

GREEN SOLUTIONS, GREEN LAB

As a lab professional, you want to minimize any negative impact your work has on the environment. That's why choosing more sustainable and environmentally friendly lab equipment and supplies is a priority. For your work community, you want to promote 'green' conscious practices that help safeguard our environment, but you also need to consider costs and outcomes. While some waste and consumption are unavoidable, working with a VICI DBS gas generator in your lab can be a small change that makes a big difference for our planet.



NO REPEATED DELIVERIES

Once a VICI DBS gas generator is installed in your lab, it stays in your lab providing an ongoing supply of gas.

Unlike pressurized cylinders or dewars with recurring deliveries and transportation emissions, a VICI DBS gas generator only requires a one-time delivery for installation, reducing your lab's overall carbon footprint. By using a nitrogen generator, a lab requiring 32 L/min of nitrogen for 5 days a week for 8 hours a day for an LC-MS instrument can eliminate delivery of approximately 450 cylinders per year. Labs requiring helium gas for their GC instrument to meet 1LPM demand for a lab operating 12 hours per day, 23 days per month can install a hydrogen generator and eliminate delivery of 24 cylinders per year. The impact is clear: with a VICI DBS gas generator you no longer have to worry about repeated bulk gas deliveries and the toll they take on the environment.



REDUCED CARBON FOOTPRINT

We understand the impact that lab equipment and operations can have on the environment and we are committed to being responsible stewards of the planet. Those aren't just words: at VICI DBS we work continuously towards creating a more sustainable future by creating better products—and the results of our efforts speak for themselves. A recent study compared our gas generator against two competitor generators and definitely showed that VICI DBS Mistral nitrogen generators consume less energy and produce fewer carbon emissions (kgCO₂e). At both full flow operation (24 hours per day, 7 days per week) and under typical usage (5 days per week, 12 hrs per day), VICI DBS generators produced 20% less carbon emissions. We are proud to say that VICI DBS gas generators are the most environmentally friendly choice for your lab.

GENERATOR	POWER RATING (W)	ENERGY CONSUMED AT FULL FLOW (24h)	ENERGY CONSUMED AT FULL FLOW (12h)	ENERGY CONSUMED FULL FLOW ONE WEEK (5 day week, 12h day)	ENERGY CONSUMED FULL FLOW ONE MONTH (5 day week, 12h day)
Competitor Generator 1	1251.9	11 kg CO ₂ e	5 kg CO ₂ e	25 kg CO ₂ e	100 kg CO ₂ e
Competitor Generator 2	1190.91	10 kg CO ₂ e	5 kg CO ₂ e	25 kg CO ₂ e	100 kg CO ₂ e
Mistral EVO 40	1052.88	9 kg CO ₂ e	4 kg CO ₂ e	20 kg CO ₂ e	80 kg CO ₂ e
Mistral EVO 25	920.2	8 kg CO ₂ e	4 kg CO ₂ e	20 kg CO ₂ e	80 kg CO ₂ e



ON DEMAND, NO GAS WASTE

A gas generator is not only more environmentally sustainable than bulk gas supply, it's also more sustainable for your budget. The amount of gas produced will match your instrument need. This means gas that was paid for will not go unused due to differential pressure. You also won't need to be concerned about cylinder contaminants that may interfere with your gas purity. Instead, a gas generator produces only the gas you need on-demand with consistent purity for the best results and zero waste.



RENEWABLE RESOURCES

A VICI DBS gas generator uses renewable resources to produce the gas required for your analysis. Unlike gas cylinders, where gases such as helium or nitrogen are extracted through energy-intensive processes, a gas generator produces nitrogen directly from the air and produces hydrogen from de-ionized water—two renewable resources free from the energy consumption required in industrial gas manufacture and more sustainable long term.



GREEN PRACTICES

As a global business, we are committed to implementing green practices in both our manufacturing facility and our offices across the globe. VICI DBS has adopted sustainable manufacturing practices such as waste prevention measures in production and using recyclable materials and packaging where possible. On an individual level, our people are committed to office recycling and plastic reduction, working together to maintain an eco-friendly working environment.

If your lab could benefit from an in-house gas generator for more sustainable and environmentally friendly lab practices without compromising your workflow, get in touch with us today.