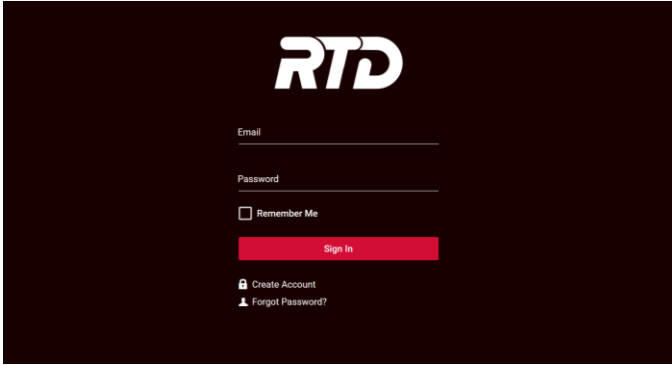
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Should you encounter any errors or issues when using RTD, please contact your local MCP distributor or email civil-csr@macleangepower.com for support.

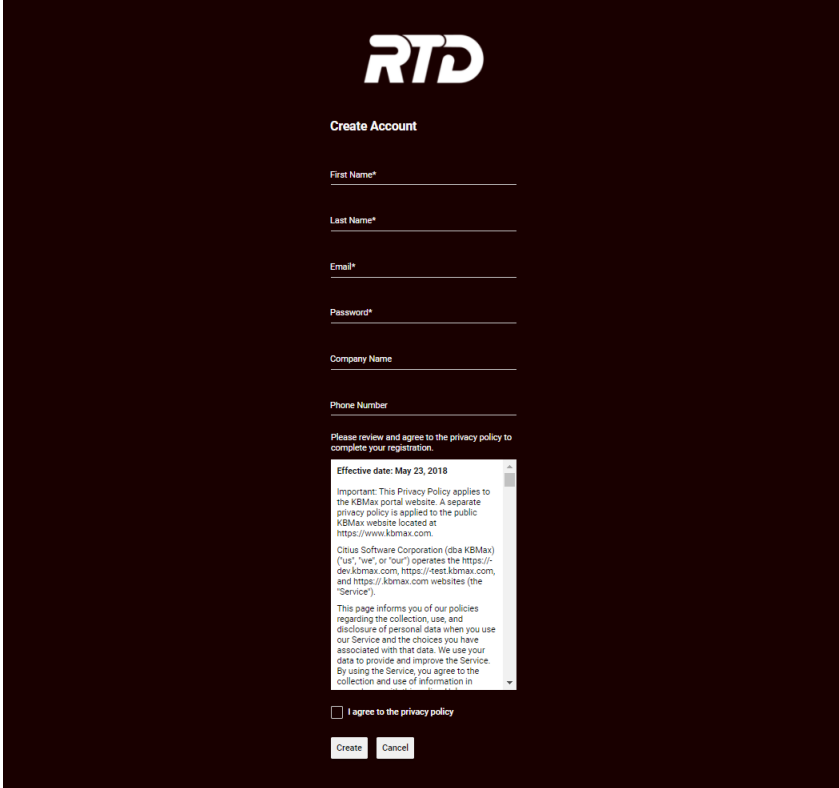
1. Signing up for an account – skip to section 2 if you already have an active account

It is recommended that you use Google Chrome to run this software on your computer or mobile device. Visit maclean.kbmax.com and click on Create Account.



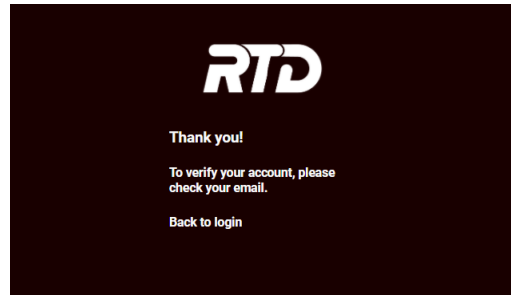
The image shows the RTD Sign In page. At the top center is the RTD logo. Below it are two input fields for Email and Password. There is a checkbox for Remember Me. A red button labeled Sign In is positioned below the password field. At the bottom, there are links for Create Account and Forgot Password?

