Alfa Laval PHE Select

Quick reference guide for gasketed, brazed and fusion-bonded plate heat exchangers

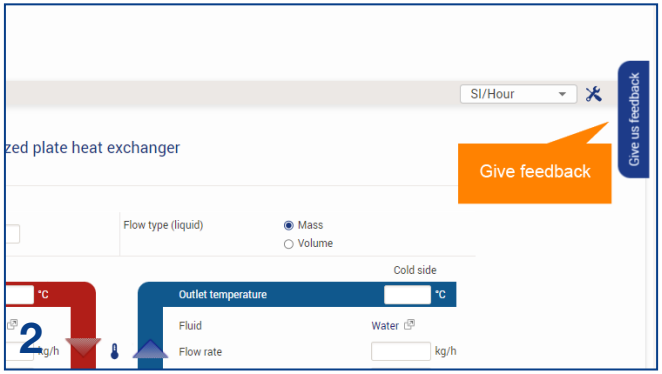
Use Alfa Laval PHE Select to find your brazed, gasketed, or fusion-bonded plate heat exchanger. This is the tool that will help you run calculations and get results in a simple and quick way.

Whether you are a consultant, a planner or someone who needs to specify a plate heat exchanger for 1-phase HVAC applications with water and glycols – in PHE Select you will be able to select heat exchangers based on your requirements.

Quick access, no approval needed to use it, just a simple login required. The brazed and gasketed plate heat exchangers are certified by AHRI, a third party certification program, assuring performance in accordance with the calculation in PHE Select.

Content

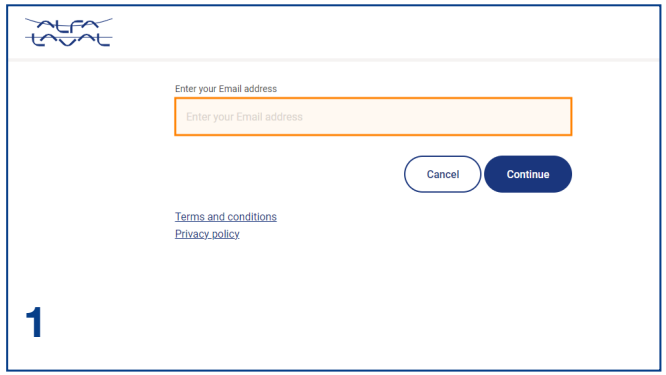
Recommended browsers and feedback function

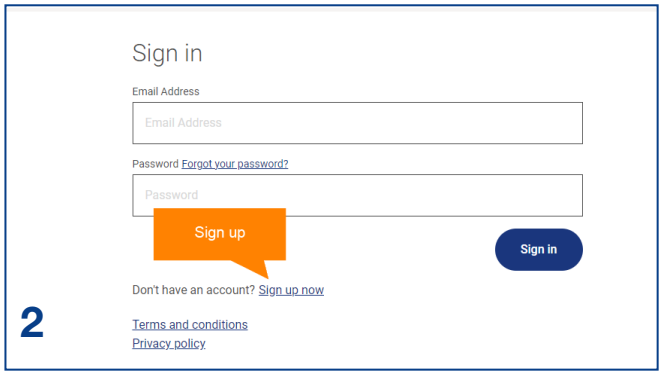


1. For the best experience when using Alfa Laval PHE Select, we recommend that you use Google Chrome or Microsoft Edge.

2. Should you experience any issues or have ideas on what you want to see in the tool, use the **Feedback** button to let us know.

