

# Vacuum Insulated Liquid Withdrawal

For end use applications that require the transfer of extremely cold, low pressure liquid from bulk storage to end use application, Chart offers the Vacuum Insulated Liquid Withdrawal Valve.

It all starts at the tank. Chart has developed the most efficient storage tank for low pressure liquid applications. Our state-of-the-art insulation technology maintains the liquid in it's lowest possible temperature, while maintaining low pressure. In order to maintain the condition of the liquid being transferred from the storage tank you need to incorporate the most efficient piping and plumbing components.

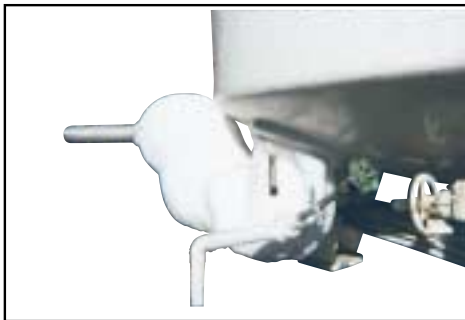
The two illustrations below reflect the thermo efficiency in both designs of liquid use valving on bulk storage tanks. The ice build up on the uninsulated valve design not only causes maintenance problems it also causes a safety concern when needing to shut off the

liquid nitrogen supply. Many times the valve handle is concealed in the ice formation, making it impossible to shut the valve off.

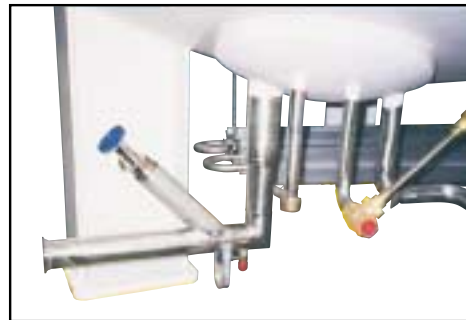
Poor valve efficiency at the tank not only costs thousands of dollars a year in wasted nitrogen, it also causes the end use application to operate at a fraction of it's potential. Insist on Chart's Vacuum Insulated Liquid Use Valve to protect your investment and save money!

## Benefits:

- Eliminates ice build-up.
- Prevents two phase flow from starting at the source of the system.
- Reduces the amount of venting through the cryovent.
- Provides colder liquid at point of use.
- Substantial annual savings



Old Technoogy



New Technology



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