Fill in the required fields and enter a password that is at least 7 characters long, contains at least one uppercase letter, and one number.

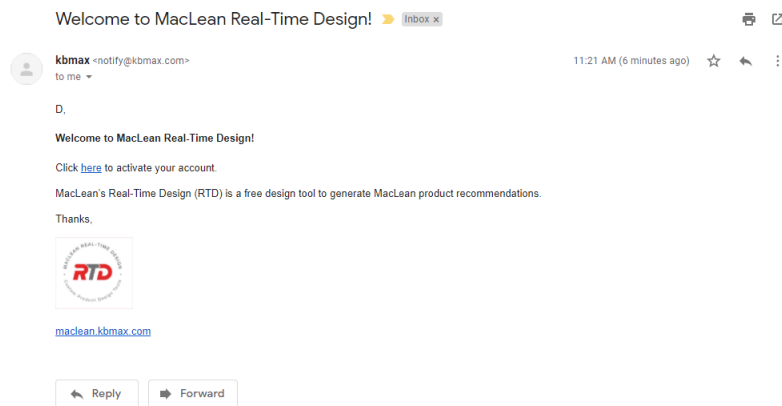


The image shows the RTD Create Account page. At the top center is the RTD logo. Below it is the heading Create Account. There are several input fields: First Name*, Last Name*, Email*, Password*, Company Name, and Phone Number. Below the fields is a section for the privacy policy, which includes the text: "Please review and agree to the privacy policy to complete your registration." and "Effective date: May 23, 2018". There is a checkbox for I agree to the privacy policy. At the bottom are buttons for Create and Cancel.

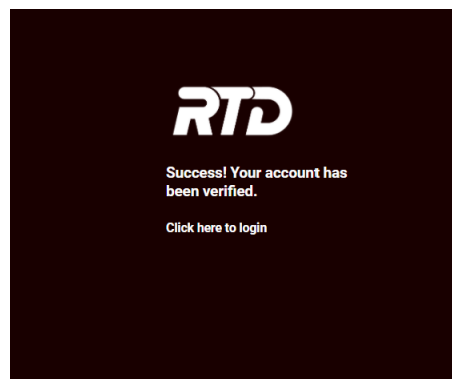
You will then be sent an email to verify your account and complete the sign-up process.



The email you receive will look like this:



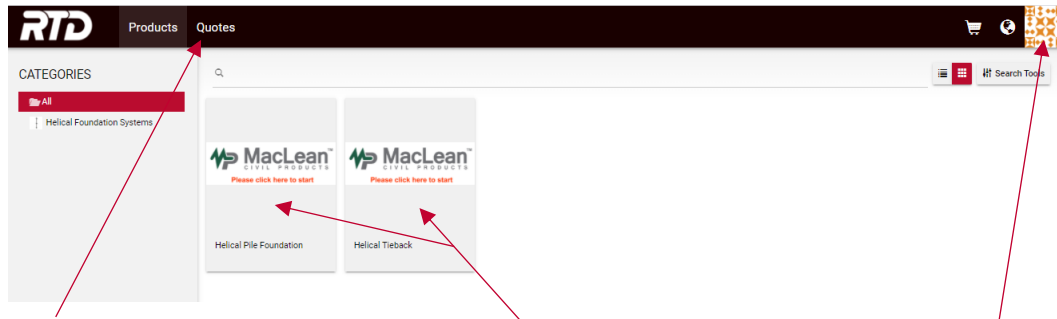
Following the link in the email will lead you to the following screen:



At this point, a member of MPS will review your user request and place you in the appropriate user group.

