

Application Report:

Piedmont Energy Systems and GM team up on bulk storage systems for refrigerants (R134a) and brake fluid.

In these days of “just in time” delivery of goods and services, the storage and the warehousing of parts is becoming obsolete. Eradication of overhead and excess inventory has become the status-quo, but is it always necessary or beneficial? Most of the time, the answer is YES..... in some instances however, there is a definite advantage to having excess inventory, and lots of it!

Industrial engineers at GM were looking to make some changes to their plant and started thinking about how they could make the assembly lines more efficient. One of the in-efficiencies was the brake fluid and refrigerant “charging” processes on the assembly lines, whereby GM fills the braking systems with brake fluid and fills the refrigerant container in the A/C units.

This process was tedious and cumbersome because they were “charging” from 55 gallon drums (brake fluid) which needed replacing every few hours. This was costly because there were always spills that had to be cleaned up, drums needing to be transported by fork-lift, extra time spent opening and closing each drum when empty and the high cost of freight & handling associated with the drums.

Although a refrigerant distribution system was already in place, GM had determined that their existing system lacked the capacity they required and needed a system upgrade. Due to the inadequate size of the previously installed system, they needed frequent shipments (via tank trucks) of refrigerant, but could only take half loads at a time. This lack of storage capacity proved costly by adding approximately 25% to the price of the refrigerant in transportation fees.

Piedmont Energy Systems was able to assess their needs and growth potential and offer fully customized packages at low costs for a quick R.O.I..

These skidded tank systems (see pictures) were installed and commissioned during the summer of 2001. For more information about these systems and potential applications of your own, please call or send inquiries to the e-mail address below.



Standard 18,000 gallon bulk storage system with special pump & metering package.



100% customized unit with customer specified filters, meters and control configuration.



6500 gallon bulk refrigerant (R-134a) storage system.



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