

Heat Treating Solutions

The right atmosphere makes all the difference



- System design expertise, start-up and engineering support services
- Complete turnkey operations as well as custom equipment solutions
- Gas flow trains, control panels, furnace analyzers and automation
- Nadcap-trained specialists
- Process optimization and furnace audits including dew point analysis, oxygen analysis and more
- Operation and safety training audits

Optimize your operations

Heat treatment typically ranges from about 5 to 10% of your manufacturing costs. Gain your competitive edge by optimizing these costs with lower gas consumption and improved quality. Airgas, an Air Liquide company, helps create more value for you and your customers with our extensive knowledge and engineering expertise in the heat treating industry. We'll provide a complete package of gases, equipment, services, safety products and expertise to lower the total cost of your operation while improving product quality, increasing productivity, and enhancing workplace safety.

In addition, Airgas is known for providing personalized, local service backed by strong national resources with more than 1,100 locations nationwide. We'll find the right solution for you when and where you need it.

Maximize your investment

Airgas takes a complete solutions approach to your heat treating operation, allowing you to focus on other plant operations so you reach your full growth potential. From analyzing your current process to conducting audits and evaluations of your heat treating requirements, our engineers help you decide on the best gas combination and equipment. Our portfolio offers you a full range of gases, including nitrogen, hydrogen, helium, argon, acetylene, ammonia and carbon dioxide in multiple supply modes, from cylinders to bulk tanks to high-purity on-site generating systems.



Atmosphere solutions from Airgas

Process	Available atmospheres	Advantages
Carburizing	Nitrogen, methanol, acetylene	Operational savings and reliable delivery
Annealing	Nitrogen, hydrogen, ammonia	Improved process control, high-purity on-site nitrogen production
Nitriding	Nitrogen, ammonia	Improved process control, safe, code-compliant system
Nitrocarburizing	Nitrogen, ammonia, carbon dioxide	Higher product quality, process flexibility
Brazing, sintering	Nitrogen, hydrogen, ammonia	Higher product quality, improved process flexibility
Cryotreating	Liquid nitrogen	Lower capital, operational savings, reduced maintenance