

## Using the Horton eRev Fan Selection Software

The Horton eRev Fan Selection Software allows the user to draw from the fan portfolio with the greatest depth and breadth in the industry. Allowing a variety of inputs and selections, the flexibility of the software enables the user to configure the correct product for nearly any application.

### Navigating the Main Headers



### SELECTION – Main Page for Managing Product Selection

The selection page is the default page where the user will start managing product selection every time the software is opened. This is also the main working page where the user will drive the majority of the configuration.

**AIRFLOW QUICK OPTIONS**

Volume: 25003 cfm  
Pressure: 1 inwg  
 Static  Total  
Conditions: 15 °C @ 0ft (1.22 kg/m<sup>3</sup>)  
EDIT

RESET SELECT

**DIAMETER SPEED**

Diameter Unit: in  
 All Standard Diameters  
 Exact: 32.3 in  
 Minimum/Maximum  
Min: in Max: in

**FAN CONFIGURATION**

Fan Type: Molded Plastic Fans  
Installation Type: Venturi Shroud (Id...  
Rotation Direction: Any  
Engine Silhouette: Any  
CHANGE ROTATION/SILHOUETTE

Standard Inputs  
(See CONFIGURATION -> Selection Settings to set user default units of measure)

Air/Gas Density  
(See Conditions)

The SELECT button is used after every change or addition; if you do not click the SELECT button, your changes will not refresh the Selections table.

Click between diameter and special tabs.

Choose desired fan type, if known.

Select CHANGE ROTATIONS/SILHOUETTE to modify these fields; they are for display only. (See Change Rotation/Silhouette).

### Conditions - Modifying Operating Conditions: Density and Temperature

**Modify Operating Conditions**
✕

Operating Conditions Input Method:  Manual  Calculated

Gas Density Unit:

Gas Type:  Air at Standard Temperature and Pressure  Other

Gas Density:  kg/m³

Altitude:  ft

Operating Temperature:  °C

Humidity:  %

Inlet Pressure:  Pa

Calculated Density: 1.22 kg/m³

Manual Density:  kg/m³

CONFIRM
CANCEL

Select Input Method

Calculated – Select and input Altitude, Temperature and Humidity.

*For gases other than air, select Gas Type "Other" and input STP gas density.*

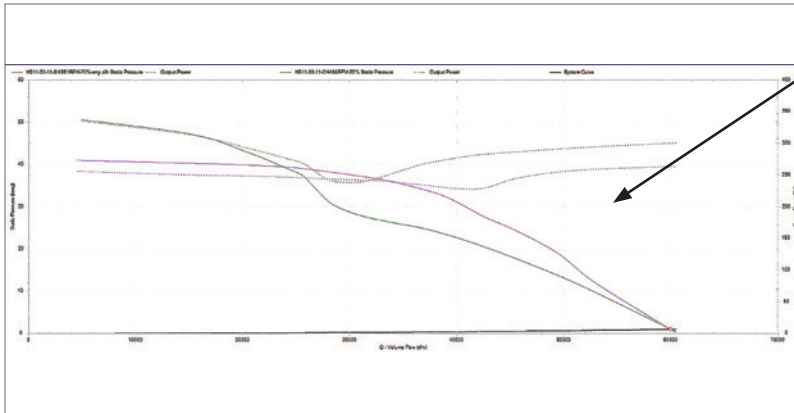
Manual – Select and input density value directly in bottom field, "Manual Density."

CANCEL to delete changes, CONFIRM to save.



Click the SELECT button to refresh the Selections table.

### Change Rotation/Silhouette







Fans will perform differently when an airflow obstruction is immediately behind the discharge side of the fan.

Horton fans tested with a representative airflow obstruction are indicated with "YES" in the Engine Silhouette field and "eng silh" in the Product Code.

**FAN ROTATION/SUCTION** ✕

CURRENT CONFIGURATION:  
Any. Any engine discharge.

**SELECT CONFIGURATION**

 CW Blower	 CW Suction
 CCW Blower	 CCW Suction

**ANY ROTATION/FLOW**

Is the engine IMMEDIATELY behind the discharge side of the fan?  Yes  No  Any  
Select 'Yes', 'No', or 'Any'.

**CANCEL** **APPLY**

Select the application fan configuration. Note the rotation of the fan and orientation of the fan/radiator.

Select ANY for general inquiries or if not known.

If the application has an engine or motor immediately behind the discharge of the fan, directly in the airflow, select YES. If unknown, select ANY.