2. Navigating the home screen

Once you have created your account and been added as a helical products user, you will be greeted by the below Products page upon logging in. This page acts as the home screen where you can create new helical pile foundation and tieback configurations, view previously configured project documents, and access your profile page.



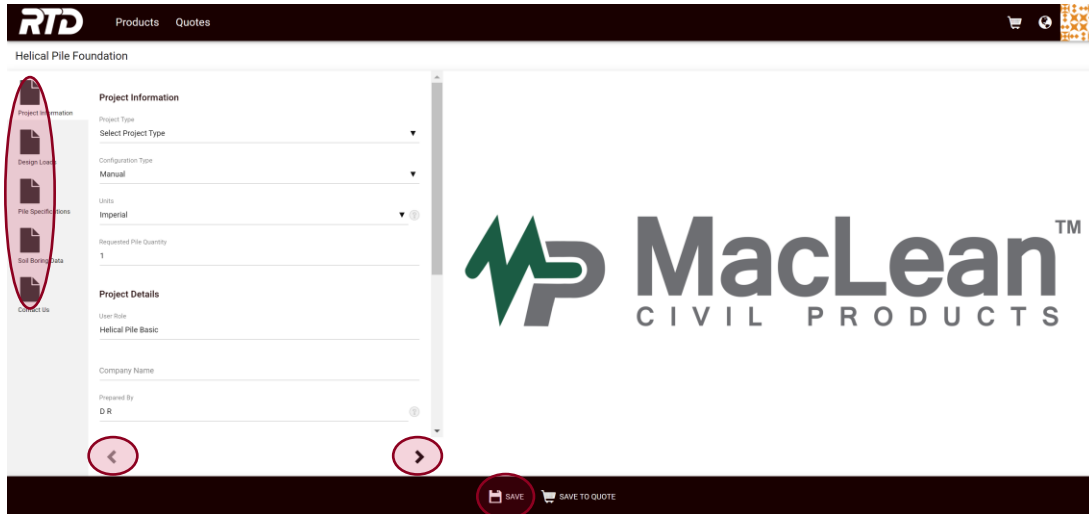
Click on Quotes to view and edit previously configured products, access calculation summaries and other output documents.

Click on these buttons to create a new helical pile foundation or tieback configuration.

Clicking on the icon in the upper right corner gives access your profile where you can update your contact information. You will not be billed through RTD for any of your configurations.

3. Configuring a helical product recommendation

On the home screen, select either Helical Pile Foundation or Helical Tieback to access the appropriate configuration type.



The screenshot shows the 'Helical Pile Foundation' configuration screen. The interface includes a top navigation bar with 'RTD', 'Products', and 'Quotes' tabs. A left sidebar contains icons for 'Project Information', 'Design Loads', 'Pile Specifications', and 'Soil Boring Data'. The main content area is titled 'Project Information' and contains the following fields:

- Project Type: Select Project Type (dropdown menu)
- Configuration Type: Manual (dropdown menu)
- Units: Imperial (dropdown menu)
- Requested Pile Quantity: 1
- Project Details: User Role: Helical Pile Basic
- Company Name: (text input field)
- Prepared By: DR (text input field)

At the bottom of the screen, there are navigation arrows and two buttons: 'SAVE' and 'SAVE TO QUOTE'.

You will be taken to the Project Information page where you can begin to input populate each field and build your helical product recommendation. Pages can be navigated to by clicking on the arrows on the bottom of the screen or by clicking on the page icons on the left banner. It is recommended to navigate to each page in the order presented. Please note that the Tieback module will have different inputs and page labels than the Pile module.

Configurations can be saved at any point by clicking on the SAVE icon on the lower banner and returned to later under the Quotes tab. We'll touch on the SAVE TO QUOTE button later.

Each page may contain one or multiple required fields. If one of these fields is left blank, an error notification will appear letting you know to go back and fix it.

