

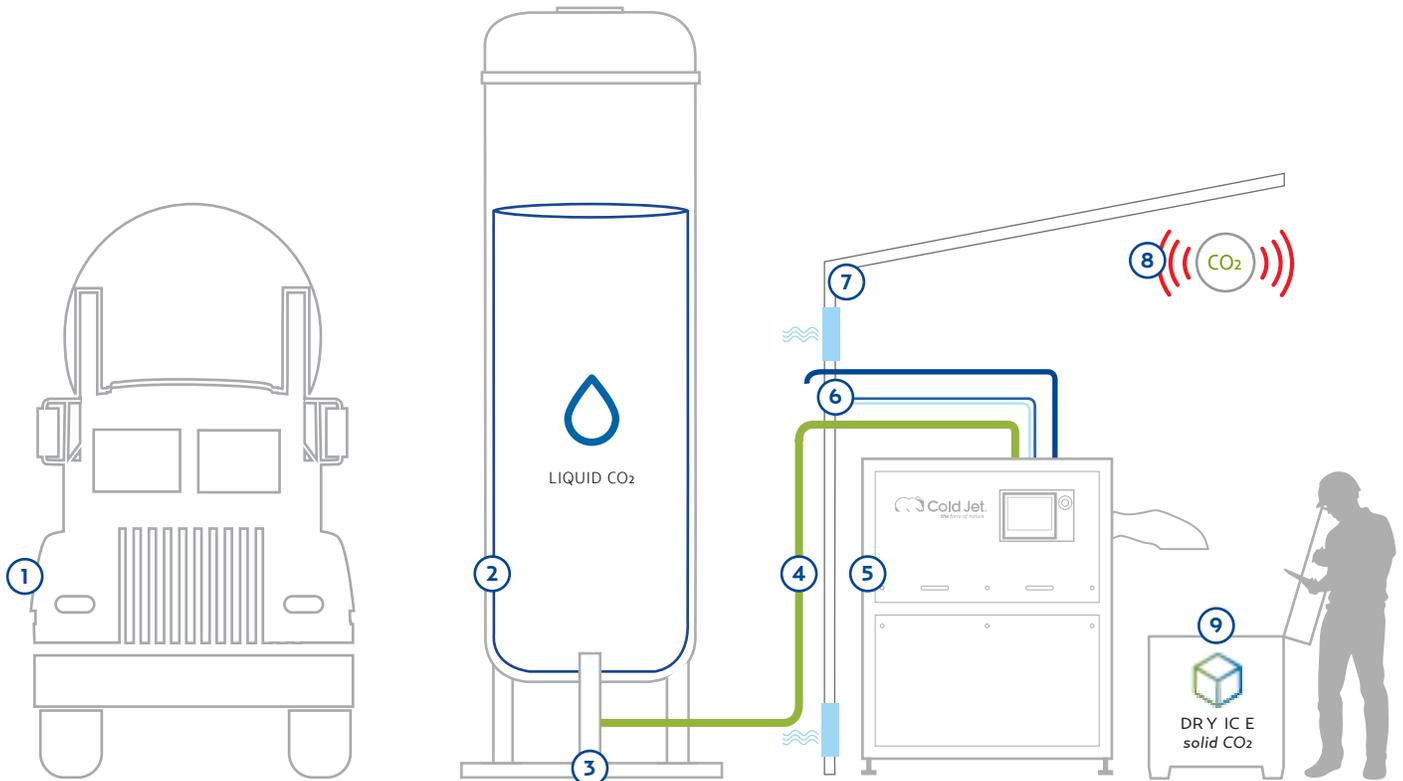


DRY ICE MANUFACTURING GUIDE

LIQUID-TO-SOLID CO₂ CONVERSION

Dry ice production involves converting a liquid source of carbon dioxide into its solid state. For every 1 kg of dry ice you wish to produce, you will require x 2.2 the amount in Liquid (i.e. 100 kg of dry ice = 220 kg LCO₂).

To establish your own dry ice production, you'll need variations on the following infrastructure, depending on dry ice volumes



1. Access to liquid CO₂ in your region.
2. An on-site liquid CO₂ reservoir. Dry ice production systems don't run on small cylinders.
3. Bulk liquid CO₂ tanks necessitate a reinforced concrete foundation for stability.
4. Insulated pipe work to connect your exterior liquid CO₂ reservoir to the dry ice production system.
5. A Cold Jet dry ice production system, protected from moisture and the elements, with plenty of room for production.
6. A three-phase electric power source for the Cold Jet dry ice manufacturing system.
7. Safety measures, including artificial ventilation to maintain airflow within the manufacturing facility.
8. Another crucial safety measure is a CO₂ PPM monitor.
9. Insulated containers to store dry ice, minimizing sublimation (solid-to-gas transition).

Establishing your own dry ice production becomes feasible when your demand for purchased dry ice reaches a significant level (i.e. >1,100 lbs/week or >500 kg/week), or when continuous supply is crucial for your cooling requirements.

The investment for a dry ice manufacturing system alone (excluding infrastructure expenses) can start from \$40,000 on a system that can produce up to 176 lbs/hr (80 kg/hr). If this sounds suitable for your needs, please reach out to us for consultation on the optimal path forward.