Login

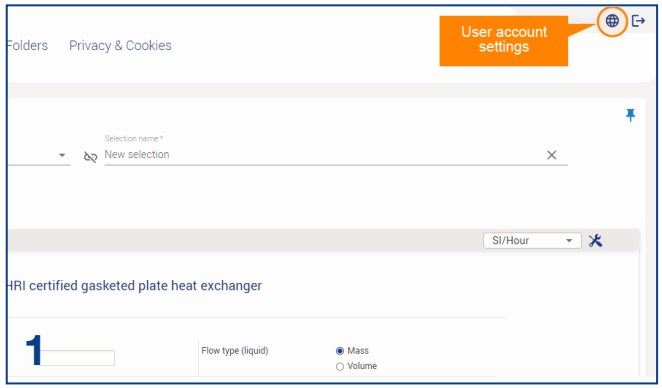


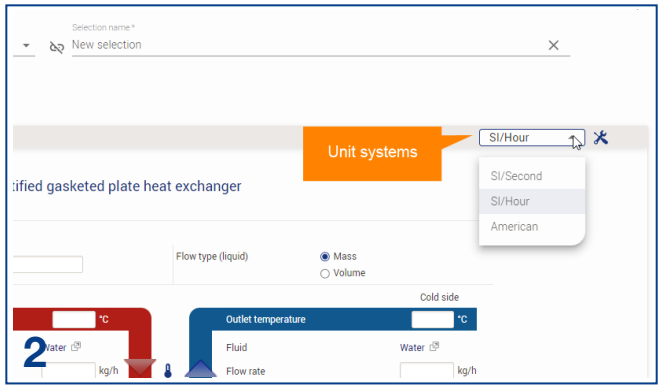


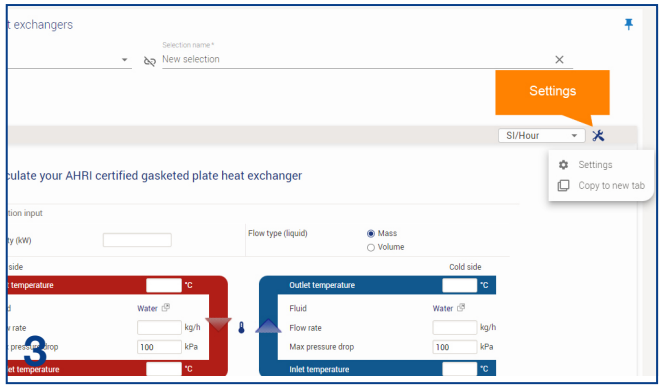
1. Enter your email address to login to Alfa Laval PHE Select if you already have an account.

2. If you don't have an account, you can easily create one by clicking on **Sign-up now** and follow the instructions to set-up a new account.

Settings





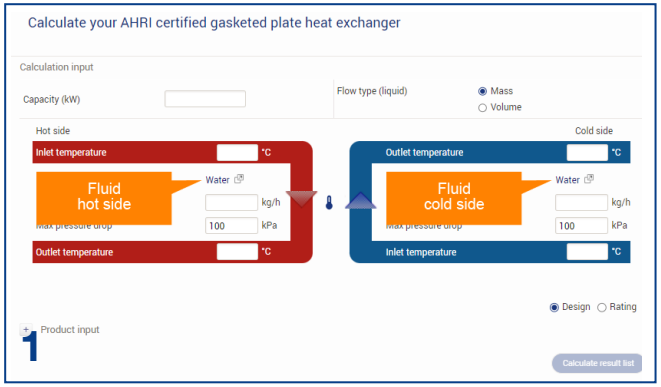


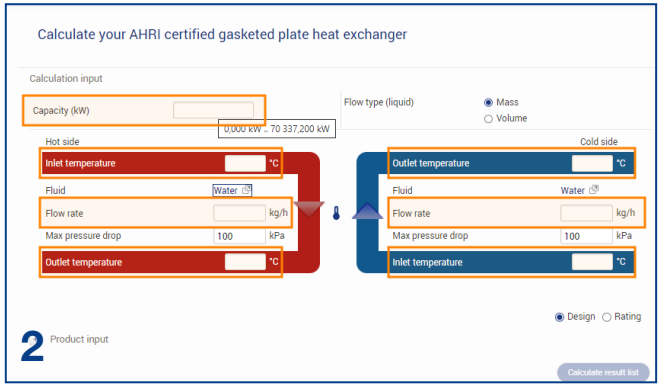
1. The first time you login you enter your Country and Company. These can be changed later by clicking on **User Account Settings**. Here you can also set your preferred number format.

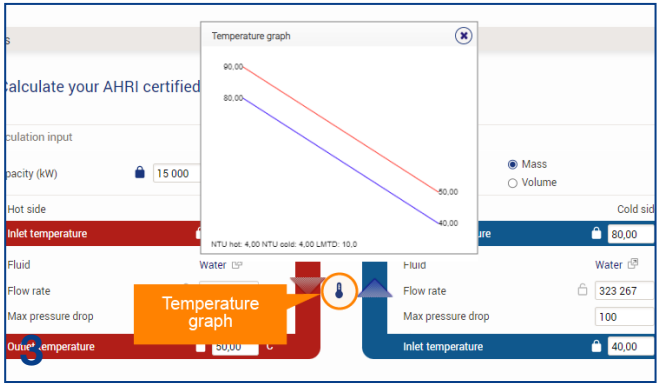
2. The default **Unit System** is set based on your country but it can be changed anytime during the calculation.

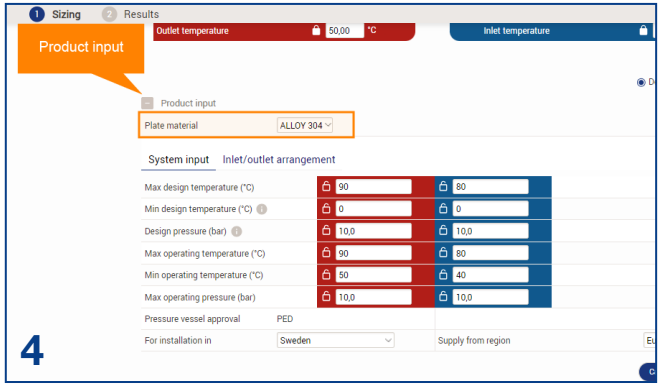
3. In **Settings** you can set the general defaults for the technical printouts such as format and language, and if you want to save a different default Unit system for future logins.

