Custom Application Questionnaire

Name: _____ **Phone** _____
Email: _____ **Company/Job Title** _____

North Slope Chiller products make it easy and cost effective to cool various applications like spray foam, coatings, adhesives, fermentation systems, electric motors. In addition to this product, we offer various sizes and levels of temperature control and duration. If you can't find the right product to fit your application let us know, we specialize in fast, affordable solutions for any application.

Please take a moment to complete this short custom application questionnaire to help us solve your cooling problem. Fill out all the information that you have, if you have questions or are unsure on a question leave it blanket and your North Slope Chiller representative will work with you. Please be sure to include units on all numerical responses.

Substance to be cooled

What are you trying to cool down? (*ex: oil, engine block, spirits, etc*)	
What are you ultimately trying to get done? (ex: *Maintain Temperature, Reduce Temperature, Reduce and Maintain Temperature*)	
Do you know the thermal properties? (*ex: density=1000kg/m^3, Specific Heat=4.22 kJ/kg°K*)*	
Are there upper or lower temperatures where the substance or contents will be damaged? (*ex: Cannot exceed 50°C and cannot go below 5°C*)	
What happens if it cools too fast?	
What happens if it cools too slow?	
What happens when your application fails to meet the desired temperature/temperature range? (*ex: product goes bad*)	
What is the associated loss (labor, cost, time, frustration) associated with your application when it doesn't work?	
Distance from chiller/Cold fluid source (determines tube length)? (*ex: 10 feet*)	

*If unknown North Slope Chillers will search its database to find comparable properties, if no comparable is found then the properties of water will be used for all calculations which may result in error.

Cooling needs

Reduce temperature of flowing system (Hot fluid enters reservoir and leaves cool at constant flow rate)	
Temperature range of fluid entering container? (*ex: 80°F - 90°F*)	
Desired temperature of fluid exiting container? (*ex: 40°F -50°F*)	
Flow rate of fluid? (*ex: 1 GPM*)	
If fluid is recirculated, how much energy is being absorbed by the fluid during recirculation? (*ex: 1000 Watts*)	
Reduce temperature of non-flowing system	
What is the beginning temperature of the substance to be cooled? (*ex: 80°F - 90°F*)	

Custom Application Questionnaire

What is the desired final temperature of the substance or contents? (*ex: 40°F - 50°F*)	
What is the desired time frame for the initial cooling? (*ex: 5 - 8 hours*)	
Maintain temperature	
How long do you need to maintain temperature? (*ex: 12 hours*)	

Ambient Conditions

Is this application indoors or Outdoors? (*ex: Outdoors*)	
Expected wind velocity? (*ex: 0 - 10 MPH*)	
Expected ambient temperature? (*ex: 70°F – 90°F*)	
Are there other environmental conditions that may be relevant? (*ex: dusty and in direct sunlight*)	

Container

Type of container? (*ex: 55 Gallon steel drum, tank, none, etc*)	
What is the container made of? (*ex: Steel, aluminum, PVC*)	
How thick is the wall of the container? (*ex: 1/16"*)	
What is the volume of the container?	

Chiller

Providing own Chiller	
What is the cooling power? (*ex:12,000 BTU/hr*)	
What pressure and flow rate does the chiller output? (*ex: 4 GPM @ 50 PSI*)	
Inlet/Outlet specs (*ex: ½" NPT female*)	
North Slope Chillers to supply chiller	
What power is available? (*ex: 120V*)	
Are there any space restrictions?	
Distance from power source (required cord length)? (*ex: 10 feet*)	

Delivery

How many units do you need now and in the future (*ex: 1 immediately, 10 in a couple months*)	
What is the required delivery date? (*ex: 3 weeks*)	
How are you currently solving this problem? (*ex: Bucket of ice water*)	

Other Notes

Custom Application Questionnaire