RTD Products Quotes

Helical Pile Foundation

Project Information

Project Type
 Select Project Type ❗
Please Select a Project Type

Configuration Type
 Manual

Units
 Imperial

Configurations can be ran in Manual or Automatic states:

Manual - you select the helix configuration and depth

Automatic - the computer runs through multiple calculation iterations to determine the fewest and smallest diameter helices and shallowest depth to meet the entered loading requirements.

Once you have progressed through each page and entered sufficient information, a new page titled Pile Calculation Results will appear on the left banner.

RTD Products Quotes

Helical Pile Foundation

Soil Boring Information

Bore Hole Number
B-1

Number of Soil Layers
8

Depth to Groundwater Below Surface (ft)
10

Soil Layer Data

Layer	Soil Type	End Depth (ft)	SPT N	Unit Weight (lb/ft ³) [calculated]	Unit Weight (lb/ft ³) [override]	Friction Angle [calculated]	Friction Angle [override]	Cohesion (lb/ft ²) [calculated]	Cohesion (lb/ft ²) [override]
Layer 1	Sand	2	6	94.94	0	28.85	0	0	0
Layer 2	Clay	4	4	98.53	0	0	0	500	0
Layer 3	Clay	6	7	101.24	0	0	0	875	0
Layer 4	Sand	10	9	97.47	0	29.79	0	0	0

This page summarizes the pile's depth and helix configuration as well as its geotechnical capacity. Should one or more of the design results be listed as FAIL, please review and update the Design Loads and Pile Specifications as needed.

RTD
Products Quotes

Helical Pile P28 X 20 ft

Project Information

Design Loads

Pile Specifications

Soil Boring Data

Pile Calculation Results

Contact Us

Manual Configuration Results
Pile design meets design load requirements.

Pile Selection Results

Pile Shaft Selection
P28

Pile Diameter (in)
2.88

Pile Design Depth (ft)
20.0

Pile Design Results

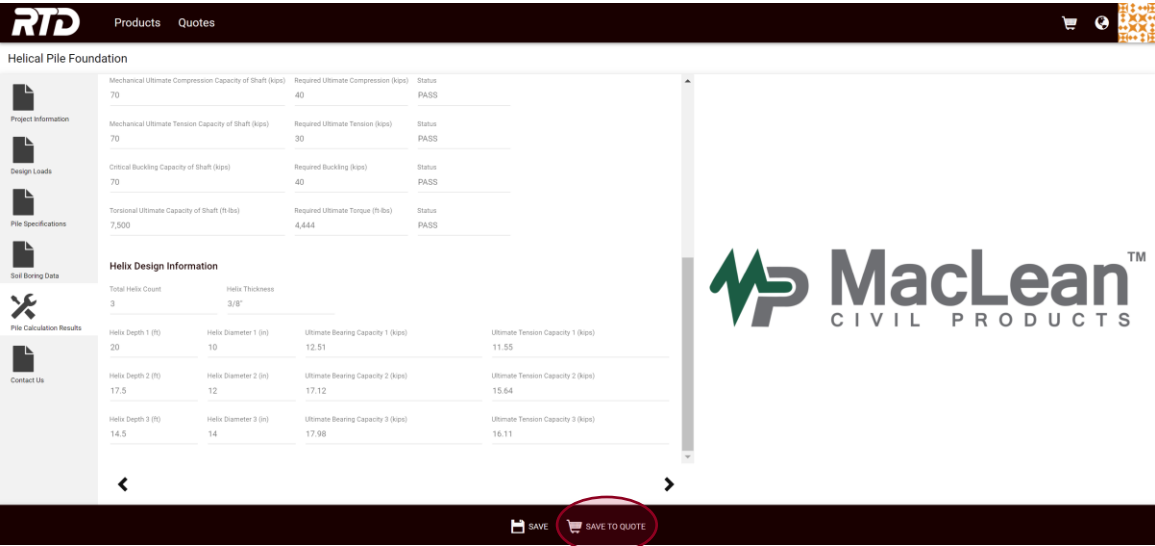
Geotechnical Ultimate Bearing Capacity (kips)	Required Ultimate Bearing (kips)	Status
47.61	40	PASS
Geotechnical Ultimate Tension Capacity (kips)	Required Ultimate Tension (kips)	Status
43.3	30	PASS
Mechanical Ultimate Compression Capacity of Shaft (kips)	Required Ultimate Compression (kips)	Status
70	40	PASS
Mechanical Ultimate Tension Capacity of Shaft (kips)	Required Ultimate Tension (kips)	Status
70	30	PASS
Critical Buckling Capacity of Shaft (kips)	Required Buckling (kips)	Status
70	40	PASS
Torsional Ultimate Capacity of Shaft (ft-lbs)	Required Ultimate Torque (ft-lbs)	Status
7,500	4,444	PASS