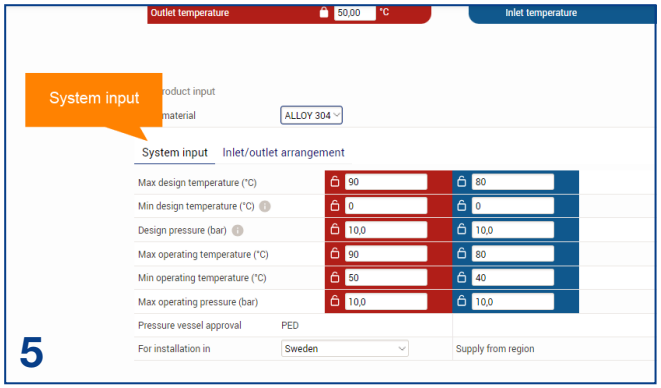
Make a selection of a gasketed plate heat exchanger

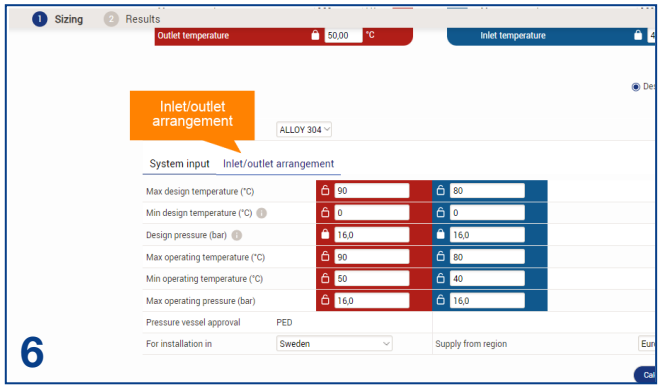












1. Start by selecting **Fluid**. Ethanol glycol, seawater, propenol glycol and water are the available fluids to calculate for gasketed plate heat exchangers with AHRI performance certification.

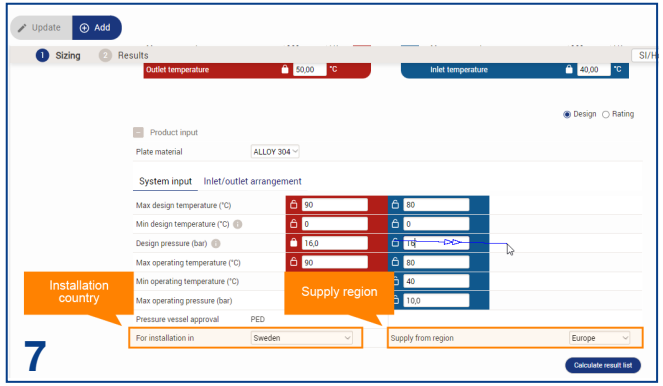
2. Based on your duty, simply fill in 5 out of the 7 required inputs, the remaining two are calculated automatically.

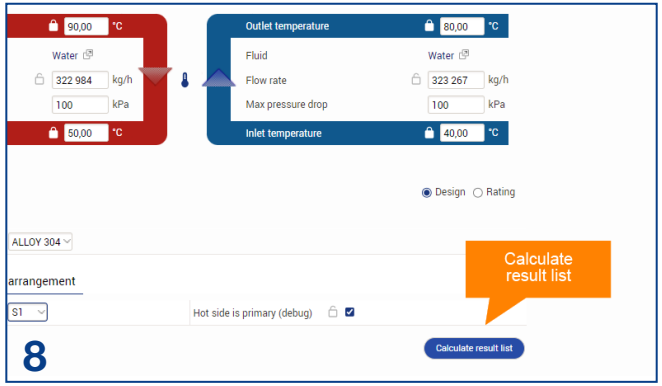
3. You can click on the **Thermometer** icon to see the temperature graph.

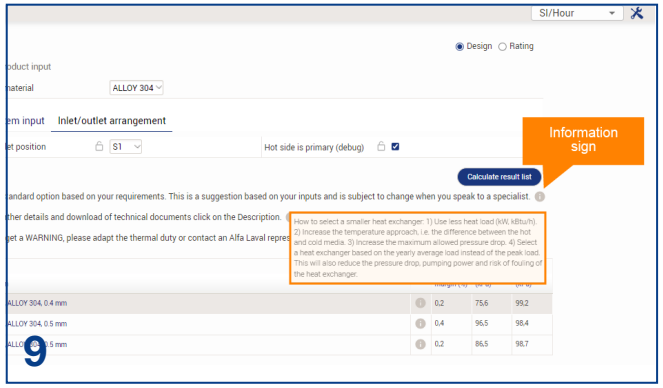
4. Change plate material suitable for your application if needed. Click on **Product input** and then **Plate material** and make the change from the drop-down menu.

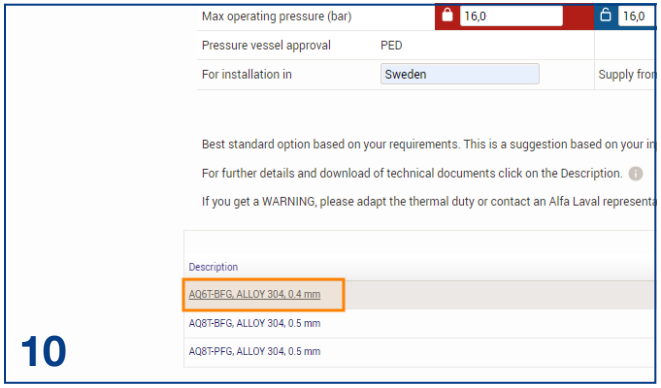
5. In **System input** you can make modifications to the data you have added.

6. If you have a preference of hot inlet position you can change it in **Inlet/outlet arrangement**, default is set to S1 which is located in the upper right corner of the heat exchanger.