CANCEL to delete changes, APPLY to save

 **SELECT**

Click the SELECT button to refresh the Selections table

### Selection Results Table

PRINT + ADD TO PROJECT EXPORT AUTO PREVIEW

SELECTIONS (28)

Product Description	Diameter (in)	Blades	Airflow (cfm)	Speed	Static Pressure (inwg)	Rotation	Engine Silhouette	Power (kW)	Total Efficiency
* HTEC 2500	72	5	100,000	812	1.50	CW/CCW	No	44.2	61
* HTEC 2500	72	6	100,000	797	1.50	CW/CCW	No	44.33	61
* Metal - 40" spider	72	11	100,000	764	1.50	CW/CCW	No	48.65	55
* Metal - 40" spider	72	11	100,000	721	1.50	CW/CCW	No	48.97	55
* Metal - 25" spider	72	8	100,000	901	1.50	CW/CCW	No	49.14	55
* Metal - 25" spider	72	8	100,000	964	1.50	CW/CCW	No	50.68	53
* Metal - 25" spider	72	8	100,000	917	1.50	CW/CCW	No	50.91	53
* Metal - 40" spider	72	11	100,000	737	1.50	CW/CCW	No	51.8	52
* HTEC 2500 - Trimmed	72	10	100,000	749	1.50	CW/CCW	No	52.08	52
* Metal - 40" spider	72	11	100,000	831	1.50	CW/CCW	No	52.1	52
* Metal - 40" spider	72	11	100,000	789	1.50	CW/CCW	No	52.5	51
* Metal - 25" spider	72	8	100,000	872	1.50	CW/CCW	No	53.98	50
* Metal - 25" spider	72	8	100,000	898	1.50	CW/CCW	No	54.48	49
* Metal - 25" spider	72	8	100,000	780	1.50	CW/CCW	No	54.75	49
* Metal - 25" spider	72	8	100,000	818	1.50	CW/CCW	No	54.81	49
* Metal - 25" spider	72	8	100,000	870	1.50	CW/CCW	No	55.14	49

HIDE PREVIEW

Unchecking AUTO PREVIEW will hide the curves as default.

Click on Hide Preview or  
 Click and drag the gray frame to adjust the size of the preview pane.

Speed	Engine Silhouette	Power (kW)	Total Efficiency
44.2	No	44.2	61
44.33	No	44.33	61
48.65	No	48.65	55
48.97	No	48.97	55
49.14	No	49.14	55
50.68	No	50.68	53
50.91	No	50.91	53
52.08	No	52.08	52
52.1	No	52.1	52
52.5	No	52.5	51
53.98	No	53.98	50
54.48	No	54.48	49
54.75	No	54.75	49
54.81	No	54.81	49
55.14	No	55.14	49

Right-click on any column heading to open the Column Chooser feature.

- Sort Rows
- Re-Order Columns
- Hide/Unhide Columns

### Selection Results Table - Key Descriptions

Immersion – Horton fans are tested at multiple immersions to allow the best data to the user. The value shown is the percentage of fan immersed into the shroud. This is a reference for the user to determine the immersion needed for optimum performance.

Product Code – This text is a physical description of the product the user has configured. Use this information when contacting your Horton Account Manager to get more data on a product.



### Navigating the SELECTION Sub-Heading Bar



#### VIEW TECHNICAL

Selecting VIEW TECHNICAL when a fan selection is highlighted allows the user to display all detailed information about that product. The information can be printed or exported from this view.

#### PRINT

A printer-friendly PDF version of the product information can be made from the SELECTION page or from VIEW TECHNICAL.

#### ADD TO PROJECT

The user can save selections to individual projects, or add selections to existing projects. See PROJECTS.

#### EXPORT

The user can export the product selection details to an Excel file; this can be used for a single fan highlighted or for multiple fans highlighted.

#### BACK ARROW

Return to the SELECTION page after viewing other pages.

### PRODUCTS - Helpful Tips to Guide Product Selection



If the user knows the specific Horton fan model or family, this section offers an easy way to narrow down the search for the desired product.



Unselect all by clicking NONE to allow you to manually narrow your selection by individually choosing each model.

Use the FILTERS button to look for models with specific diameters. Select FILTERS, then Diameter to activate the minimum and maximum fields. After making your entries, select APPLY, and click FILTERS again to hide, if desired.

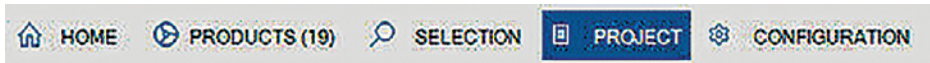


Choose CONTINUE when ready to activate your selection(s) to bring the user to the SELECTION page.