Helix Design Information

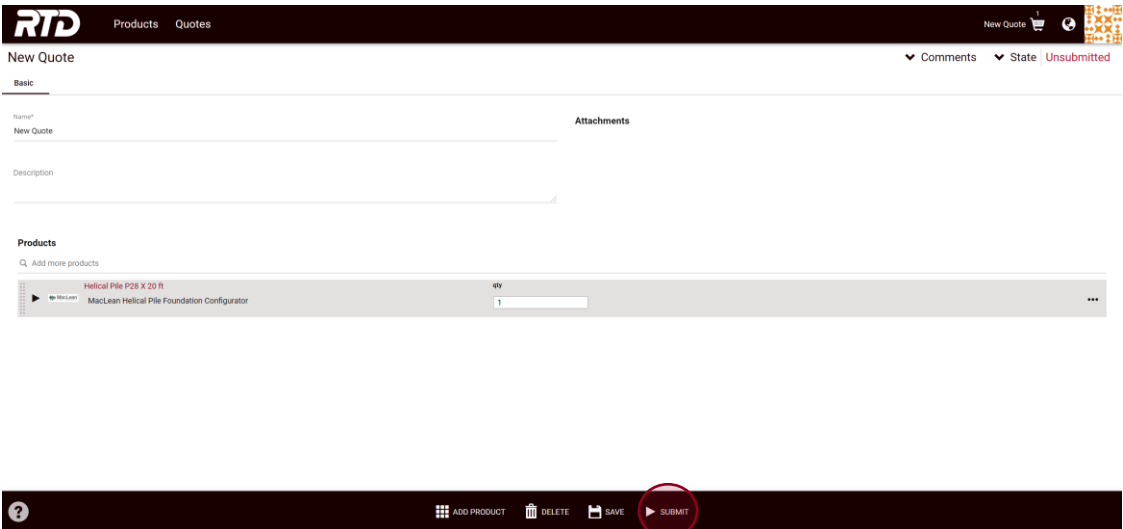
Total Helix Count	Helix Thickness		
3	3/8"		
Helix Depth 1 (ft)	Helix Diameter 1 (in)	Ultimate Bearing Capacity 1 (kips)	Ultimate Tension Capacity 1 (kips)
20	10	12.51	11.55
Helix Depth 2 (ft)	Helix Diameter 2 (in)	Ultimate Bearing Capacity 2 (kips)	Ultimate Tension Capacity 2 (kips)
17.5	12	17.12	15.64
Helix Depth 3 (ft)	Helix Diameter 3 (in)	Ultimate Bearing Capacity 3 (kips)	Ultimate Tension Capacity 3 (kips)
14.5	14	17.98	16.11