7. With the installation country and supply from region correctly set, you will ensure to get a selection of items with relevant pressure vessel approvals and connection standards.

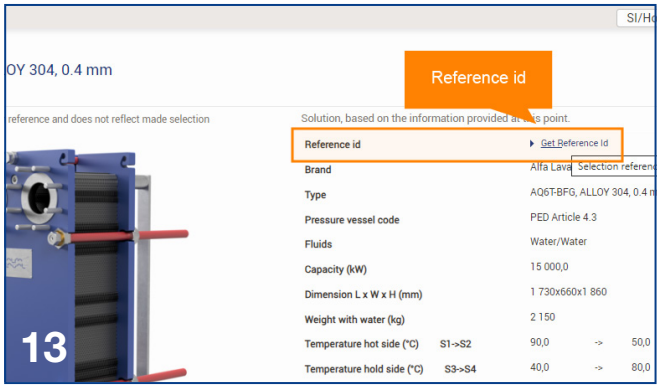
8. Press **Calculate result list** and you will get a list of up to 3 suitable items based on your input, all with the resulting excess surface margin and pressure drops presented.

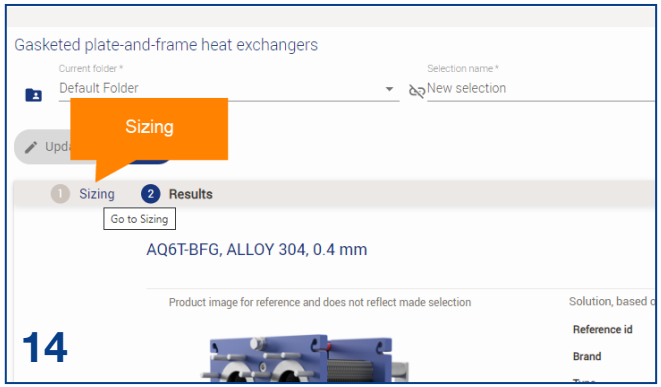
9. For an even more efficient and smaller gasketed plate heat exchanger, click on the **Information** sign to find some useful tips on how you can modify your input.

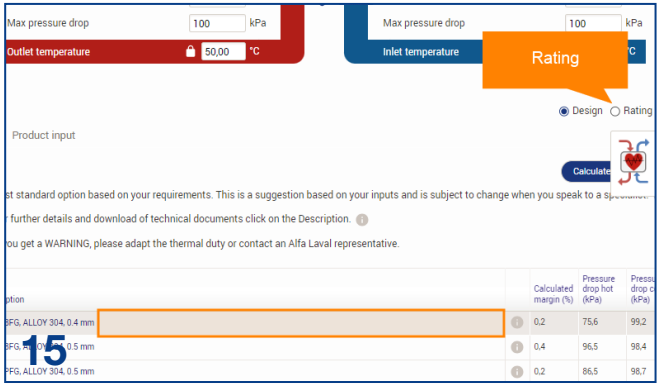
10. To come to the result page, click on the **description text** of the heat exchanger you want to view the details for.

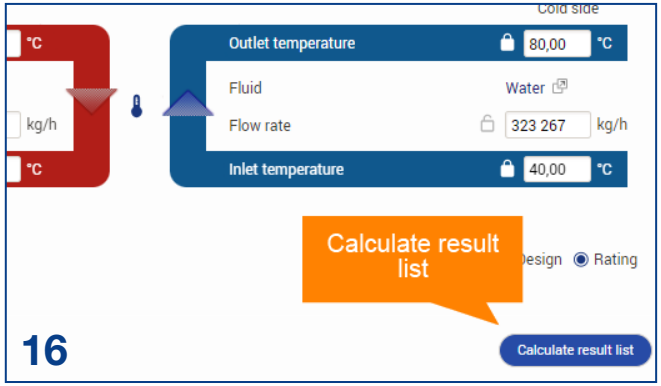
11. In the Results' page you see the details of the selected heat exchanger and here you can add accessories such as insulation and drip-tray.

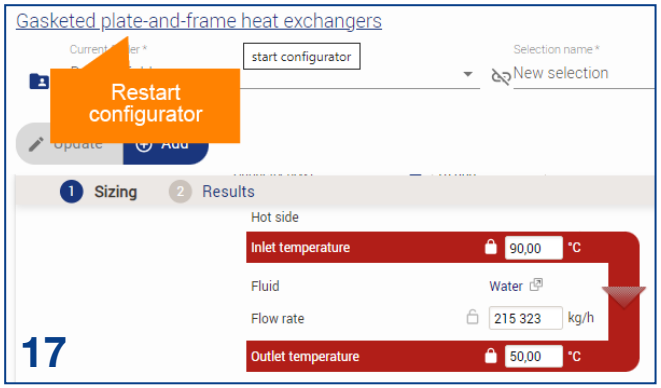
12. In **Documents** you can download the technical specification, drawings (2D, 2D scale, 3D step and Revit), installation manual and for all sizes of Alfa Laval AQ heat exchangers there are generic BIM objects available, click the link and you will be redirected to BIM Objects' website.











13. Get the reference ID by clicking **Get reference id** link. The reference ID includes all relevant information about heat exchanger and the duty, and can be shared with your local Alfa Laval representative when you need support as well as for your final specification.