Click the SELECT button to refresh the Selections table.

## PROJECT – Saving Selections and Details



To save specific selections, the user can highlight one fan and then click PROJECT in the header bar or in the preview section.

Enter information and SAVE. The software will save the project to the user’s computer in a location of the user’s choosing.

Users can open previously saved projects by selecting OPEN when in PROJECT.

With an open project, users can add additional products by clicking back to the SELECTION page, highlight a product selection, and ADD TO PROJECT.

Project details

Project Name

Quote Number

Date

Issued By

Notes

Customer Details

Customer Contact

Company

Address

Telephone

Fax

Email

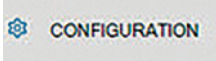
Reference	Product Code
	HTEC 2500-72-5-0/812RPM-50%

Name the project

Enter the reference notes

For customer-specific selections, enter the customer contact information

## CONFIGURATION – Managing User Settings



In the CONFIGURATION pop-up window, the user can customize their license of the Horton Fan Selection Software.

Click CLOSE to discard or make no changes; click SAVE AND RESET to save settings and reset inputs.

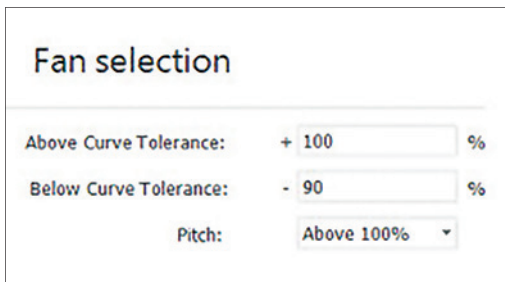
**NOTE:** Clicking SAVE AND RESET while in the middle of a product selection process resets all inputs on the SELECTION page. It is recommended to make configuration changes prior to starting the selection process to avoid unwanted reset of selections.

### ADDRESS DETAILS

Address Details allows the user to update their company contact information. This allows Horton representatives to contact the user with product information and support.

### SELECTION SETTINGS

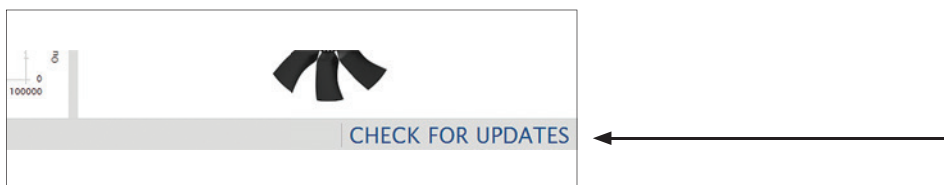
Selection Settings is the location for managing details on how the user normally inputs details into the software. This includes setting default units of measure and tolerance settings for matching inputs.



Modifying tolerance allows adjustment of what is displayed by the software, by percentage, above and below the target volume.

### PROGRAM UPDATES

Horton will periodically push updates to the software. Depending on the users' internet access, the settings for how updates are received may be changed. If the user selects Check for Updates "Manually", it is important that the user periodically clicks the CHECK FOR UPDATES button at the bottom of the page.



## Additional Information

Data - Values are derived from Horton-tested product in the Horton Cooling System Simulator wind tunnel which is designed to AMCA 210 specifications. Testing is done in flat plate shroud (orifice plate) and bell-mouth shroud configurations at multiple tip clearances and immersions, as well as in combination with engine silhouettes.

Sound - Values are based on measured or calculated test results as sound power (dBA) as per AMCA 300. These calculated guidelines are for reference to be used for relative comparison between products in the Horton Selection Software. Comparisons to data produced elsewhere or data physically measured in a specific application could be inaccurate.

## Additional Resources

### Requesting Help for Software Issues

Send an email to [configurator.support@hortonww.com](mailto:configurator.support@hortonww.com) for help on software issues, concerns, or opportunities for improvement.

### Requesting More Product Information

Send an email to [configurator.sales@hortonww.com](mailto:configurator.sales@hortonww.com) for the account manager or another Horton representative to review your request and respond.

### Your Partner in Thermal Control

*As a global leader in thermal control for power systems, Horton® offers a variety of technologies for transportation and industrial applications to operate at the optimal temperature. Our culture of innovation delivers high-performance products that last and services that help you meet your commitments.*

Horton is IATF 16949, ISO 14001 and ISO 9001 certified.