4. Viewing your configuration results

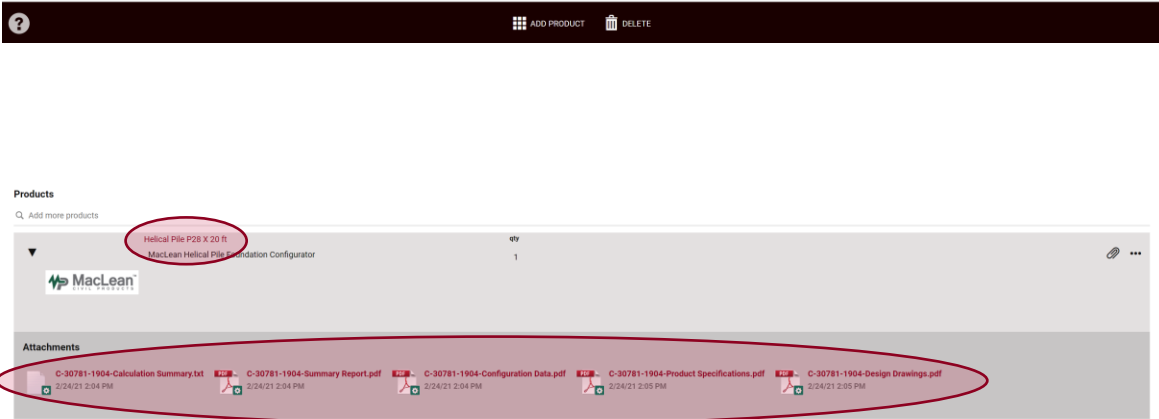
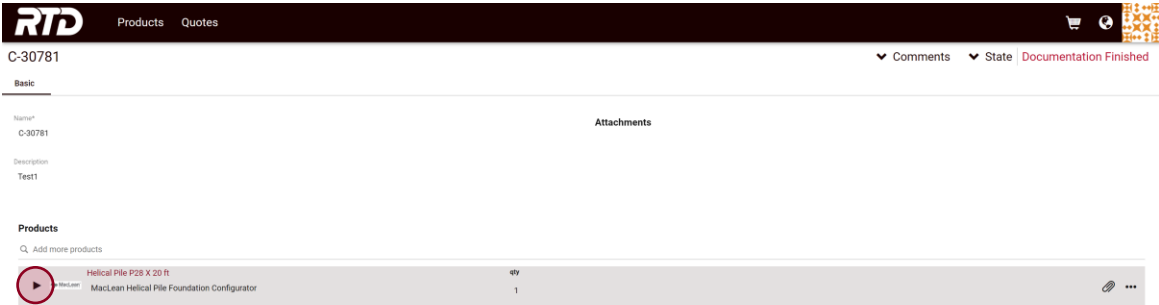
Once you are satisfied with your helical configuration shown on the Calculation Results page, click on the SAVE TO QUOTE button on the lower black banner.



This will direct you to a new page as well as save your configuration. On this new screen, click SUBMIT on the lower black banner and the output documents, including a summary of the depth, geotechnical calculation results, and product catalog number information, will be created. These documents can then be used in your helical pile/tieback project submittal.