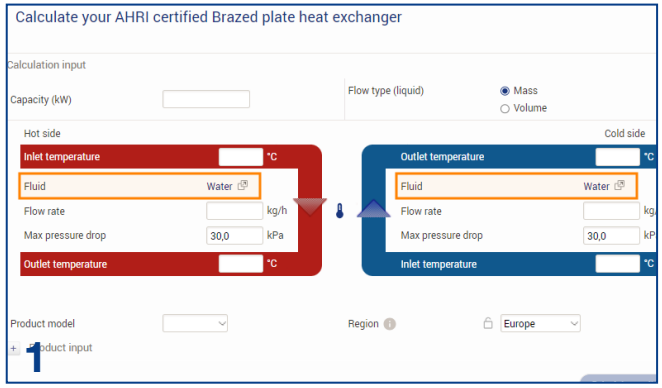
14. To calculate the surface margin and pressure drops for a different condition, go back to **Sizing**.

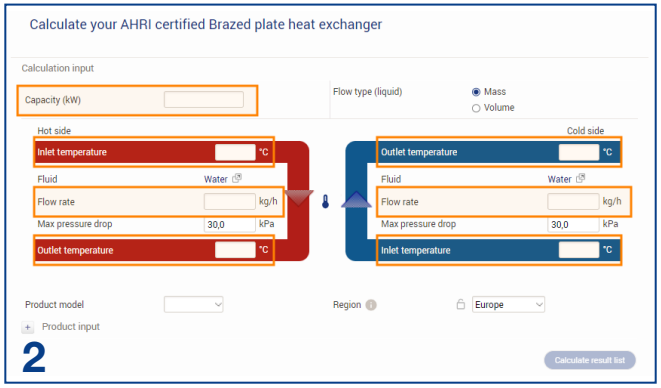
15. Click on the **empty space** on the row (not the heat exchanger name) and select **Rating**.

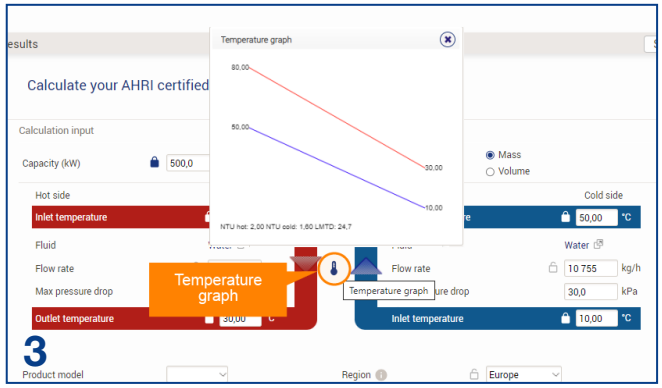
16. Change the conditions and click **Calculate result list** and the heat exchanger result will be updated with the new conditions.

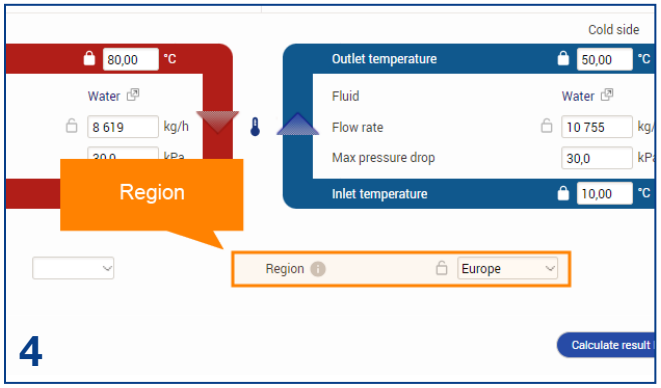
17. To make a new design, restart by clicking on the **headline**.

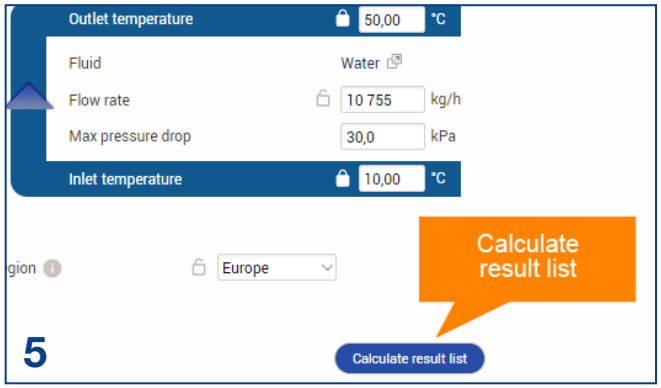
Make a selection of a brazed or fusion-bonded plate heat exchanger

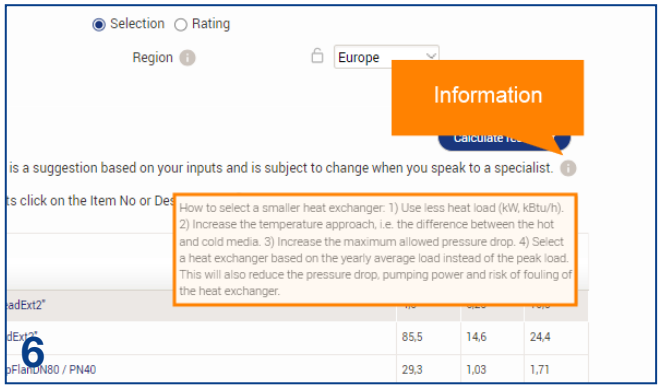












1. Only water is available to calculate for brazed plate heat exchangers with AHRI certification. If you need to use glycols, please contact your local Alfa Laval representative.

