

IN-TRUCK MANUFACTURING SYSTEM (ITM)

ON BOARD MANUFACTURING OF TYPE I FLUID

Vestergaard Company, with over 50 years of proven credible and reliable longterm leadership in engineering and manufacturing of high quality Ground Support Equipment, is pleased to announce the next evolution in state-of-the-art deicing technology: In-truck Manufacturing System (ITM).

Vestergaard engineering experts conducted an in-depth review of the supply chain and logistics issues associated with delivering Type I fluid to a winter operation during a major deicing event. In an effort to address the significant issues discovered as well as to create increased value for our current and future clients, the ITM technology was conceived.

The patented ITM system, for the first time ever, allows operators complete control of sourcing and manufacturing of Type I fluid on the deicing truck!

In the early years of deicing, end users were supplied with a ready-to-spray Type I fluid. The next evolution and radical change was to allow for the sales of concentrated Type I fluid providing operators a cost saving for shipping water, where the operator would dilute to 55/45 with water on site.

The next evolution was to allow operators to blend the concentrated fluid to match the required OAT (Outside Air Temperature) for increased cost savings and environmental benefit. Today many operators spray significantly less than the old 55/45 Type I blend – in many cases 30% or less for the winter season.

ITM technology allows operators to purchase propylene or ethylene glycol from any world-wide supplier of their choice at negotiated pricing, and purchase additive packages from a fluid vendor of their choosing.

Vestergaard has partnered with several leading global propylene glycol and fluid manufacturers to certify the ITM technology with their additive packages.

ITM has been field tested by a North American airline company for the 2014/15 and 2015/2016 winter seasons and will be used in operation from the 2016/2017 winter season.

For more information, please contact us at peter.haug@vestergaardcompany.com



IN-TRUCK MANUFACTURING SYSTEM (ITM)

ON BOARD MANUFACTURING OF TYPE I FLUID

INDUSTRY LEADING BENEFITS

- End users may source EG or PG from the manufacturer of their choosing for increased cost savings
- End users may purchase additive packages from the vendor of their choosing for increased cost savings
- Type I storage now becomes PG or EG storage and increases storage by a minimum of 12%
- Properly stored PG and EG do not expire in two years like Type I fluid
- End users have the potential to create shared use/storage, similar to a fuel consortium
- Significantly increased quality control: Typical supply chain involved QC risks from manufacturer to rail car, to tank truck, to storage terminal, to tank truck, to storage tank, to application truck to aircraft. The ITM system eliminates these QC risks. Fluid is manufactured in the deicing truck and applied directly to the aircraft, eliminating various QC risks and complying with fluid manufacturers FAA/AEA/TC approved certification.
- Reduced risk to airlines and increased efficiency. Additive package can be purchased once a year based on prior year volume. No more out-of-stock or late deliveries of deicing fluid during a deicing event.
- Increased shelf life of additive package
- Reduced stress to operation staff
- Next Generation Vestergaard equipment can be modified for installation of the ITM system without an increase in capital cost or replacement of equipment.
- Increased environmental benefit: Reduced trans shipping of Type I for significant fuel and CO emission reductions.
- Availability: Several leading fluid manufactures have partnered with Vestergaard Company, and additive packages are available for the coming winter season.
- Vestergaard's proven reliability: ITM functions with Vestergaard's patented PLC, positive displacement pumping system, Siemens magnet flowmeters, and patented DTS (Data Transmission System).



For questions and requests for further information please contact:

Vestergaard Company A/S

Skullebjerg 31 • Gevninge
DK-4000 Roskilde • Denmark
Tel: +45 4642 2222
sales@vestergaardcompany.com
www.vestergaardcompany.com

Vestergaard Company Inc.

1903 W. Rte. 120
McHenry, IL 60051 • USA
Tel: +1 815 759-9102
Toll free: +1 888 759-9118
usa@vestergaardcompany.com