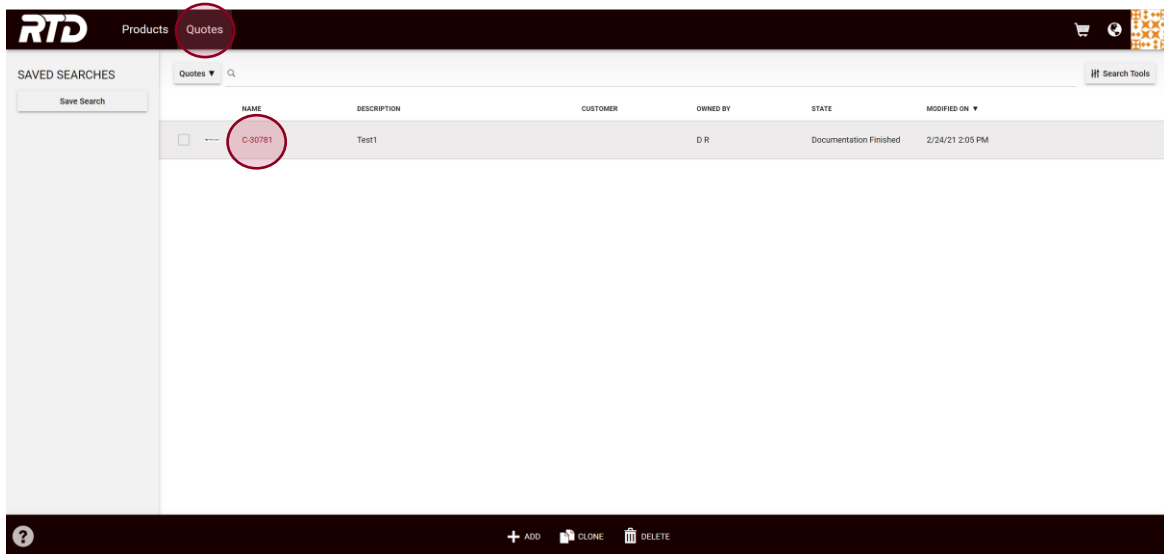
To view and download these documents, click on the drop-down triangle in the middle gray banner.



The description of the product that you have configured, Helical Pile P28 X 20 ft in this case, is a link that will bring you back to the Project Information page and allow you to make changes to your configuration.

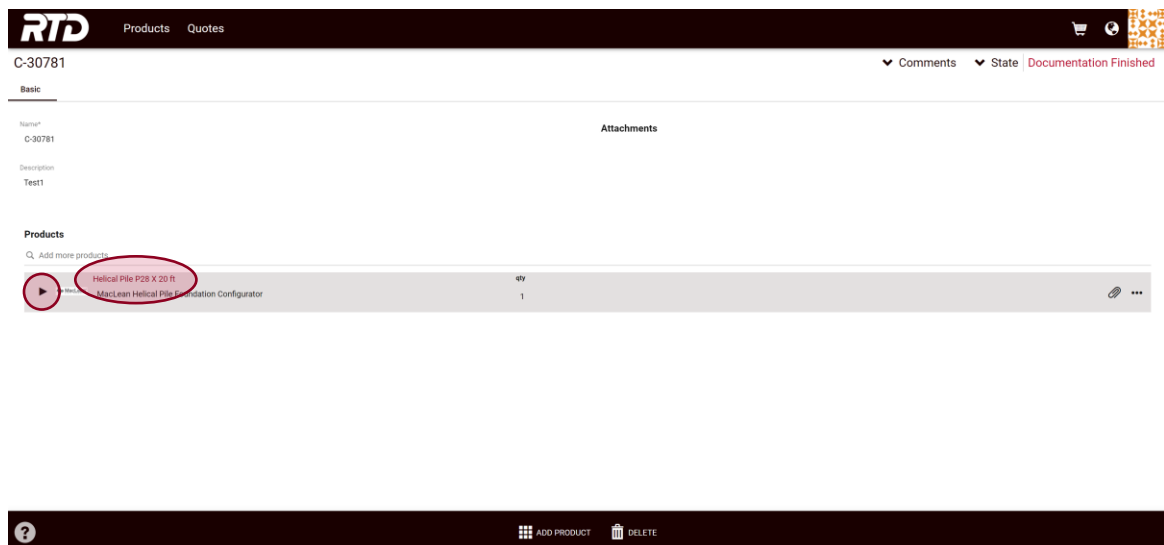
5. Accessing previously saved and configured files

To access saved or previously configured projects, click on the Quotes button on the upper black banner. Then, click on the NAME of the configuration you'd like to view/edit.



To view and download the output documents, click on the drop-down triangle in the middle gray banner.

To edit the configuration data, click on the description of the product that has been configured, Helical Pile P28 X 20 ft in this case, which will bring you back to the Project Information page.





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