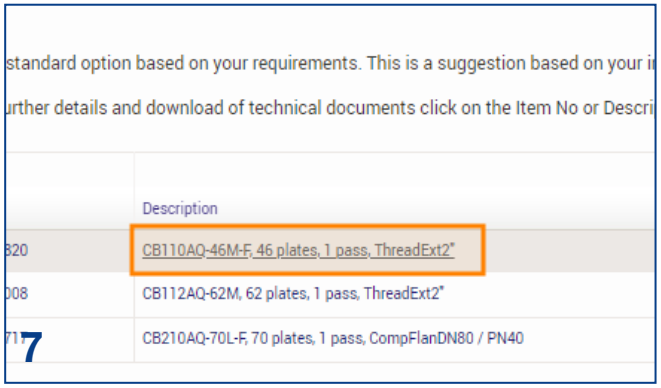
2. Based on your duty, simply fill in 5 out of the 7 required inputs, the remaining two are calculated automatically.

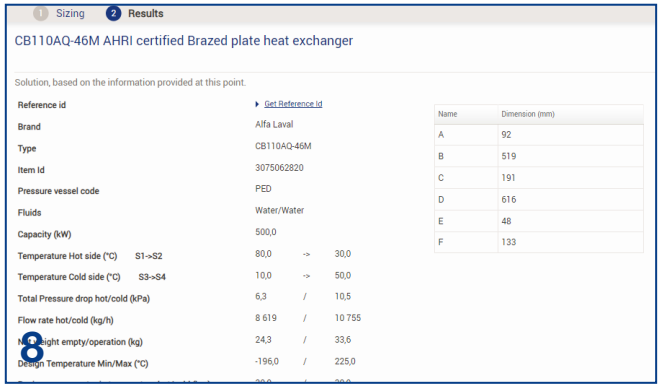
3. You can click on the **Thermometer** icon to see the temperature graph.

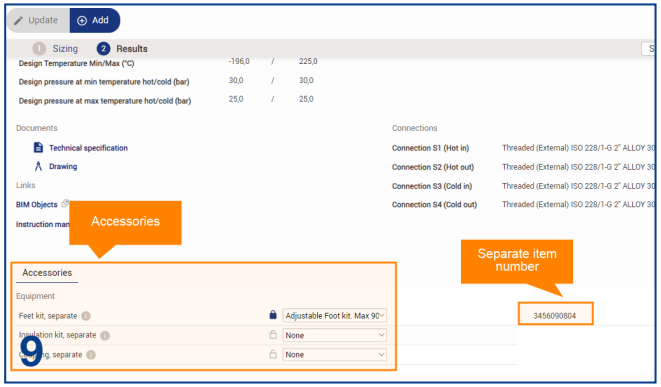
4. The **Region** setting gives a selection of items with relevant pressure vessel approvals and connection standards.

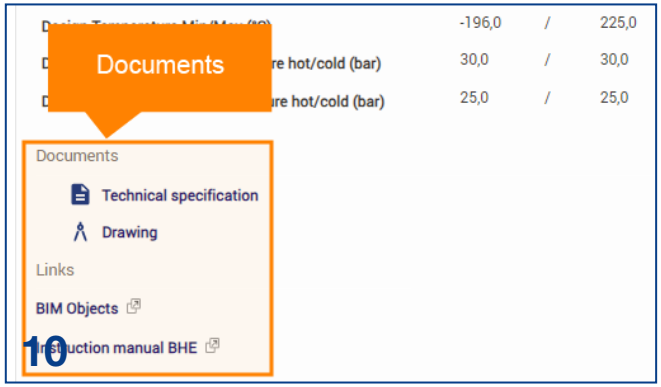
5. Press **Calculate result list** and you will get a list of up to 3 suitable items based on your input, all with the resulting excess surface margin and pressure drops presented.

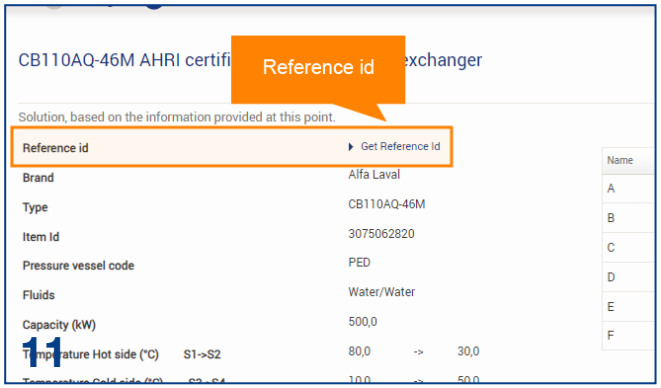
6. For an even more efficient and smaller brazed or fusion-bonded plate heat exchanger, click on the **Information** sign to find some useful tips on how you can modify your input.

