



## Tips to Help Minimize Orifice Meter Freeze

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- **Verify that there are no leaks between the tap valves and the secondary device;**
- **Make sure that there are no liquid traps in your gauge lines;**
- **Use large port tap valves wherever possible;**
- **Minimize the length of your meter tubing;**
- **Inject atomized methanol upstream of measurement, taking care to not compromise measurement standards and accuracy – not too much, the methanol should be vapor at the meter;**
- **Insulate the meter run, sensors, tap valves, tubing, manifolds, and associated valves;**
- **Install insulated meter housings on secondary devices; full walk-in meter houses may be required for severe conditions;**
- **Utilize catalytic heaters as required; and**
- **Optimize temperature on any installed line heaters, too much heat may be as bad as not enough depending upon where it is applied.**