

Selecting the correct Pfannenberg Chiller

Use the chart below to help you select the proper chiller for your application. For questions please consult with the factory or visit our website for the latest charts, diagrams, drawings and sizing materials.



STEP 1

WHAT IS THE HEAT LOAD?

Determine the heat load. There are several ways to determine the heat load depending on the application. Understanding the process is essential to calculating an accurate heat load.



Determine the coolant, its target temperature and the flow rate that the chiller must provide to the process. This is determined by the method from which the heat is transferred from the process to the coolant and the type of coolant being used. For example, water has different characteristics than oil.

STEP 2

COOLANT TYPE, TEMPERATURE & FLOW RATE



STEP 3

IDENTIFY INSTALLATION ENVIRONMENT

In what environment will the chiller be installed? Indoor applications for example can see high temperatures and dirty atmospheres, while outdoor installations can experience both low and high ambient temperatures. This can effect chiller sizing and require accessories such as air filters, sump heaters, etc.



Now use the chiller performance curves available* to select a chiller model that meets or exceeds the required capacity based on the chilled water supply temperature and the highest expected ambient air temperature. Consideration should be given to the safety margin of the application with respect to available frame sizes to maximize the value of the chiller selection.

*Consult factory or website for current curve data.

STEP 4

USE CHILLER PERFORMANCE CURVES



STEP 5

CHECK PUMP PERFORMANCE CURVES

Check the pump performance curves available* to ensure that the pump will provide enough pressure at the design flow rate to satisfy the application. Some liquid cooled systems have small coolant flow paths or longer distances that can have higher than average pressure losses.

*Consult factory or website for current curve data.



Finally, consider that the remaining application requirements such as power characteristics, control options, footprint, agency listing, color, etc. are met by the selected standard Pfannenberg chiller. Choosing a standard chiller will bring you greater reliability, easier service with common spare parts and global support.

STEP 6

FINAL SELECTION