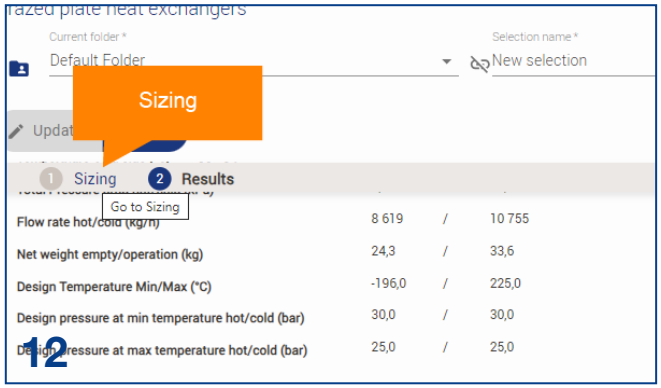












7. Click on the desired heat exchanger name in the description to get come to the Results page.

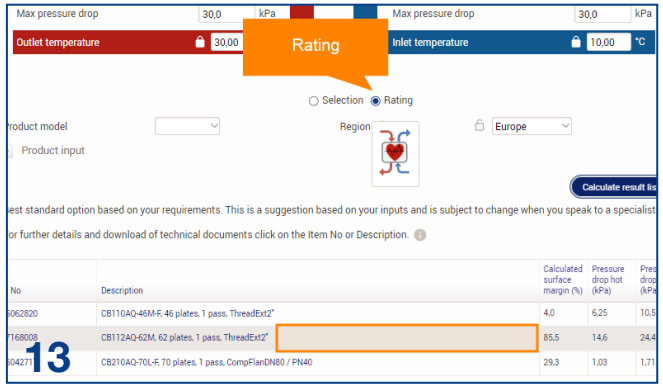
8. Here you find an overview of the details for the specific plate heat exchanger.

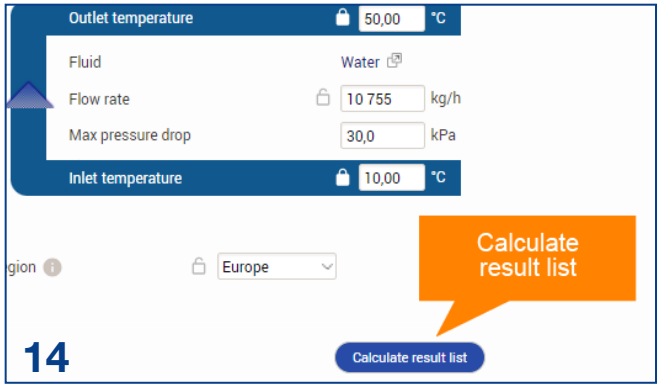
9. You can add **Accessories**, please note that they will be added by **separate item numbers**. Make sure to include them in your specification.

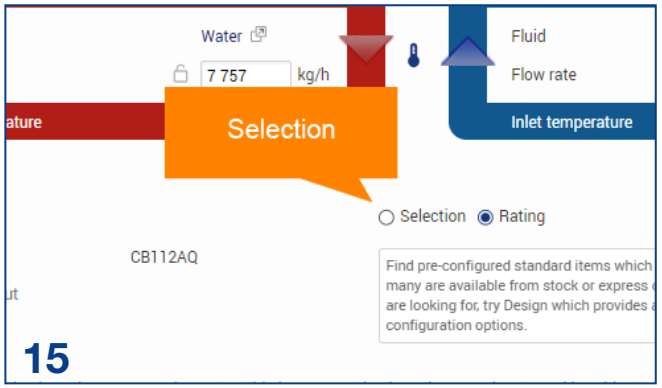
10. In **Documents** you will find the technical specification, drawing and in some cases a 3D step file. There are generic BIM files available for all sizes of Alfa Laval CBAQ heat exchangers. Click on the link and you will reach BIM Objects' website. You can also download the manual which is available in multiple languages.

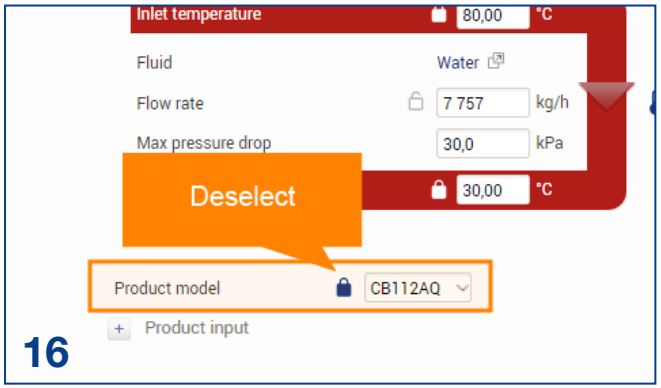
11. Get the **Reference ID** which includes all relevant information about the heat exchanger and the duty. This reference ID can be shared with your local Alfa Laval representative when you need support as well as in your final specification.

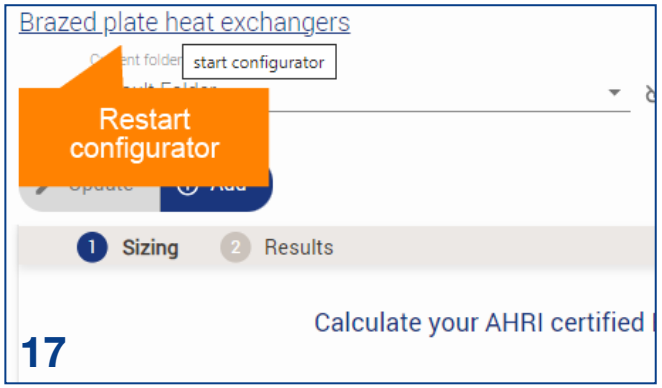
12. To calculate the surface margin and pressure drops for a different condition, go back to **Sizing**.











