

# Concrete Cooling Solutions

Safe, uniform and cost-effective results



Photo Credit: Harris County Toll Road Authority

- Ensure accurate and flexible temperature control guaranteed while cooling your mix, right on the pour site or batch plant
- Easily reach low temperature specifications
- No adverse impact on slump, air content, set time or density with liquid nitrogen
- Eliminate ice and chilled water handling

Uncertain conditions can greatly impact even the best laid construction plans. Temperature is especially critical for concrete pour jobs in extremely hot weather conditions and fluctuations can cause production delays and cracking. For optimal conditions during your next concrete pour, liquid nitrogen is the ideal solution for handling demanding cooling requirements and pour temperature specifications.

Airgas, an Air Liquide company, offers on-site solutions for both large and small scale projects, capable of safely achieving high cooling rates at any production rate to keep your project on schedule.

## Concrete Cooling Solutions

#### Safe, uniform and cost-effective results

#### CryoCrete™

CryoCrete from Airgas has helped many successful mass pour jobs including caps and columns, bridge decks and power plants. Perfect for large-scale projects and capable of achieving low temperature specifications at any production rate, CryoCrete cooling with liquid nitrogen on-site eliminates the worry of temperature loss during transport of concrete to your site—allowing you to stay on schedule while saving money.

- Increase productivity with automated liquid nitrogen injection that provides flexible and accurate temperature adjustments
- Cool your mix and maintain temperature in the truck, right on your pour site or at the batch plant
- Gain significant time and labor savings compared to ice
- Easy installation on your jobsite. Site requirements include a concrete foundation for the nitrogen tank and CryoCrete injector, appropriate electrical connections, local permits and licenses, and necessary utilities



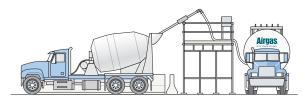


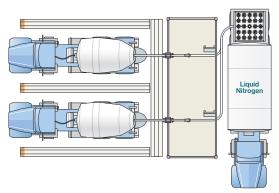
Photo Credit: Harris County Toll Road Authority

### ChillRight®

ChillRight from Airgas is a quick and flexible on-site concrete cooling solution using liquid nitrogen injection, designed for quick installation for smaller projects at the batch plant or on your pour site.

- Improve productivity by maintaining cool temperatures during pours
- Installation system requires short lead times and little investment—set up is quick and simple





#### Other Solutions

#### Neutralization of high pH water

Concrete producers are taking a close look at treating wash-off and run-off water with hazardous and expensive mineral acids, and discovering carbon dioxide as a more cost-effective, safe and environmentally-friendly way to neutralize. A CO<sub>2</sub> pH control solution from Airgas allows you to effectively treat water so you can recycle or correctly discharge while complying with EPA limits for pH and Total Suspended Solids (TSS), while realizing the following benefits:

- Improve safety with a non-hazardous alternative
- Save money with improved operations, maximized equipment life cycle, and decreased maintenance