13. If you want to calculate one of the other heat exchangers, click on the empty space on the row of the unit you want to calculate and select Rating.

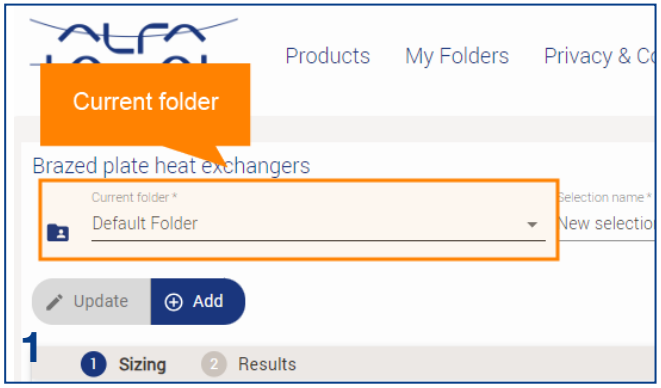
14. Change the conditions and click **Calculate result list** and the calculated margin and pressure drops will be updated.

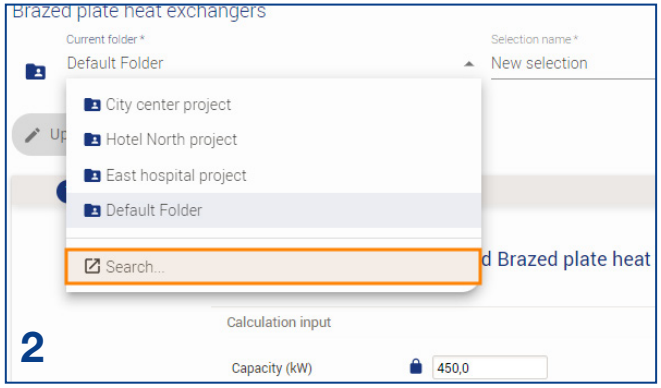
15. To make a new selection, either change to **Selection**.

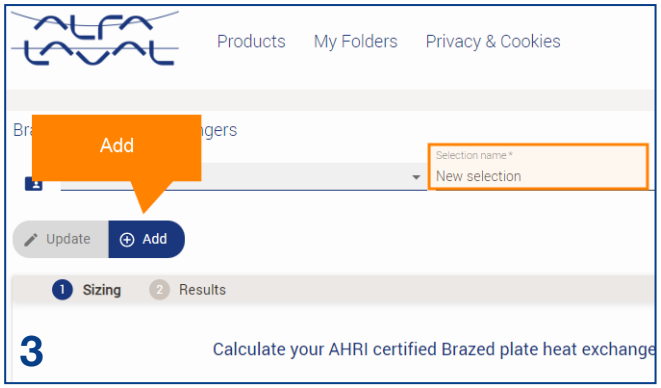
16. And then deselect the product model and make a new calculation.

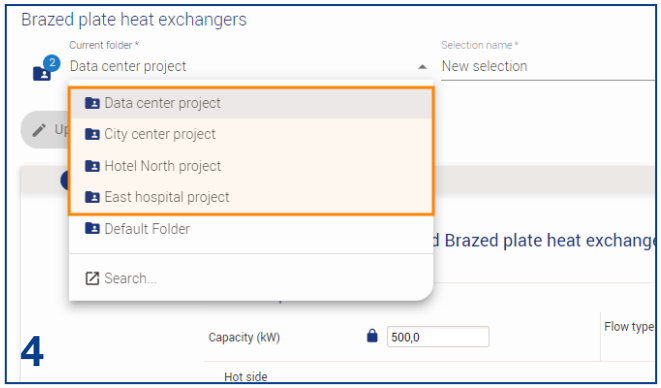
17. Or you can start a new design by clicking on the **headline**.

Save calculation, find folders and open a saved calculation









1-2. You can save your calculation anytime. Click on the **Current folder** name and **Search** to create a new project folder for your calculations.

3. Give the selection a name and click **Add** to save it. If you make a recalculation and want to overwrite the already saved calculation you click **Update**. If you instead want to save it as a new calculation you give it a new selection name and click **Add**.

4. You can open previously saved calculations by finding them in the **Current folder** menu or you can go to **My folders** to see them all.

This is Alfa Laval

The ability to make the most of what we have is more important than ever. Together with our customers, we're innovating the industries that society depends on and creating lasting positive impact. We're set on helping billions of people to get the energy, food, and clean water they need. And, at the same time, we're decarbonising the marine fleet that's the backbone of global trade.

We pioneer technologies and solutions that free our customers to unlock the true potential of resources. As our customers' businesses grow stronger, the goal of a truly sustainable world edges closer. The company is committed to optimizing processes, creating responsible growth, and driving progress to support customers in achieving their business goals and sustainability targets. Together, we're pioneering positive impact.

How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information.

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